Walking on the Grammaticalization Path of the Definite Article

Edited by Renata Szczepaniak Johanna Flick

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Volume 23

Walking on the Grammaticalization Path of the Definite Article Functional Main and Side Roads Edited by Renata Szczepaniak and Johanna Flick

Walking on the Grammaticalization Path of the Definite Article

Functional Main and Side Roads

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Introduction

Walking on the grammaticalization path of the definite article – functional main and side roads

Renata Szczepaniak and Johanna Flick

1. Introduction

According to Heine and Kuteva (2002: 110), the development from demonstrative to definite article is "the most frequent way in which definite articles evolve" and, thus, one of the most important pathways of grammaticalization. In order to comprehend the different stages of this development, various theoretical models have been introduced in the literature. The most known pathways are proposed in Greenberg 1978, Lyons 1999 and Lehmann 2015 [1982], all of which envision the development in a rather linear way. The present volume brings together eight empirically-based contributions which aim to develop more elaborate models of the grammaticalization pathway from demonstrative to definite article and beyond in the history of the German language. Each paper provides an in-depth analysis of the functional change yielding a better understanding of the grammaticalization path, along with its side roads and ramification network. Special focus lies on cognitive, pragmatic, semantic and syntactic factors supporting or impeding the emergence of the definite article resulting in different patterns of variation across time.

1.1 Models of the grammaticalization path Demonstrative > DEFINITE ARTICLE

The general course of the grammaticalization path of the definite article, as it has been proposed by Greenberg (for details see Greenberg 1978: 61–74), consists of four stages:

Stage 0 Stage I Stage II Stage III

DEMONSTRATIVE > DEFINITE ARTICLE > SPECIFIC ARTICLE > NOUN MARKER

Figure 1. The grammaticalization path from demonstrative to noun marker (Greenberg 1978: 61)

https://doi.org/10.1075/silv.23.int © 2020 John Benjamins Publishing Company Since Greenberg's main objective was to show how the definite article develops into a gender marker, the right side of the pathway containing Stage II and Stage III is obviously more elaborated than the left one, where the emergence of the definite article from the demonstrative takes place (Stage 0 > Stage I). The development from Stage I into Stage II entails the emergence of the non-definite (but referential or specific) use of the article. In addition, Greenberg (1978: 62–63) observes that languages in Stage II also include the non-referential (generic) use of the article, which allows the assumption that the generic function of the article develops later than the non-specific one. However, Greenberg does not specify how the development of the generic use should be represented in the grammaticalization path.

Lehmann (2015 [1982]) pays more attention to the functional shift from demonstrative to definite article, see Figure 2. His model is generally confirmed by what is known about the development of the definite article in German (see Szczepaniak 2011, Flick submitted). Lehmann's pathway comprises not only a functional change (demonstrative > definite article > noun marker) but also a formal evolution (free grammeme > affixal article).



Figure 2. The universal grammaticalization path of definite articles (Lehmann 2015 [1982]: 59)

Note, however, that Lehmann's grammaticalization path does not clearly differentiate between form and function by presuming an "affixal" stage. Yet, following Lehmann's line of argumentation (2015 [1982]: 41), the affixal article can undergo further semantic weakening: from the expression of definiteness to mere specificity. Although Standard German has already reached this stage (visible in cases of contractions, e.g. $in\ dem > im$ 'in the'), little is still known about the functional implications of this incomplete development (cf. Nübling 2005). Due to further semantic change, the affixal article reaches a stage at which it has lost all referential meaning. At this final stage, it solely functions as noun marker or noun class marker (cf. Lehmann 2015 [1982]: 41–42).

The transition from a demonstrative into a definite article has been further elaborated by Himmelmann (1997, 2001) whose model – based on Löbner's preliminary work (1985) – includes the expansion of the former demonstrative into new pragmatic and, subsequently, semantic contexts, s. Table 1.

Table 1. Usage contexts of the demonstrative and the definite article

Usage contexts	Subtypes	Demonstrative	Definite article	Examples
pragmatic (deictic)	situational	+	+	<u>Diese/Die</u> Katze (dort) ist wunderschön. 'This/The cat (there) is gorgeous.'
	anaphoric	+	+	Im Hof spazierte gestern eine Katze. <u>Diese/Die</u> Katze war sehr scheu. 'Yesterday, there was a cat walking in the court. This/That cat was very shy.'
	anamnestic / recognitional	+	+	Hast du noch was über diese/ die Katze erfahren? 'Have you learned something more about this/the cat?'
semantic	abstract-situational	-	+	Kann ich <u>die</u> Toilette benutzen? 'May I use the bathroom?' <u>Die</u> Sonne scheint. 'The sun is shining'
	associative-anaphoric	-	+	Vor dem Haus stand ein Fahrrad. <u>Das</u> Vorderrad war kaputt. 'There was a bike standing in front of the house. The front wheel was broken.'

While the demonstrative is restricted to pragmatic contexts, where it is used for situational, anaphoric (i.e. textual) or recognitional deixis, the definite article can also appear in semantic contexts: the abstract-situational (also: *larger situation use*, see Himmelmann 2001: 833) and the associative-anaphoric usage contexts. Both usages have in common that the referent is not present in the immediate context of utterance and, thus, can be identified via general knowledge, either due to general world knowledge, e.g. the knowledge that apartments, dwelling-houses or restaurants prototypically have a bathroom and that some referents like *the sun* are unique (compare also Schroeder 2006), or because of its relation to a previous referent like the metonymic relation between *front wheel* and *bike*. In both usage contexts, the identification of the referent is possible, because it is supposed to be existent and unique (one bathroom per apartment, one sun in our solar system, one front wheel per bike).

Finally, Lyons (1999: 337) proposes an implicational scale where the later stages of the functional expansion are especially highlighted, s. Figure 3. In contrast to Greenberg's model, where the generic use of the article is said to occur at Stage II (and presumably only after the development of the specific/non-definite use of the article), as well as contra Himmelmann's model, where the generic function is subsumed under the abstract-situational use, Lyons argues for a distinct generic step that can be reached during the grammaticalization process. Furthermore, he assumes two additional stages at which the article combines first with possessives and afterwards with proper nouns.

1 (English): simple definite

2 (French): simple definite, generic

3 (Italian): simple definite, generic, possessive

4 (Greek): simple definite, generic, possessive, proper noun

Figure 3. The implicational scale by Lyons (1999: 337)

Summing up, all of the discussed models have in common that they assume a strictly linear progression of grammaticalization. Simultaneously, they propose a different diachronic succession of the functions the former demonstrative acquires in the course of the grammaticalization to the definite article and beyond. The latest research, however, challenges this linear model of grammaticalization. There is, for instance a high variability in the use of the article with plural noun phrases in generic contexts in contemporary German (see Barton, Kolb and Kupisch 2015), so that the status of an assumed generic stage, as proposed by Lyons, is rather controversial. Furthermore, at least for German, the implicational relationship between the generic use of the article and its use with proper names (as an onymic article) should be questioned. The historical data of German rather suggest that the development of an onymic article was not possible until the definite article acquired the expletive function of expressing definiteness of unique nouns like the sun or the moon and continued parallel to the further grammaticalization of the definite article (see Schmuck and Szczepaniak 2014). Hence, the development of the onomastic article out of a "young" definite article is rather a "side road" than a late step on the main route. In addition, the question arises why the combination with proper nouns should proceed only after the article is used with possessives. At least in German, there is a gap in the implicational scale, since the combination of the definite article with the possessive is not possible any more (see Demske 2001: 141-142). These findings suggest that, on the one hand, grammaticalization does not follow a simple pathway, but instead produces a branched network. On the other hand, it shows that grammaticalization research needs empirical studies.

Thanks to numerous corpus projects that have been launched in recent years (for an overview see Dipper 2015: 521–526) it is now easier than ever to systematically examine historical data. Nevertheless, it remains empirically challenging to categorize the data and differentiate between the various contexts of usage proposed in the literature. Apart from the functional variability there are additional criteria determining the usage of the definite article, i.e. register, text genre, region of origin, syntactic contexts, universal pragmatic-cognitive principles or typological characteristics of languages.

This volume collects the latest research that empirically explores these factors, and, in doing so, challenges and further refines the grammaticalization path from demonstrative to definite article and beyond in German.

1.2 Papers in this volume

The papers are organized into three sections, each emphasizing one or more of the above-mentioned factors that determine the article's evolutionary walk on the grammaticalization path in German. The first section "From pragmatic to semantic definiteness" addresses the question how the functional reanalysis from demonstrative to definite article can be modelled. In order to capture the difference between the two categories, or in Greenberg's terminology, the transition from Stage 0 to Stage I, the contributions by Eva Schlachter and Ulrike Demske rely on Löbner's distinction between pragmatic and semantic definiteness introduced in Section 1.1. Schlachter argues for an abrupt reanalysis from demonstrative to definite article in Old High German (OHG). Demske, likewise, discusses this early grammaticalization process, but also puts into focus the development of a specific article in Early New High German (ENHG), hence, Greenberg's stage II. Svetlana Petrova further explores this stage: She takes a closer look on article usages in generic contexts and thus addresses the underlying question if there is indeed a distinct generic stage in German as proposed by Lyons' model.

The second section "Syntactic contexts, cognition and grammaticalization" focuses on the development of the definite article in different syntactic contexts in which the influence of cognitive forces can be detected. This applies for the framing principle, which Elke Ronneberger-Sibold has introduced in her earlier work (e.g. 1991, 2010) and refined ever since. Framing requires a specific kind of processing where the recipient concludes from the appearance of the first element (such as a determiner or a preposition) that the syntactic structure can only be fully processed when the second element of the frame (a noun) appears. In the contribution at hand, Ronneberger-Sibold reports on how framing influences the successive fixation of the emerging definite article within the noun phrase. Sandra

Waldenberger's contribution takes a closer look at Lehmann's "affixal stage" by analyzing the preposition-article clitics in Middle High German (MHG). She argues for a separate grammaticalization path of preposition-article clitics where the definite article develops into the definiteness marker. Attached to the preposition, this definiteness marker points to a specific prepositional procedure and, thus, directs the recipient towards the most likely (and easily identifiable) referent of the following noun phrase. As Antje Dammel shows in her paper, we also find cognitive forces working against the gradual obligatorification of the definite article. Her paper deals with coordination constructions, i.e. coordinated definite nominal phrases in ENHG: Here, omission of the article is possible when the conjuncts overlap conceptually, even if their morphosyntactic features differ.

The third and final section is dedicated to a special "side road" of the grammaticalization path, i.e. the combination of articles with proper names. Mirjam Schmuck examines the transition from the definite into the onymic article, which appears to be possible under certain specific conditions: The expansion of the article to proper (family) names is triggered by individual bynames, which represent a transitional stage between common nouns and proper names and, thus, provide a bridging context for the further development. The individualizing function of the article seems to be the necessary prerequisite for paving this functional side road. Damaris Nübling sheds light on the very end of the grammaticalization path. Her investigation unearths an unusual and somewhat unexpected functional branch. Nübling shows that the use of the onymic article has been reorganized into a new onymic classifier system rather than being only stripped off its previous functions.

Section 1. From pragmatic to semantic definiteness

The section starts with the paper "A complex grammaticalization scenario for the definite article: The interplay of different article forms" by Eva Schlachter who challenges the assumption of a gradual path of grammaticalization by proposing a scenario involving abrupt mechanisms of change and analogical extension. She shows that even in a very early period of OHG *der* is not only used in pragmatic definite, but also in semantic definite contexts, i.e. with unique entities (e.g. *diuual* 'devil'), abstract nouns or within preposition-article contractions like *zimo* 'to the'. Even though its usage is not yet obligatory but rather subject to stylistic variation, *der* must be interpreted as a definite article in these contexts. Its status and hence the coexistence of nouns with and without *der* can be explained in terms of an incomplete analogical extension. Furthermore, the OHG data indicates that the reanalysis took place in concrete situations where the hearer "cancels" the genuine delimitation feature of the demonstrative *der*, which the author views as a cognitive process which reduces semantic redundancy. Schlachter is the first to include the

existence of the early definite secondary article forms into her grammaticalization scenario. She assumes that the variability regarding the competing articles *ther* and *thie* 'the' in Tatian's Gospel Harmony correlates with Löbner's pragmatic/semantic definite distinction. In addition, article-like pronouns (e.g. *ubar iz uuazzer* 'over it (the) water' or *ir selbo christ* 'he (the) self christ') also serve to express semantic definiteness and hence function as definite articles. In MHG, however, this variant becomes lost. From these findings, Schlachter deduces the existence of *d*-less article forms in OHG (similar to weak articles in modern dialects) which also participate in article-preposition contractions. In the course of time, these old articles merge with the new reanalyzed *der*-forms and thus give rise to a new article paradigm.

In her paper "The grammaticalization of the definite article in German: From demonstratives to weak definites", Ulrike Demske is particularly interested in Stage II of Greenberg's grammaticalization scale. At this stage, the article broadens its functional horizon and is not only used to mark definite referents but also to denote specificity. This domain usually corresponds to indefinite nominal expressions. The crucial time for the development of the specific article is ENHG (1350–1650) when the rise of the so-called weak definites takes place. The term weak definite refers to noun phrases that do not presuppose uniqueness, e.g. Fred went to the store, and Alice did, too (= non-possessive weak definites) or John got these data from the stu-<u>dent</u> of a famous linguist (= possessive weak definites). Demske illustrates how the emerging article walks its way from pragmatic to semantic definite contexts in OHG before reaching the domain of weak definiteness: In terms of Löbner's semantic typology, mainly sortal nouns like skef 'ship' occur with der. In the course of time, an increasing amount of functional nouns, e.g. fater 'father', sunna 'sun' or enti 'end', occur with the emerging article. Yet, Demske's data drawn from the OHG reference corpus at the same time indicate a high degree of variability in these contexts until late OHG. The spread to possessive weak definite constructions goes hand in hand with word order changes within the NP (which is related to animacy). Throughout the history of German, genitive complements gradually change their position from prenominal (e.g. sinero muoter uuambun 'his mother's womb') to postnominal. The same is true for possessive constructions. In these constructions, definite and indefinite article compete for the prenominal position. With her extensive corpus study, Demske documents how the definite article "wins" this competition. From the 15th to 18th century, the numbers of possessive weak definites carrying a definite article increase over time while the numbers for indefinite determiners decrease. This development reflects the further semantic bleaching of the definite article and must be regarded as a further step on the grammaticalization path that until now has not yet been acknowledged in the literature.

Svetlana Petrova's paper addresses the question "What genericity reveals about the establishment of the definite determiner in German". Genericity refers to phrases or sentences characterizing a whole class of objects or individuals instead of one specific representative of a class, e.g. the dog is a mammal vs. the/this dog sleeps in the garden. Genericity is a semantic domain which represents a rather late stage on the grammaticalization scale of definite (and also indefinite) articles. No generic articles should be expected during early OHG, for this period is being considered as the starting point of the grammaticalization process in German. Yet, Petrova detects single instances of generic noun phrases with *der* at the beginning of this time period, i.e. within the Monsee Fragments and Tatian. Her data challenges the traditional view of discrete and implicational grammaticalization steps and supports the idea that stages may synchronically overlap. Still, the variation rate regarding generic contexts (bare nouns vs. determined NPs) is very high – not only in OHG but also until now in present-day German. The question remains which factors determine the variation between phrases with and without article in the domain of genericity. By means of a corpus study based on the five biggest OHG documents (Isidor, the Monsee Fragments, Tatian, Book 1 and 2 of Otfrid's Gospel Book, Notker's Psalter) as well as MHG examples from the Speculum Ecclesiæ Petrova explores four possible factors which could explain the variation: activation, emphasis, nominalization and case marking. While the statistical tests reveal no effect for activation and case marking, the factors emphasis and nominalization seem to trigger the usage of the definite article. Genre specific variation cannot be excluded entirely though, since these effects are only visible in some texts.

Section 2. Syntactic contexts, cognition and grammaticalization

In this section, Elke Ronneberger-Sibold discusses how the grammaticalization of the definite article interacts with the framing principle. Her paper "The role of the definite article in the rise of the German framing principle: A comparative study of verbal and nominal constructions in the Old High German *Muspilli* and the Old English *Dream of the Rood*" is based on the fact that the framing principle, a typical morphosyntactic feature of contemporary German, developed around the same time as the definite article. Framing is at work when two cognitively and grammatically related elements are split up, e.g. auxiliary and main verb, subjunction and finite verb or determiner and head noun, and thus form a frame around other constituents in the sentence. By means of a comparison of two alliterative poems (the OHG *Muspilli* and Old English (OE) *Dream of the Rood*), which until now have been neglected with respect to syntax-related questions, Ronnberger-Sibold explains the typological divergence of German and English. Her analysis shows that OHG *der* not only had a higher frequency and was functionally wider than OE *se*. It also reveals

important differences regarding the structure of the noun phrase. Her conclusion is that the grammaticalization of the definite article supported the framing principle: Unlike OE *se* the definite article *der* in OHG was morphologically transparent and well-integrated in the linguistic system so that language users could easily assign grammatical features to it and were aware to which head noun it belonged. In addition, in contrast to OE, the avoidance of homonymous masculine and feminine *n*-stems as well as the use of *i*-mutation as salient plural marker in OHG helped speakers to see the congruence between determiner and noun, which supported cognitive parsing. Since the framing principle was not limited to the noun phrase but – as Ronneberger-Sibold shows – was also visible in the verb phrase it slowly became one of the distinctive typological features of the German language.

Sandra Waldenberger takes a closer look at the usage patterns of Preposition Definite article Clitics (PDCs) in MHG. In her paper "Cliticization of definite articles to prepositions in Middle High German – early stages of grammaticalization? A qualitative study", she takes the Standard New High German (StNHG) system of special clitics as a point of comparison for her investigation, i.e. PDCs that are not freely interchangeable with their full form like im, am, zum, vom, beim, zur. PDCs are not yet obligatory in Middle High German (MHG), however, their usage pattern is similar to PDCs in StNHG. They appear when the NP (= the Ground of the prepositional relation) corresponds to a semantically definite referent. Previous studies assume that the clitic article in these PDCs represents a late stage on the grammaticalization path, that is to say a stage on the very same path that has led to the emergence of the definite article in the first place. Waldenberger argues against the assumption of a continuous grammaticalization path and suggests that the development of the PDCs must be seen as a process of obligatorification and in this sense as a path on its own. It started when the two variants (full vs. clitic form) displayed separate functions and, hence, different form-meaning pairings. This way, the PDCs were integrated into the paradigm of definiteness markers of German as obligatory components. In order to investigate the distribution of PDCs in MHG, Waldenberger draws on data from the Korpus der Mittelhochdeutschen Grammatik, a corpus accounting for diachronic, diatopic and diaphasic variation in MHG. Waldenberger chooses four different texts for an in-depth qualitative analysis: Zwiefaltener Benediktinerregel (a translation from Latin), Wolfram von Eschenbach: Parzival (D) (verse), Von der Gnaden Überlast (clerical prose) and Würzburger Polizeisätze (legal text). Her investigation reveals that the occurrence of PDCs is also sensitive to text type. The highest number of occurrences can be found in courtly epic poetry, i.e. Parzival.

Antje Dammel investigates the process of the ongoing obligatorification of the definite article in ENHG. In her paper "Absence as evidence – Determination and

coordination ellipsis in conjoined noun phrases in (Early) New High German", she focusses on the use of the definite article in the second of two conjoined definite noun phrases, e.g. der Vater and _ Bruder des Retters 'the father and _ brother of the rescuer'. Based on a corpus analysis, she documents an ongoing obligatorification of the definite article in the second phrase. In Modern Standard German, the use of the second determiner is morphosyntactically conditioned: it is obligatory if the form and the morphosyntactic features differ, e.g. *dem Hund (DAT.SG.M) und Katze (DAT.SG.F). It can be omitted if the article matches in both form and morphosyntactic features, e.g. der Vater and _ Bruder des Retters 'the father and _ brother of the rescuer'. The ellipsis is less expectable if the form is the same, but the morphosyntactic features differ, e.g. die Katze (singular) und Hunde (plural). Contrary to the expectation, the corpus analysis conducted in the Bonn corpus of Early New High German (1350-1700; BonnC) and the Manchester Corpus for early New High German (1650-1800; GermManC) shows a frequent ellipsis of the second determiner in the case of a mismatch in form and feature specification. Interestingly, the coordination ellipsis is governed by semantic, pragmatic or discourse factors. Conjuncts representing natural coordination, i.e. those conjuncts that are closely related in meaning or form conceptual or discourse units, e.g. eine grosse Quantitet vnd hauffen Golds 'a great quantity and heap of gold' or einen Thurnier und Ritterspiel 'a joust and knightly game', are more likely to occur with coordination ellipsis. In contrast, accidental coordination typically leads to double determination. In the course of time, the semantic-pragmatic conditioning of coordination ellipsis weakens while morphosyntactic dependencies strengthen. This process reflects both the ongoing obligatorification of the definite article from ENHG to Modern Standard German and the scope reduction of the definite marker. The *gestalt* of the noun phrase thus is stabilized as consisting of an obligatorily filled determiner slot. This development is supported by codification and didactics, possibly because the morphologically driven use of the second determiner ensures maximal explicitness in written language.

Section 3. From definite into onymic article – and finally onymic classifier In this section, Mirjam Schmuck investigates the development from the definite into an onymic article. Her paper "The rise of the onymic article in Early New High German – Areal factors and the triggering effects of bynames" focusses on the spread of the definite article to (inherently definite) proper names, which represents a later stage in its grammaticalization, where the article acquires a new abstract function of an expletive marker. Based on the protocols of witch trials from the late 15th–17th century, the study shows that the frequent use of the onymic article is only documented for the Upper German dialect area, with the percentage of

proper names with a definite article decreasing dramatically from the south to the north of the German-speaking area. However, this areal distribution of the onymic article in the late 15th-17th century does not correlate with the tendency towards deflection of proper names and nouns, which is also quite advanced in the north (Low German). Hence, the development of the onymic article cannot be reduced to the need of overt case marking. The subsequent analysis of the Municipal Registers of Vienna, dating from the early 15th century, reveals the crucial role of (unstable) bynames. Descriptive (motivated) and replaceable bynames (many of them derived from appellatives) represent a transitory stage in the development into the (heritable) surnames, which began to occur only in the 16th century. In the transitory period of the 15th century, the determination of bynames listed in the Municipal Registers of Vienna becomes increasingly rare, e.g. Werner der Gärnter 'Werner the Gardener' > Werner Gärtner. However, the omission of the definite article is much more advanced in the nominative (more than 80% without an article) than in other cases (in the dative, only 11% without an article). Schmuck, thus, proposes a grammaticalization scenario, where the high number of bynames derived from appellatives (like Gärtner 'Gardener'), which were used with the definite article in oblique cases in the 15th century, served as a bridging context for the emergence and spread of the onymic article in the Upper German dialect area as documented in the protocols of witch trials from the late 15th and 17th century.

In the final contribution, Damaris Nübling takes a broader perspective on the onymic article. In her paper on "Die Capital – der Astra – das Adler. The emergence of a classifier system for proper names in German", she uncovers a rather unusual development path of the definite article into an onymic classifier in German. In contrast to common nouns where the definite article marks definiteness and encodes (lexical and, thus, stable) gender, (inherently definite) proper names allow for the appearance and absence of the onymic article (which still is homonymous with the definite article) and for different genders. Their actual form depends on and simultaneously defines the onymic class of referents the named object belongs to, e.g. undetermined Luxemburg refers to the country or the (capital) city, while die Luxemburg may be a ship, der Luxemburg – a car, and das Luxemburg – a hotel or a restaurant. While the marking of some onymic classes is fixed (e.g. airplanes and ships belong to the [+article & feminine]-class and countries to the [-article & neuter]-class), the appearance of the onymic article as well as gender may vary for others (islands, companies, mountains, rivers, cars etc.). The development of a fixed, referential gender – as it can be observed for mountains – starts with the inherited gender of the common noun (der Schönberg, but das Matterhorn). In the course of proprialisation, the gender of the corresponding common noun (e.g. der Berg) determines the referential gender of an onymic class, e.g. der Kilimandscharo. In a

last step, an independent referential gender can be established, e.g. masculine for mountain names. The development of the definite article into an onymic classifier – a side road within the grammaticalization path of the definite article – comprises the exaptation of the definite article and the degrammaticalization of gender.

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SECTION I

"From pragmatic to semantic definiteness"

A complex grammaticalization scenario for the definite article

The interplay of different article forms

Eva Schlachter

The rise of the definite article in Old High German is the result of a more complex grammaticalization process than has commonly been assumed. Current explanations do not take into account the existence of early definite secondary article forms that are attested since the 8th/9th century. The notion of secondary article forms refers to preposition-article-combinations, the alternation of two different article forms *ther-thie* 'the' and occurrences of apparent personal pronouns which will be analyzed as definite article forms. On the other hand, the reanalysis from a demonstrative to a definite article is not possible in purely semantically definite contexts. The absence of definiteness marking in these contexts must be the result of incomplete analogical spreading and not of the non-existence of a definite article.

Keywords: Old High German, grammaticalization, semantic definiteness, pragmatic definiteness, demonstratives, contraction forms, reanalysis, weak article forms

1. Introduction

In recent decades most historical linguists have come to agree with respect to the interpretation of the determiner $d\ddot{e}r^1$ in Old High German (OHG) (e.g. Oubouzar 1992, 1997, Demske 2001, Szczepaniak 2011). In general, $d\ddot{e}r$ is not seen as a definite article but as a demonstrative for two empirical reasons (Demske 2001). First, in many cases it is clearly used as a demonstrative, as in Example (1); second, it is often missing in the context of the so-called *unica*, nouns referring to a unique entity in a given discourse world, as in (2):

^{1.} I use this form of the determiner when I refer to the OHG system as such while the different graphematic realizations in the manuscripts are maintained in the examples.

- (1) [Ein búrg] ist thar in lánte, [...] zi théru steti fúart er thia druhtines a town is there in land [...] to this place takes he the Lord's múater (O I.11, 23–26, cf. Demske 2001: 113) mother
- (2) Tho ward himil offan² then became heaven open 'Heaven has opened itself'

(O I.25.15, cf. Demske 2001: 114)

Oubouzar (1992, 1997) points out that only in Notker's work at the end of the OHG period are nouns indicating uniqueness regularly marked by *dër*. Two centuries earlier (870 Otfrid), nouns such as *sunna* 'sun', *mano* 'moon', *himil* 'heaven' and *worolt* 'world' still show considerable variation between forms marked and not marked by a definite article. Using Löbner's (1985) terminology, which distinguishes between pragmatic und semantic definiteness, Demske (2001: 7) refers to these cases as semantically definite phrases and observes that they mostly occur without the definite article while pragmatically definite nouns (both anaphoric and deictic ones) are marked by a definite determiner. OHG is thus considered to be a language stage where the expletive use of the definite article still is not obligatory, as opposed to the situation in New High German (NHG). This view is summarized in Schrodt's OHG grammar (2004: 44):

Von einem grammatikalisierten Artikel kann man erst dann sprechen, wenn alle definiten Nominalphrasen mit einem Artikelwort stehen, also auch Phrasen, die allein durch ihre Referenz als identifizierbare und abgrenzbare Einheiten ausgewiesen sind, wie die Unika *sunna* und *himil*.

'A definite article only exists if all definite nominal phrases are marked as such, including all the phrases that are designated as identified and delimited entities, such as the unique entities *sunna* and *himil*.'

Leiss (2000: 69f.) regards this kind of redundancy as a state of hyper-determination and criticizes the fact that linguists seem to take hyper-determination as a precondition for assuming the existence of a definite article.

Traditionally, this final state is seen as the result of a grammaticalization process from a demonstrative to a definite article that occurs step by step, from one context to the next. Within this development, demonstratives lose their deictic or demonstrative feature, which enables them to occur in new contexts. At the same time, this model builds upon the idea that a certain state is achieved only when all noun phrases of the same kind are marked by the same means, regarding variation only as a transitionary state or as an obstacle.

^{2.} I have only added the translation line when the word by word glossing does not render a comprehensible version.

The aim of this article is to argue against this traditional view for different reasons:³ First, it does not take into consideration that this process has not yet been completed. For example, it ignores the fact that, in Standard German, proper names still do not obligatorily occur with a definite article although they refer to semantically definite entities, and it does not consider that marking of definiteness in prepositional phrases continued to be rather unusual even in later centuries.⁴ The second problem has to do with the fact that, even at the beginning of the OHG period, we find instances of entities that are clearly marked as semantically definite by a definite article, such as "devil" or abstract nouns, which is supposed to occur much later in the grammaticalization process. Third, it does not consider occurrences of "secondary" definite article forms, which is a desideratum if we intend to achieve a more complex and adequate explanation of the process as a whole. The notion of secondary forms refers to preposition-article combinations such as zimo 'to the' (e.g. Nübling 1992, 2005, Coniglio & Schlachter 2014), where a clitic definite article combines phonetically with a preposition. I will refer to these by the term "contraction forms" (in German they are also known as Verschmelzungsformen). Furthermore, the notion of secondary forms includes the alternation of two different article forms ther-thie 'the' (NOM-SG) in certain passages of Tatian's translation of the Diatessaron (Neumann 1967) and occurrences of apparent personal pronouns which will be analyzed as weak definite article forms.

Instead, I assume that grammaticalization is best understood as a combined process of abrupt reanalysis (in the sense of Detges/Waltereit 2002) and analogical extension. Reanalysis is only possible in contexts that allow for demonstratives and definite determiners to co-occur. As soon as in a certain text passage the determiner $d\ddot{e}r$ can be interpreted as a definite article, this occurrence is sufficient to assume its existence. The aforementioned variation (occurrence vs. non-occurrence of the definite article) is not so much the reflex of an incomplete grammaticalization process, but can be better understood as a consequence of different manifestations

^{3.} In contrast to Schlachter (2015) this paper focuses on the conceptual aspect and mainly on the significance of co-occurring article forms. At this point, I would like to thank the audiences of the International Congress *Komplexität und Emergenz in der Deutschen Syntax* (9.-17. *Jahrhundert*) held at the Sorbonne University in Paris (September 2013) and of the workshop in September 2014 in Hamburg that gave rise to this book. I also want to thank my colleagues at Humboldt-University, mainly Carmen Bluhm, Marco Coniglio, Karin Donhauser, Sonja Linde and Lars Zeige, for discussing oral versions of this paper. It is also based on work conducted by the project B4 "The role of information structure in language change" (SFB 632: "Information structure: The linguistic means for structuring utterances, sentences, and texts").

^{4.} For the Middle High German period, Szczepaniak (2011: 77) explains the variation within PPs in terms of discourse pragmatics: foregrounding of a PP requires the definite article, while backgrounding allows the bare noun.

of language use. Since purely semantically definite contexts do not permit the demonstrative reading, they do not allow this kind of reanalysis. Instead, I assume the analogical spreading of existing definite article forms to contexts which previously had not been marked by the definite article or had been marked by other article forms (see also Section 5).

The paper is structured as follows: First, I will show how the change from a demonstrative to a definite article is interpreted within the established view of the grammaticalization process in more detail and will discuss its conceptual and empirical problems (Section 2). In Section 3, I will propose a more explicit model of the supposed reanalysis process by focusing on the theoretical notions of pragmatic and semantic definiteness and on the meaning of the demonstrative. Finally, I will discuss the secondary article forms and include them in a complex model of the change (Section 4).

2. The standard view of grammaticalization

In this section I will first describe the common view of the grammaticalization process (cf. also Flick & Szczepaniak, this volume), focusing on some of the problems that arise for the explanation of the change. The main problem is the analysis of variation as an incomplete status. The inclusion of new data shows that we have to assume different instances of definite article forms from the very beginning onward.

2.1 Concepts and their empirical realization

Since Wackernagel (1928: 130) it has commonly been assumed that the definite article developed from the demonstrative one.⁵ In the areas of grammaticalization and typology this view has been combined with other processes of change and summarized in the often quoted grammaticalization path by Lehmann (1982/1995: 55):

(3) demonstrative determiner → weakly demonstrative definite determiner → definite article → affixal article → noun marker

Languages differ with respect to the status of their determiners on this scale; for instance the status of an affixal article is achieved in Scandinavian languages while noun class markers are found in Nilo-Saharan languages (Greenberg 1981: 107). At this point, it is important to note that Nübling (1992, 2005: 107) classifies the reduced article in the contraction form as more or less similar to an affixal article

^{5.} In this paper, I will use the term "article" instead of "pronoun," motivated by its syntactic distribution, although in traditional work the term demonstrative pronoun has been preferred.

and thus as a further developmental stage beyond that presumably reached by the definite article at the end of the OHG period.

At the same time, the grammaticalization process is only possible because it is accompanied by a loss of semantic content (Lehmann 1982/1995: 37-38). The demonstrative loses its deictic component, acquires anaphoric functions and reduces its demonstrative component, which consists of definiteness and a pointing gesture (the deictic component mentioned before), to only definiteness. Further semantic bleaching leads to the reduction of definiteness, then to the creation of specificity, and finally to the pure marking of nominal classes. Heine (2003: 578-580) distinguishes between four interwoven mechanisms that operate on different levels of the language system: desemantization, extension, decategorization and erosion. The gradual loss of semantic features is accompanied by the spread (extension) of its use in new contexts. On the phonological level the accentuation of the demonstrative article is lost, and the subsequent development in the direction of the clitic article is due to a loss of phonetic substance. Without explicitly mentioning the theoretical concept of this grammaticalization scenario, Oubouzar (1992) uses it to describe the data in OHG. In her view, early instances of the determiner dher in the Isidor translation (about 800) are still to be interpreted as weakly deictic. In combination with nouns referring to persons, the determiner has the function of emphasizing the nouns because of their communicative importance (Oubouzar 1992: 75). In the Tatian translation (830) ther as a definite article is used systematically in anaphoric contexts and in combination with the reference to persons. The next step, manifested in Otfrid (870), is characterized by the systematic marking of other appellative nouns while unica still show some variation with respect to definiteness marking. A systematic marking of nouns indicating genericity and uniqueness is not established until Notker's work (about 1000).⁶ At first glance, this scenario gives a clear and comprehensible description of the development. But besides the fact that it never has been empirically proven, it also presents some conceptual problems. One of them has to do with the assumed graduality of the grammaticalization process (for a discussion, see Haspelmath 1998). How can we think of a gradual loss of deictic semantics? Shouldn't the feature specification [+/-deictic] be conceived of as an indication of two discrete categories and not as a scale? If the characterization 'deictic' means a reference to the actual situation, it cannot be subject to a semantic weakening without losing the essence of its meaning. The same problem arises if we alternatively speak of the loss of a 'demonstrative pointing gesture.' In what way should a speaker who is indicating a certain referent suddenly start to indicate to it "in a lesser way"? It is only possible to model a more adequate understanding of the change if we use a more explicit meaning of the demonstrative article.

^{6.} Note that Petrova (this volume) criticizes this view with respect to genericity.

2.2 Old and new data

A further problem has to do with the integration of the data into this model, specifically the contraction forms. Nübling (2005: 109) notes that the reduced article forms involve referents that are marked as semantically definite. This means within the grammaticalization model described above that their existence presupposes the existence of a definite article, which is assumed to be a late development. However these contraction forms – albeit only with the preposition zi 'to' – are already attested in Otfrid (870), as described in Nübling (1992: 154) and in the OHG grammar by Braune/Reiffenstein (2004: 248). We get a more detailed impression about the frequency and distribution of these forms from recent work by Unverzagt (2011), who investigates the Minor OHG texts, the Tatian translation and Otfrid. In sum, Unverzagt (2011: 30) counts 64 contraction forms, 51 of which occur in Otfrid. The most frequent combination is the one with zi and the dative plural as in (4). In Tatian, there is only one example attested; see (5):

- (4) Er sprah zen jungoron tho (O III 23, 27) he said to.the-dat.pl disciples-dat.pl then
- (5) quam thuruh sidonem zemo seuue galilee (T 275, 2) (he) came through Sidon to.the-DAT.SG sea-DAT.SG of Galilee

The other forms are found in the Minor texts, which differ greatly with respect to the time of emergence. To my knowledge, the earliest attestation of a contraction form can be found in glosses from the end of the 8th century as shown in (6), quoted in Glaser (cf. 2000: 196):

(6) [Ad postulationem]

zera souhnungu

to.the-DAT.SG collection-DAT.SG (of taxes)

This early attestation of a contraction form with a definite abstract noun calls the gradual process of grammaticalization as described by Oubouzar into question.

At the same time, Glaser finds attestations of the simple determiner in the glosses of the 8th and 9th centuries. Based on results of other authors who investigated different manuscripts, she reports that there is a strong tendency to gloss the nominal forms without a determiner (Glaser 2000: 191–192), but in some cases the definite article form is inserted. In her own work on the Codex Clm 6300 from the end of the 8th century (Glaser 1976: 80–81), she finds 370 glosses. 43 of them can be interpreted as instances of the definite article, 20 of them occurring in simple nominal phrases (Glaser 2000: 193). Most of these instances can be observed in syntagmas with a genitive or in prepositional phrases (PPs) as in (7):

(7) [pro risu] pi demo hlatre [lat.:to laughter] - to the-DAT laughter-DAT (Et uir tantae seueritatis **pro risu** turpium moritur (CCh 143, S.120,41) and a man of such harshness dies to-the the laughter of shameful people) (Codex Clm 6300, cf. Glaser 2000: 193)

Hodler (1954: 12) interprets these forms as indications of correct case marking, not as real articles. Glaser argues against this, noting that it is often unclear whether the glosses refer to the Latin text or to the OHG translation (Glaser 2000: 209), the Latin text being extremely clear with regard to case marking. Furthermore, the determiner occurs very frequently in NPs with the genitive, which also in OHG shows distinct case morphology (Glaser 2000: 210).

Besides these instances in the glossing literature we find the marking of unique nouns as definites in the early 9th century as in manuscript B of the Paternoster of Freising the definite article marks nouns such as truhtin 'Lord', tiuuval 'devil' as in (8), or sonategin 'Last Judgement':7

(8) des sculun uuir den truhtin pitten, daz unsih niulazze den that-gen shall we the Lord ask, that (he) us not.let the tiuual so uram kæchoron devil so much tempt 'We shall ask the Lord that he might not let the devil tempt us so much' (Freisinger Paternoster B, 67–69, cf. Siemund 2013)

Considering both the conceptual problems and the data I conclude that dër is clearly used as a definite article in all contexts from the early OHG period on. The assumption that a definite article usage already existed in Early OHG leads to fewer contradictions than the opposite one. The fact that not all referents are marked as definites can be ascribed to an incomplete analogical extension process which ultimately can be traced back to stylistic considerations⁸ (cf. Hodler 1954: 34). Furthermore, only from this perspective is the early formation of the so-called double demonstrative *dëser* motivated. In the OHG grammar by Braune/ Reiffenstein (2004: 249) the form is explained as the connection of der with the

^{7.} Thanks for this example to Melanie Siemund, who wrote a paper about the use of the definite article in Manuscript B of the Freisinger Paternoster' at the Humboldt-University of Berlin in the winter term 2012/13 (Siemund 2013).

^{8.} Recall that even in Modern English, which clearly is considered a language with a definite article, nouns like 'heaven, hell, paradise, church' are not marked by an definite article (Hodler 1954: 34).

particle *se* (from **sa*, **si*). Originally, the morphological inflection occurred in a word-internal position as can still be seen in the form *dësse* in the Muspilli. After a period, when the morphological categories were marked both internally and finally as in *dheasa* from the Isidor translation, only the final marking prevailed. It is important to note that the demonstrative *dëser* already existed at the beginning of the OHG period. The "need" for its formation can also be explained if the original demonstrative had changed its function before.

Grammaticalization as reanalysis

This section deals with the most relevant concepts of definiteness and the differences between definite and demonstrative determiners with respect to them. The process of reanalysis I propose is based on these concepts and on a definition of demonstrativeness which no longer focuses on the deictic character or on a pointing gesture.

3.1 Usage contexts of the definite and the demonstrative article

The appropriate definition of definiteness has been debated for a long time (for an overview, see Lyons 1999: 253–281). I adopt the view established mainly within the semantic tradition that defines definiteness as reference to a unique entity (Lyons 1999: 253). In order to capture definite entities in the plural, Hawkins (1978: 161) proposes expanding the notion of uniqueness to inclusiveness, which means that the designated referents are included in a unique set. It is the common knowledge of speaker and hearer that determines the identification of the relevant unique discourse referent. The relevant common knowledge is constructed in different usage contexts. Hawkins (1978: 106–130) is the first to give a structured overview of the most important contexts (as shown in Table 1).¹¹

^{9.} According to Klingenschmitt (1987) the formation goes back to the iteration of the pronominal stems *sa/þa in Germanic.

^{10.} For a detailed discussion of different forms see also Lloyd/Lühr/Spinger (1998: 608).

^{11.} Originally Hawkins distinguished between eight different contexts, which he later condensed to four major groups (Hawkins 1978: 106–130). His classification has been adopted by Himmelmann (1997: 36), Schwarz (2009: 14) and Szczepaniak (2011: 72–73), among others.

Usage context	Example
Immediate situation / Deictic	'Beware of the dog!'
Anaphoric	'Yesterday a cat was walking in the yard. The children played with the cat.'
Associative anaphoric	'In front of the house there was a bicycle. The handlebars were bent.'
Abstract (or larger) situation	'At nine o'clock the Federal Chancellor opened the session.'

Table 1. Usage contexts of the definite article¹²

In the immediate situation context, speaker and hearer are part of the same situation as the referent to which they are referring, whereby visibility of the referent is not a necessary precondition in order to identify it (Hawkins 1978: 114). In anaphoric contexts, the referent is known to both speaker and hearer because it has been previously mentioned. In both context types, the identification of the referent depends on the situation – either the external or the contextual one. The other two context types have in common that the reference occurs independently of any situation. Rather it is the common knowledge of both speaker and hearer that guarantees the correct reference. The associative anaphoric context is due to a conceptual connection, typically a part-whole relation, to an already established referent (cf. Himmelmann 1997: 36) or as parts of a common frame. A nice example is attested in the Matthäus-Evangelium (about 800):

(9) In deru ziti fuor iħs in resti tago · after satim · sine iungirun in that time went Jesus on (a) holiday through fields. his disciples auh uuarun hungrage · bigunnun · raufen diu · ahar enti ezan · also were hungry started to.pick the ears and to eat [lat: coeperunt uellere spicas] (M IV, 1–3)

In the abstract or larger situation use, this common knowledge can simply be presupposed without the need for it to be introduced. The abovementioned *unica* or monosemantica are part of this group. We therefore distinguish between pragmatic definiteness (deictic and anaphoric contexts) and semantic one (associative anaphoric contexts and abstract/larger situations), using Löbner's (1985) terminology. Himmelmann (1997: 35) points out that the meaning of the definite article consists in the sum of these contexts.

If we compare the possible usage contexts of the demonstrative article, we see that it cannot be used in the semantically definite cases, as shown in Table 2:

^{12.} The examples given in the table are a compilation from Hawkins (1978), Himmelmann (1997) and Szczepaniak (2011).

Usage context	Example
Immediate situation / Deictic	'Beware of this dog!'
Anaphoric	'Yesterday a cat was walking in the yard. The children played with this cat.'
Associative anaphoric	'In front of the house there was a bicycle. #These handlebars were bent.'
Abstract (or larger) situation	#'At nine o'clock this Federal Chancellor opened the session.'

Table 1. Usage contexts of the demonstrative article

Himmelmann adds a further meaning for demonstratives, the 'anamnestic' one, a notion that goes back to Bühler (1934: 309). It refers to situations where the speaker reminds the hearer of a "spezifisches gemeinsames Wissen" [specific common knowledge] (Himmelmann 1997: 61). To illustrate this use Szczepaniak (2011: 72) quotes the following question asked by the speaker after a shared journey:

(10) Hast du was Neues über diese Stadt erfahren? have you anything new about this town learned 'Have you learned anything new about this town?'

In her view, the anamnestic use is also possible with the definite article. The result of this comparison is summarized in Table 2, where "+" indicates possible occurrences of the respective determiner, and "-" indicates impossible ones.

Usage contexts	Article		
	Definite	Demonstrative	_
Immediate situation/ deictic	+	+	
Anaphoric	+	+	Pragmatic definiteness
Anamnestic	+	+	
Associative anaphoric	+	_	C 4: 1 C :4
Abstract (or larger) situation	+	_	Semantic definiteness

Table 2. Context uses of the definite and demonstrative articles (cf. Szczepaniak 2011: 73)

If the demonstrative never occurs in semantically definite contexts, ¹³ it is hard to see how it could develop into a definite article in these positions. Therefore, the marking of semantically definite nominals can only occur by analogical spreading of an already existing definite article, an idea which I will work out in more detail in

^{13.} We explicitly exclude occurrences of the type *diese Sonne* 'this sun' from this subclass. If semantic *unica* are marked by a demonstrative article they have a special marked emotive value by referring to a specific situation, not to the entity itself.

the last subsection. What I would like to show first is the development of the definite article in those contexts where both forms are possible. As Heine (2003: 589–590) points out, a grammaticalization chain needs to have overlapping structures which can be interpreted both synchronically and diachronically:

[...] the development of grammatical forms does not lead straight from the source meaning (or form) A to the target meaning (or form) B but invariably involves an intermediate stage where A and B coexist side by side, thereby creating a situation of ambiguity [...]:

(11)
$$A \rightarrow (A, B)^{14} \rightarrow B$$

This means that the determiner *dër* must have been ambiguous between a demonstrative and a definite article at least for a certain period of time.

The meaning and reanalysis of the demonstrative 3.2

The meaning of the demonstrative is typically described in relation to a deictic system (Himmelmann 1997: 3). Contrary to this view, Himmelmann (1997: 55, 62) points to the fact that *dies* in NHG doesn't express distance. Bisle-Müller (1991: 80) doesn't even mention the deictic system in defining its usage:

Der Demonstrativartikel wird verwendet, wenn es auf die Abgrenzung von anderen möglichen Referenzen ankommt. Entscheidend ist, dass andere mögliche Referenten im gemeinsamen Wissen vorhanden sind und dass sich der gemeinte Referent von diesen anderen für den Hörer unter Berücksichtigung des gemeinsamen Wissens mit dem Sprecher deutlich unterscheidet und der Hörer diesen Unterschied als relevant ansehen kann.

'The demonstrative article is used if the delimitation from other possible references is crucial. It is decisive that other possible referents exist in the common knowledge and that the designated referent can be clearly differentiated from these other ones by the hearer considering the common knowledge with the speaker, and the hearer can regard this difference as relevant.'

This definition, which takes delimitation¹⁵ as the decisive feature, will be my point of departure. I will assume that in all cases of pragmatic definiteness this feature can be lost, as shown in the following text passage, where the determiner dher is used in the anaphoric context:

^{14.} I add brackets to clarify Heine's idea.

^{15. &}quot;Salience" could also be a concept to capture the semantics of the demonstrative (cf. Krasavina 2011). I will leave this question open since the actual argumentation would not change.

(12) Isaias auh offonor den selbun sunu [...] gafestinota, duo er quad:
Isaiah also more clearly the self son [...] meant, when he said:
["..."] Sus chuad auh dher forasago: ["..."]. So selbo dher forasago
["..."] So said also the prophet: ["..."]. So even the prophet
offono quati:
clearly said:

Based on the definition adopted above, the demonstrative focuses on the fact that it was the prophet Isaiah and not someone else who made the quoted comments. Bisle-Müller's definition includes the possibility that other potential referents occur in the common knowledge of speaker and listener without a further prophet being mentioned in the previous context. Using the demonstrative in this case creates exactly this effect, which is described as communicative highlighting by Oubouzar (1992: 75). But contrary to her, I assume that this is not the only potential reading and that the reading of the determiner as a definite article is not only possible, but even more likely. The repetition of the emphasis would only make sense if the identity of the prophet were really in doubt. But this is not the case, as the context reveals. What matters are the statements in the quotations - the reference to the prophet is merely a reference to an accepted authority. Therefore, it seems likely that in the process of reanalysis the feature "delimitation" is cancelled. We can model this process based on Detges/Waltereit (2002), who explain the grammaticalization of the French negation ne ... pas from a cognitive-pragmatic point of view. In the 14th and 15th centuries the simple negation ne is being reinforced by pas 'step', which finally prevails in the written standard variety as the double negation ne...pas (Detges/Waltereit 2002: 174). At the beginning of this process, the speaker wants to be more expressive than usual and uses the reinforcement pas (in contexts of physical movement). This concreteness is seen as more informative than the abstract meaning "absolutely not." In a further step of the development the hearer reduces this kind of expressivity to what is meant (Detges/Waltereit 2002: 179). This process must be an abrupt one and cannot occur gradually, since there is no intermediate concept available. The authors therefore assume that the relevant process of grammaticalization is reanalysis in a concrete communication situation between speaker and hearer. We transfer this model to the development of the definite article and assume that – for example in anaphoric contexts – the speaker starts to use a demonstrative in order to mark a certain discourse referent as delimited from others and thus as emphasized. Her motivation is due to the wish to be more expressive than the average, a common assumption in the literature on language change (for a similar view see Keller 2014). At the same time, she creates more information than necessary. In the reanalysis process the hearer reduces the redundancy, which is mainly manifested by the repetitions of anaphoric dher, i.e. the repetition of the delimination feature, and cancels it. What remains is only the

meaning of uniqueness. This reduction process can be derived from Grice's (1989) second Submaxim of Quantity "Do not make your contribution more informative than is required." In a certain communication situation, the speaker starts to omit the accentuation of the demonstrative, thus creating the precondition for the determiner *dher* to be ambiguous. ¹⁶ The hearer infers that the speaker is probably observing the Maxim of Quantity and interprets the determiner as a definite article. Only if the context prompts the necessity of the delimitation feature will she maintain it, as is the case in (1), repeated here as (13):

(13) [Ein búrg] ist thar in lánte, [...] zi théru steti fúart er thia druhtines is there in land [...] to this place takes he the Lord's a town múater (O I.11, 23–26, cf. Demske 2001: 113) mother

The interpretation of the polysemous determiner *dër* as a demonstrative is forced by the context: the existence of different discourse referents (here: towns) is part of the common knowledge, thus the inference of the delimitation feature is necessary in order to focus the hearer's attention to the relevant referent (Diessel 1999: 2). In many cases this inference is only a possibility, thus allowing the special stylistic effect of emphasis as well. From our contemporary perspective, we often cannot decide which interpretation the OHG author had in mind.

In all usage contexts that allow overlapping interpretations this kind of reanalysis is possible, thus also in deictic ones and - as Szczepaniak (2011: 74) assumes in anamnestic ones. In most of these cases, the uniqueness feature is sufficient in order to identify the correct referent because of the common situation or the common context.

Unlike Schlachter (2015), I assume that the marking of semantic definites in anaphoric contexts by a demonstrative determiner is only a marked option (see also fn. 13) and that the emergence of definite marking is probably due to analogy and not to reanalysis. In the famous text passage from St. John's gospel, the first reference to the entity *uuort* occurs as a bare noun. In the second and third occurrences, the determiner *thaz* is inserted:

(14) In anaginne uuas uuort / Inti thaz uuort uuas mit gote. / Inti got in beginning was word and the word was with God and god selbo uuas thaz uuort (T 65, 16)himself was the word

^{16.} An anonymous reviewer pointed out that the loss of the accentuation could also be the consequence of the reanalysis. If this were true, we would expect the existence of accentuated definite articles which is not the case.

Although *thaz* occurs in an anaphoric, i.e. pragmatically definite, context, it does not grammaticalize in that position but is inserted as an already existing definite article due to a process of analogy (cf. Hopper/Traugott 1993: 56). Of course we cannot exclude the possibility that *thaz* was used as a demonstrative with its original semantics, we only want to argue that there is no need for emphasizing or delimitating the unique referent from others. This is even more obvious with nouns like *son* or *father*. In the Isidor translation they mostly occur as bare nouns.

The analogical diffusion can be observed in the manuscripts. It manifests itself not only in the spread of usages of the same context but also in the spread from the pragmatic usage contexts to the semantic ones.

4. The interplay of different article forms

In this section I want to argue for the hypothesis of a more complex scenario of the development of the definite article. I assume that from the very beginning of the OHG period there is evidence not only for a definite article reading of the "old" demonstrative, but also for the existence of other definite article forms. These secondary forms – besides the bare noun phrases – were displaced by the spreading definite article *dër*.

4.1 Primary and secondary article forms in Tatian

Interestingly two article forms are attested in the Tatian translation, which originates from the first half of the 9th century: *thër* and *thie*. The precursor of *thie* is *thē* (Braune/Reiffenstein 2004: 247, fn. 1a). This form, which was accentuated (Heinrichs 1954: 98, Klein 1979: 440), is also attested in other texts. ¹⁷ On the other side, the form of the nominative singular *thër* has been described as the composition of the demonstrative *sa* (*þa*) with the personal pronoun *iz* (*iR*>*ir*) 'he' (Braune/Reiffenstein 2004: 247, fn. 1a). While Braune/Reiffenstein (2004: 247, fn. 1a) call *thie* merely a secondary form [*Nebenform*] of *thër*, other authors such as Heinrichs (1954: 87), Neumann (1967: 31–37) and Eroms (1989a: 307) suspect that the distribution of the two forms is the same as in many contemporary German dialects (cf. also the material collected by Barufke/Spannbauer-Pollmann 1989). Most of the dialects distinguish between accentuated and non-accentuated forms. Broadly, the accentuated forms are used in anaphoric and deictic (i.e. pragmatically

^{17.} Neumann (1967: 116–118) however interprets these forms mainly as relative or demonstrative pronouns.

definite) contexts while the non-accentuated forms refer to semantically definite contexts, where the discourse referents can be identified because of general knowledge (Heinrichs 1954: 85, Ebert 1971, Eroms 1989b: 113–114).¹⁸

Neumann is the first to explicitly investigate whether the two OHG article forms *ther* and *thie* show the same or a similar distribution. With respect to frequency he gets the following results: *ther* occurs 435 times, and *thie* 80 times, i.e. the proportion is at about 5:1. It is important to note that this proportion is not distributed regularly throughout the text. Only the scribes α , β und α use both variants (Neumann 1967: 7), while the others only use the article *ther* (Neumann 1967: 89). An interesting phenomenon is the revision carried out by corrector ζ . In most of the cases, he corrects *thie* to *ther*. One could assume that *thie* is simply the older form, but the fact that he doesn't correct all forms (Neumann 1967: 8) gives rise to the conclusion that there must have been a difference in meaning.

Based on Neumann's investigation of the individual examples, I conclude that there is some slight evidence for the hypothesis that *ther* marks semantically definite discourse referents while *thie* is mainly used in pragmatic (mainly anaphoric) contexts (Neumann 1967: 45–54). Thus, *thie* seems to have features of a demonstrative article. Nevertheless, it is difficult to make this kind of generalization with respect to semantically definite noun phrases because of the high token frequency of *heilant* 'Redeemer'; for instance scribe β marks 73 noun phrases with *ther*, 61 of which occur with *heilant*. Although other instances of *unica* are relatively rare, it is important to note that *diuual* 'devil' is marked with *ther* by all scribes; *thie* never occurs with this noun (Neumann 1967: 46). In other cases which are also semantically definite, scribe ζ replaces *thie* by the form *ther*, as shown in the following example, where the determiner in front of a modified noun has been corrected:²⁰

(15) [...] ther (< thie) fariseus / thien thara ladota / quad sus In imo selbemo the Pharisee who-him there invited said so to him self (T 487, 7)

The proposition of the restrictive relative clause guarantees the unique reference of the noun *fariseus*. If we assume that *thie* still carries the delimitation feature, the correction eliminates this redundant information and replaces it with the semantically definite *ther*.

^{18.} This also includes nominalizations, names, denominations of professions and nouns in proverbs.

^{19.} The proportion of *ther:thie* is 19:16 (scribe α), 73:45 (scribe β) und 37:14 (scribe α ').

^{20.} Thanks to Vita Rosalie Wijffels, who collected the Examples (15) and (16) for a paper she wrote during the winter term 2012/2013 at Humboldt-University of Berlin (Wijffels 2013).

In the following example *thie* has been replaced in a chain of anaphorically coreferring nouns:

(16) In themo sehsten manode gisentit uuard engil gabriel fon gote [...] in the sixth month sent was angel Gabriel from God Inti Ingangenti ther (< thie) engil zi Iru quad [...] quad Iru and entering the angel to her said said to-her ther (corr.) engil [...] antlingota tho ther (corr.) engil quad Iru]²¹ the angel responded then the angel said to-her (T 71, 3-27)

After the discourse referent "engil Gabriel" has been introduced as a bare noun, the anaphorically used noun phrase *thie engil* refers to it several times. Following our hypothesis, the subsequent corrections from *thie* > *ther* show that the corrector judged the repetition of the article *thie* as inappropriate, since it is too explicit and creates an emphasis on *thie engil* which is not justified by the context. A reanalysis of the form *thie* doesn't seem to be a possible solution. Instead, the data show the analogical spreading of the competing form, namely the *ther*-article which must have developed independently. In the next subsection, we will come back to its etymology and use it for a synchronic analysis.

4.2 Article-like personal pronouns

I want to propose that also apparent personal pronouns in a prenominal position should be interpreted as secondary forms of the definite article, like in the OHG Examples (17), found in Behaghel (1923: 37), and (18), from Univerzagt (2011: 23, fn. 20), where the article-like pronoun occurs within a prepositional phrase:

- (17) [...] quamun sine iungoron ubar iz uuazzer (T 297, 15) came his disciples over it (the) water
- (18) tho giengun thie iungoron zi imo heilante tougolo (T 313, 20) then went the disciples to him (the) Redeemer secretly

We also find such forms in nominal phrases with a proper name in the text type of legal decisions (*Rechtssprüche*) from Cracow from the 15th century, quoted in Waligóra (2008: 371):

^{21.} Note that in the Latin original every single occurrence of angelus 'angel' is bare.

- (19) das her Clebiczky adir zyne muwme / en > Tczmeln
 that he (or Master) Clebiczky or his wife him (the) Tczmeln
 aus feyne(m) haufe hette getre=/ben >[...]
 from his house had expelled

 (Sentencia de Cracovia, No. 1.58/8,9.XII.1456, S. 43–44, Hand B)
- (20) So / mag d(er) selbe briff ym Bochenken / geʃchadin so may the self letter him (the) Bochenken harm (Alia [sentencia] de Cracovia, No. 1.648/82, 24.XII.1465, S. 213, Hand M)

Waligóra (2008: 371) evaluates these forms as 'anaphoric-cataphoric' personal pronouns. She reports that they usually occur between two proper names referring to the same person and that they refer backward and forward at the same time. They serve to clarify the case and syntactic function of the discourse referent indicated by the proper name. Apparently, Waligóra interprets these sequences as appositions. Of course such an interpretation is possible, but I want to argue that it is not plausible. First, if it were a phenomenon typical for this kind of juridical texts, it should be found consistently, but it occurs only in the time between 1456 and 1472. Then, it suddenly stops although it is attested for different scribes and although these texts are recorded until 1504. Under the hypothesis that these forms aren't pronouns but weak article forms as they are attested in most of the German contemporary dialects, this sudden disappearance can be explained. I especially want to point out the clitic forms without initial d- (such as em, en) attested in the dative and accusative, masculine and neuter (Barufke/Spannbauer-Pollmann 1989: 140, 149, and 173). It could be the case that these weak article forms were seen as a feature of orality and that they were forbidden by a prescriptive act. Also Nübling (1992: 155) mentions the fact that in Middle High German these free (weak) forms existed in other syntactic positions besides in contraction forms. Second, the assumption that the reference to a previously mentioned person occurs twice (via the pronoun and via the proper noun) implies that a similar kind of "over-determination" is created as in the abovementioned case of the demonstrative in an anaphoric context. It would create a stylistic emphasis which is not justified by the context. Instead, I will follow Hodler (1954) in assuming that this kind of apposition was the origin of the development of the weak article forms. Already Hodler (1954: 31) distinguishes between the anaphoric article and the article in semantically definite contexts. ²² The latter developed from an apposition structure consisting of a personal pronoun and a noun which originally had the function of clarifying the reference of the pronoun (Hodler 1954: 31).

^{22.} He uses a different terminology, speaking of "absolutely real (unica, proper names)," "relatively real (all nouns besides the other groups)", "abstract" and "generic" nouns (1954:30).

In the same way we can analyze the constructions of the type "*ir selbo* + noun" which are attested in the Isidor translation as instances of weak article forms:

- (21) dhazs ir selbo christ ist chiuuisso got ioh druhtin (I III.1) that he (the) self christ is certainly God and Lord
- (22) So ir selbo druhtin quhad zi moysi: (I V.II) so he (the) self Lord said to Moses

Even more common is *dher selbo*:

(23) Umbi dhen auh in andreru stedi dher selbo forasago quhad (I VII.2) about him also in different place the self/same prophet said

This analysis is also supported by theoretical linguistic work. Postal (1970: 69–70) explicitly rejects the analysis as an appositive relative clause for noun phrases like "we guys" or "we soldiers." First, they occur in negative contexts where typical appositions cannot be used, see for example the contrast in (24), and second, they have a different meaning than the appositive clause would have, as for instance in (25). Therefore, he proposes treating them as definite articles.

- (24) a. *They never insulted the men who were democratsb. He didn't like us Americans (Examples (35c) and (36c) in Postal 1970: 70)
- (25) a. Let us three men leave first
 - b. *Let us, who are three men, leave first; Let us three, who are men, leave first (Examples (40b) and (41b) in Postal 1970: 71)

Finally, in the generative framework this analysis was adopted by Abney (1987), who was the first to propose that pronouns are – like articles – the head of a determiner phrase (DP) which selects a nominal phrase. I would like to adopt this analysis for OHG and suggest that the personal pronoun in the head position of the DP was ambiguous and that at least some forms of the paradigm could be used as a weak definite article expressing semantic definiteness.

4.3 Contraction forms

In this subsection I want to focus in more detail on the theoretical analysis and show the advantages for the explication of the contraction forms. Nübling (2005) proposes categorizing these forms as a further step in the grammaticalization process of the definite article²³ since their existence presupposes the expression of

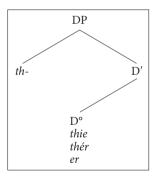
^{23.} But see Waldenberger (this volume) who argues against this view.

semantic definiteness. Apart from the empirical problem we already mentioned in subsection 2.2, namely the existence of contracted forms already in the 8th and early 9th century, the formation of these forms is difficult to explain, especially the loss of the initial d-. Nübling (1992: 149) draws attention to the fact that the intermediate forms don't exist synchronically. Her explanation builds upon the idea that the enclitic article is isolated from the existing contraction forms and analogically transferred to new ones (Nübling 1992: 155, 177). Nevertheless, the problem of the formation of the original forms still remains. Instead, if we assume the existence of weak definite article forms without an initial d- in OHG (cf. Schaub 1979 for a synchronic analysis), the formation of the contractions [prep+art] is easy to explain. The article cliticizes to the preposition in the nucleus of the prepositional phrase: zi + imo 'to + him' = zimo.

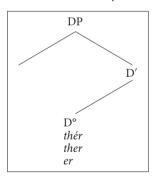
I also want to propose that all determiners are situated in D°, independent of their specific semantics. The reanalysis from the demonstrative article (realized as accentuated *thér* in Figure 26) to the definite one (*ther*) doesn't correspond to a syntactic change.

Based on the abovementioned explanation in Braune/Reiffenstein (2004), I propose that a reduced p-stem (here realized as th-)²⁴ combines with the article like personal pronoun in order to form a new semantically definite article, homophonous to the one which developed from the demonstrative.

(26) a. Before the reanalysis



b. After the reanalysis



This analysis differs from van Gelderen (2007) with regard to the classification of the demonstrative. In van Gelderen (2007: 279), the original demonstrative article is hosted in SpecDP and becomes the head of DP after the reanalysis has taken place. It is in line with Coniglio/Schlachter (2014: 168), who assume that, also in a synchronic analysis, the different formatives of the weak article are in different

^{24.} This stem can be analyzed as a phonetically reduced form of invariant article forms like *de*, *di*, *the*, *thi* (cf. Lloyd/Lühr/Springer 1998: 589) or from the adverbs *thar* 'there' or *tho* 'then'.

positions: the stem b- with its anaphoric and deictic features is located in the specifier of DP while the morphological information is realized in the D-position. The formation of the contraction form (preposition + article) is explained by the reduction of the stem of the definite article. In contrast, the analysis proposed here suggests a direct formation of the preposition with a th-less (or d-less) weak article form. This analysis presupposes that semantic definiteness is associated with the formative -er. A problem might be that the same formative is involved in the morphology of the strong adjective, where it signals indefiniteness. A solution would be to adopt Lühr's (1982: 597)²⁵ explanation of the adjective ending -er which would have developed independently of the "artikelartigen pronomen" [article-like pronouns] (Sievers 1876: 102) Furthermore, the analysis proposed here assumes two different formation processes of the definite article: one is the reanalysis of the demonstrative leading to the pragmatic readings of the definite article, the other one is the formation of the new semantically definite article from the just mentioned formatives. Driven by the analogical extension of the reanalyzed dër-article into purely semantic contexts, old and new der-forms merge.

5. Conclusions

The standard view of the grammaticalization of the definite article in German encounters some problems which concern both theoretical assumptions about its development and the assessment of known and new data related to it. This paper questions the standard scenario, which builds upon the idea of gradualness: the demonstrative loses its deictic (and other semantic) features step by step, thereby creating the precondition for the spread to other noun classes. Instead, it proposes a process of reanalysis that occurs in all relevant pragmatically definite contexts, and already takes place in a very early period of German. In combination with analogical extension, the new meaning is transferred into semantically definite contexts – also in a very early period. The reanalysis consists in the loss (or cognitive repression) of the delimitation feature related to the demonstrative and thus gives rise to the new definite article reading. Semantically definite NPs marked with the der-article are attested since the early 9th century (e.g. truhtin 'Lord', ti*uual* 'devil'). The same is true for contractions of prepositions and reduced articles, whose formation is only possible in combination with semantic definiteness. The hypothesis that the definite article already existed in early OHG leads to fewer conceptual contradictions than the counter-hypothesis. For example, it motivates

^{25.} Protogermanic *blinda was extended first in Westgermanic by the ending * $-\bar{e}$, in analogy to the pronoun * $b\bar{e}$, and then in Early OHG by -r from er/der.

the existence of the double demonstrative *dëser*, which is interpreted as a development of the weakened demonstrative. The observable variation between marking and non-marking is seen as a consequence of preferences in language use. In a small sample of 150 NPs (50 from the Isidor translation, 50 from the gospel of St. Matthew in the Monsee Fragments (both about 800) and 50 from Tatian (830), I compared the proportion between definite nouns marked by *dër* (presumably not the demonstrative) and bare nouns that are semantically definite. What can be observed is an increase of definiteness marking. The proportion of marking vs. non marking changes from Isidor (12:38) to St. Matthew (19:31) to Tatian (25:25). But these data, if they were significant at all, only confirm what is already known. They do not reveal anything about the process of grammaticalization itself since the different syntactic and semantic noun classes cannot be compared to each other and since the type-token relation varies. For example, in the bare noun group of the Isidor translation the nouns 'father' and 'son' occur 7 times, and there are 9 NPs with a preposed Genitive attribute. Except for Example (27), this syntactic group is totally missing in St. Matthew, whereas in Tatian preposed genitives mainly occur in appositions which also in Present Day German can occur without article marking: in behleem iudeno burgi 'in Bethlehem, (der) Stadt der Juden; in Bethlehem, der Juden Stadt' (T 93, 9 and 27). We further confirm what is already known about PPs. We find many bare nouns inside them in all the texts (fona munde 'from mouth' (I 4 22) inbaru 'on litter' XX (M 1,8) in hûs 'in house' (T 9514). But interestingly nouns in object PPs are marked by the definite article: frāgēn fon themo kinde 'ask for the child' (T 95,3). Any serious account, therefore, has not only to consider these factors but many more syntactic and semantic properties, and only compare similar groups in its diachronic development. What matters here is the fact that even in this small sample we do find occurrences of semantic definiteness:

(27) Inu ni larut ir · huuaz dauid teta · (...) hueo · $aer \cdot genc$ · in daz

Part. Neg read you what David did how he went in the

gotes hūs

god's house

(M IV, 6–8)

The NP *daz gotes hūs* 'the god's house' is semantically definite due to its use in a larger situation (see Table 1 and 2). It is not mentioned in the context before and thus accommodated as a known and unique referent. It is this kind of semantically definite noun marking which in my view is sufficient to claim the existence of a definite article already in the early Old High German period and that further exceptions are due to analogy in process. Finally, the assumption of the existence of a definite article depends on the understanding of grammaticalization itself and on the question of how much variation is permitted in order to qualify a certain item as part of a system.

A further issue of this paper has been to show that the development of the definite article $d\ddot{e}r$ has to be seen in the same context with other, secondary article forms. First, the distribution of *ther* and *thie* in the Tatian translation reveals that the *ther*-forms are mainly used in the domain of semantic definiteness and that they slowly drive back the *thie*-forms. Second, the assumption that in OHG – like in modern dialects or colloquial speech – we find d-less weak article forms leads to a better understanding of certain text passages and a more complex understanding of the definiteness scenario as a whole. Third, this assumption also leads to a simple explanation of the abovementioned contraction forms: the d-less article form cliticizes to the preposition, thus we don't have to assume the loss of the stem.

In sum, the development of the definite article in German involved more processes than a simple grammaticalization path might suggest. In future work, this has to be investigated with detailed empirical studies which will give us a precise idea of the frequencies involved in all relevant context uses. The tagged OHG corpus which now exists will supply the methodologically indispensable tools to address this desideratum.

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The grammaticalization of the definite article in German

From demonstratives to weak definites

Ulrike Demske

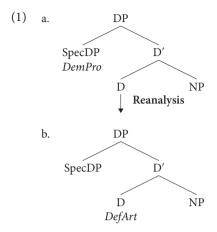
The present paper looks into the grammaticalization of the definite article in the history of German. Starting with the well-known emergence of the definite article from a demonstrative pronoun over the course of Old High German (750–1050), I will consider the rise of so-called weak definites in Early New High German (1350–1650) as a new piece of evidence for the grammaticalization process. Here, the subclass of possessive weak definites is of particular interest for the grammaticalization of the definite article in German, because of a word order change affecting the position of possessor phrases. As soon as the possessor systematically follows the head noun (except for proper names), we observe three alternatives for the prenominal determiner slot: it may remain empty, or it may be filled either by the indefinite or the definite article in Early New High German. In Present-Day German, the definite article is used in the unmarked case, thus pointing to a second stage in the grammaticalization process of the definite article in German, which has so far not been acknowledged in the literature.

Keywords: definite article, grammaticalization, weak definites, possessive constructions, German

1. Introduction

The rise of the definite article from a demonstrative is a well-known phenomenon, attested in many languages and considered to be a prime example for grammaticalization processes, cf. Greenberg (1978), Himmelmann (1997), Diessel (1999) and Schlachter (2019, Section 2). According to van Gelderen (2011), the rise of the definite article is part of a linguistic cycle, with the demonstrative in the specifier position of a functional projection being reanalyzed as the head of the respective phrase (see (1)).

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It is commonly assumed that definite articles derive from the anaphoric use of demonstrative pronouns (= Stage I according to Greenberg 1978), followed by Stage II where the definite article is used to denote specificity. In the present paper, I am concerned with the development of the definite article in the history of German, starting with its rise in Old High German (= OHG). Particular emphasis, however, will be placed on the later development of definite articles, i.e. Stage II in Greenberg's terms. This distinction has not been drawn in previous literature on the development of definite articles in German so far (Heinrichs 1954, Hodler 1954, Oubouzar 1992, Demske 2001, Catasso 2011, Kraiss 2014). Taking a closer look into the distribution of the determiner, I will provide evidence that definite articles of Stage I are attested in environments requiring a definite expression, while definite articles of Stage II have a wider distribution. They also occur when the context requires an indefinite nominal expression. While the use of the definite article of Stage I is well established towards the end of OHG, ² definite articles with weak

^{1.} Greenberg (1978) posits a third stage in the development of the definite article where the article becomes a noun class marker. Hopper & Traugott (1993: 135) state that this stage cannot be taken as a classic case of grammaticalization, because the former demonstrative acquires new functions throughout this change.

^{2.} Cf. Schlachter (2019) for a novel approach to the OHG data, pointing out empirical and conceptual problems of previous proposals. In particular, she suggests a reanalysis of the demonstrative in a much earlier stage in the history of German than assumed so far. Her evidence is based inter alia on the manifest presence of contracted forms (= preposition and determiner) in Otfrid which is not expected in any account locating the rise of the definite determiner as late as the end of the OHG period. Further evidence includes the distinction of two forms of the determiner in Tatian, which might also be interpreted in terms of an already established distinction between pragmatic and semantic definites (cf. Section 4 of Schlachter's paper).

interpretations become grammaticalized much later, starting in the 16th century, when possessor phrases are postposed in growing numbers.

The structure of the paper is as follows. In Section 2, I briefly sketch the use of the definite article in Present-Day German (= PDG) based on Löbner's (1985) distinction of pragmatic and semantic definites. Section 3 presents the OHG data. Based on previous work, I show that in OHG we deal with a demonstrative pronoun, rather than with a definite article. In Section 4, I turn to weak definites in Early New High German (= ENHG). An interpretation of the changes in terms of an emerging functional projection is suggested in Section 5, and Section 6 provides a conclusion.

The definite article in Present-Day German

The use of a definite singular noun phrase indicates that there is exactly one entity in a particular context that satisfies its descriptive content. A typical example is the anaphorically used noun phrase der Vogel 'the bird' in (2), which is coreferent with the antecedent expression einen Vogel 'a bird'.

(2) Fred beobachtet einen Vogel. Der Vogel hat ein rotes Gefieder. Fred watches bird. The bird has a red plumage 'Fred is watching a bird. The bird has red plumage.'

Possessive constructions provide less typical examples for the use of the definite article as Löbner (1985) points out. In examples like the following, the definite article is used in spite of the fact that we have no further information about the farmer himself or the probable number of sons he has. According to Löbner, the definite noun phrase can be interpreted unambiguously nevertheless, when we construct an abstract situation containing two entities, i.e. 'poor farmer' and 'son'. Since only one son figures in the abstract situation, there is an unambiguous relation between father and son, licensing the definite article.

(3) Er war der Sohn eines armen Bauern. he was the son of.a poor farmer 'He was the son of a poor farmer.'

Recent work such as Barker (2005), Doron & Meir (2013), and Schwarz (2014) treats cases like (3) as a subclass of definite expressions, known as weak definites since Poesio (1994).

The present paper will explore the grammaticalization process of the definite determiner building on typical and less typical usages, the latter arising throughout the grammaticalization process. To describe the historical development of the definite article in the history of German, I will make use of Löbner's (1985) relational approach to definiteness and distinguish between pragmatic and semantic definites. His distinction is briefly introduced in Section 2.1, followed by a sketch of possessive weak definites in Section 2.2.

2.1 Pragmatic and semantic definites

In his seminal paper, Löbner (1985) suggests to distinguish two ways of licensing a definite noun phrase, yielding pragmatic and semantic definites. Pragmatic definites on the one hand depend on a particular context of utterance to refer unambiguously, anaphoric uses being a prominent example. An example of an anaphoric relation between a definite noun phrase and its antecedent is shown in (3), where the former picks up a referent introduced in the previous discourse. The definite description and its antecedent refer to the same extralinguistic entity. In addition, the head nouns of both phrases are identical. These cases are generally called direct anaphors (Vieira & Poesio 2000).

(4) Fred schreibt ihr einen Brief. Der Brief wird nie ankommen.
Fred writes her a letter. The letter will never arrive
'Fred writes her a letter. The letter will never reach her.'

Coreference without identity of head nouns holds when both head nouns are only lexically related: The definite noun phrase *der Vogel* 'the bird' in (5) is a hyperonym of *Kardinal*. Following Müller & Strube (2001), I assume that only coreference is a necessary requirement for establishing an anaphoric relation.³

(5) Fred sieht einen Kardinal. Der Vogel hat einen roten Kamm. Fred sees a cardinal. The bird has a red crest 'Fred observes a cardinal. The bird has a red crest.'

Head nouns of pragmatic definites typically have a sortal meaning with the unique referent being specified by the context. According to Löbner (1985), sortal nouns are neither unique nor referential, they rather classify entities into sorts. Head nouns of semantic definites, on the other hand, are functional nouns which are unique and referential. In contrast to sortal nouns, they take arguments. Löbner classifies functional nouns corresponding to their valency. Nouns like *Sonne* 'sun', *Zeit* 'time' and *Wetter* 'weather' represent functional concepts with only a situation argument. The most frequent type of functional nouns includes a second argument in addition to the situational one. This argument may denote a social or some other role (*Ehefrau* 'wife', *Mörder* 'murderer'), unique parts of objects (*Kopf* 'head', *Dach*

^{3.} In contrast, Vieira & Poesio (2000) restrict the notion of anaphoric relation to cases where coreference and identity of head nouns are involved, i.e. cases of direct anaphors.

'roof'), events which occur only once (Geburt 'birth', Anfang 'beginning') or dimensions of various kinds (Höhe 'height', Alter 'age', Name 'name'). 4 Semantic definites operate unambiguously irrespective of particular situations, either because they are inherently unique as with one-place functional nouns (6a), or due to a bridging relation⁵ they establish between the definite noun phrase and the previous context (6b).6 Neither coreference nor identity of head nouns holds in the latter case, the definite noun prase is rather used to introduce a new referent into the discourse.

- (6) a. Die Sonne schien den ganzen Tag. the sun shone the whole day 'The sun was shining all day.'
 - b. Alfons wurde gestern ermordet. Der Mörder entkam. yesterday murdered. The murderer got.away 'Alfons was murdered yesterday. The murderer got away.'

Besides functional nouns as illustrated above, there are relational nouns which are not unique, because they instantiate relations from one-to-many. Examples for merely relational nouns are kinship terms as Schwester 'sister', Tante 'aunt' or represent part-of-relations with more than one part available, such as Auge 'eye' or Fuß 'foot'. Merely relational nouns usually figure as head nouns of pragmatic definites as stated by Löbner (1985).

Even if there are clear diagnostics to distinguish between sortal, functional and relational nouns, it should be noted that this distinction applies strictly speaking to uses of nouns, because nouns cannot be classified in a strict way (Löbner 1985, Partee & Borschev 2012). A noun with a basic sortal meaning, for instance, can be shifted to a functional reading by adding an adjective such as nächst 'next', a superlative or an ordinal number. The following definite noun phrase uniquely refers, independent of the particular situation.

Zoo von Berlin (7) der älteste Löwe im the oldest lion in the zoo of Berlin 'the oldest lion in the zoo of Berlin'

Well-known evidence for the distinction between pragmatic and semantic definites comes from the definite article in Frisian where different forms are used with functional nouns (8a) and sortal nouns (8b), cf. Löbner (1985, quoting Ebert 1970):

^{4.} Three-place functional nouns include nouns like Beziehung 'relation', Unterschied 'difference' und Entfernung 'distance' with two arguments in addition to the situational argument (Löbner 1985).

^{5.} Hawkins (1978: 123) uses the notion associative anaphoric.

^{6.} The English version of the example is taken from Clark (1975).

- (8) a. $\underline{\underline{A}}$ san skiinjt. the sun shines 'The sun is shining.'
 - b. Peetje hee jister an kü slaachtet. Jo saai, <u>det</u> kü wiar Peetje has yesterday a cow slaughtered. One says the cow was äi sünj.
 not healthy

'Peetje has slaughtered a cow yesterday. One says the cow was not healthy.'

How can we use Löbner's distinction to describe the grammaticalization process of the definite article? In view of the fact that functional but not sortal nouns are inherently unique, we might expect that the definite article is earlier attested with sortal than with functional nouns to explicitly indicate that there is exactly one entity in a given context to satisfy the descriptive content of the nominal head. This expectation is in fact borne out as shown in Demske (2001). Furthermore, the emergence of the definite article from a demonstrative pronoun suggests that the definite article starts out with sortal nouns before spreading to functional nouns. The assumption that the definite article arises from an adnominal demonstrative pronoun presupposes a stage in the history of the definite article where its distribution is rather that of the demonstrative than that of the grammaticalized definite article. Following Löbner (1985) again, I assume that adnominal demonstratives need to choose between two entities of the same kind which rules out functional nouns, but allows for sortal and merely relational nouns to combine with a demonstrative pronoun.⁷ Earlier examples are repeated here to illustrate the difference:

- (9) Fred schreibt ihr einen Brief. Der Brief wird nie ankommen. Fred writes her a letter. The letter will never arrive 'Fred writes her a letter. The letter will never reach her.'
- (10) a. Die Sonne schien den ganzen Tag. the sun shone the whole day 'The sun was shining all day.'
 - b. Alfons wurde gestern ermordet. Der Mörder entkam. Alfons was yesterday murdered. The murderer got.away 'Alfons was murdered yesterday. The murderer got away.'

Before evidence to this effect is presented in Section 3, I briefly introduce the concept of weak definites.

^{7.} Partee & Borschev (2012) refer to Davies (1982) for the observation that demonstrative pronouns used without a noun need an implicit sortal noun to resolve the deictic intention:

⁽i) I don't know why that's in here.

Weak definites 2.2

Definite expressions with weak interpretations belong to first-mention uses of the definite article as do semantic definites. In contrast to the latter, however, they are commonly taken as not presupposing uniqueness, but are known for their lack thereof, with sortal and merely relational nouns figuring as nominal heads. So far, three subclasses have been discussed in the literature: (i) possessive constructions (Poesio 1994; Barker 2005), (ii) non-possessive constructions (Carlson & Sussman 2005; Aguilar-Guevara & Zwarts 2010; Schwarz 2014) and (iii) amount definites (Doron & Meir 2013). The following examples for non-possessive and possessive weak definites are taken from the literature just mentioned.

- (11) a. Fred went to the store.
 - *John got these data from the student of a famous linguist.*

Discussing non-possessive weak definites as (11a), Carlson & Sussman (2005) introduce two pieces of evidence to demonstrate their non-unique reference. In examples like (12a), the definite NP the store gets a weak reading and therefore the sentence does not necessarily mean that Fred and Alice went to the same store (i.e. sloppy identity under VP ellipsis). The weak interpretation of the definite NP the hospital in (12b) admits a distributive reading with individual boxers sent to different hospitals.

- (12) a. Fred went to the store, and Alice did, too.
 - Every boxer was sent to the hospital.

Further diagnostics of non-possessive weak definites include their restriction to a small class of lexical items⁸ and their need of a governing preposition or verb (Carlson & Sussman 2005, Carlson et al. 2006; Aguilar-Guevara & Zwarts 2010; Schwarz 2014). As pointed out by Carlos & Sussmann (2005), non-possessive weak definites behave like bare singular count nouns in English (13). Both are used to denote a typical activity.9

(13) Sue took her nephew to college.

^{8.} Bosch & Cieschinger (2010) argue that weak readings of definite noun phrases are due to conceptual rather than lexical restrictions.

^{9.} Another approach is taken by Aguilar-Guevara & Zwarts (2010) who analyze non-possessive weak definites as definite generics, refering to kind of individuals. They adopt the proposal of Krifka (2003), stating that the definite article is licensed by the uniqueness of the kind as in definite generics (The lion vanished from Asia).

The German versions of (12) require cliticization of the definite article to the preceding preposition, as Löbner (1985) pointed out. When preposition and definite article do not clitisize, the definite noun phrase gets a strong reading licensed by a modifier (14b).

- (14) a. Fred muss ins Krankenhaus/zur Schule.

 Fred must in.the hospital/to.the school 'Fred has to go to (the) hospital/to school.'
 - b. Fred muss in das Krankenhaus im Stadtzentrum.

 Fred must in the hospital in the city.center

 'Fred has to go to the hospital in the city center.'

As to possessive weak definites, exemplified in (11b), unique reference is likewise not presupposed in spite of the relational head noun marked for definiteness either by the definite article or a prenominal genitive. Doron & Meir (2013) stress the fact that none of the examples under (15) means that the famous linguist has a single student. Besides examples with indefinite possessors, weak indefinites may also include definite possessors (16), cf. Poesio (1994), Barker (2005), Coppock & Beaver (2015).

- (15) a. John got these data from the student of a famous linguist.
 - b. John got these data from a famous linguist's student.
- (16) a. The baby's fully-developed hand wrapped itself around the finger of the surgeon.
 - b. He is standing at the corner of the intersection.

As pointed out by Doron & Meir (2013), possessive constructions as in (15) pattern with other weak NPs: (i) They may introduce new entities into the discourse (17) and (ii) they may appear in existential constructions as in (18).

- (17) a. I met a student yesterday.
 - b. I met the student of a famous linguist yesterday.
 - c. *I met the student yesterday.
- (18) There is the student of a famous linguist waiting in the hall.

Weak readings of possessive and non-possessive constructions have in common that they form part of abstract situations¹⁰ (Löbner 1985, Poesio 1994, Doron & Meir 2013). Example (18a) (both examples are taken from Löbner 1985: 105) shows an abstract situation comprising two entities, i.e. farmer and son, the latter representing a relational concept. Though the farmer might have more than one

^{10.} Abstract situations refer to types of situations (Löbner 1985).

son, only a single son figures in the current situation. Hence, there is a one-toone (= functional) relationship between farmer and son, triggering the use of the definite article. The use of the definite article in (19b) is equally licensed. Note that both head nouns are relational nouns; sortal nouns are excluded in such a context.

- (19) a. He was the son of a poor farmer.
 - b. I do not want my daughter to marry the lover of her sister!

Considering the grammaticalization path of the definite determiner, I expect weak definites to be a rather recent development in its history. Emerging from the demonstrative pronoun, the definite determiner is first used with sortal nouns to indicate that a unique referent has been identified in the immediate situation, yielding what Löbner calls pragmatic definites. The definite determiner then encroaches on the domain of semantic definites, licensed by the inherent uniqueness of functional nouns. The spread to noun phrases headed by merely relational nouns, with uniqueness holding only in abstract situations, is supposed to follow at a later stage in the grammaticalization process.

3. The determiner in Old High German

3.1 Sortal concepts

In OHG, the definite determiner is frequently attested with sortal nouns, as illustrated below. Example (20) shows the anaphoric use with the sortal noun *figboum* 'fig tree' being not only coreferent with its (indefinite) antecedent but including the same head noun as well. The Latin source does not suggest the use of the definite determiner.

(20) In morgan uuerbenti In burg hungirita. Inti gisah <u>einan figboum</u> nah themeo uuege. Inti quam zi Imo. Inti nifand niouuhiht In Imo. nibi ekkorodo thiu loubir noh thanne niuuas zît thero figono. Inti quad Imo, niomer fon thir uuahsmo arboran uuerde zi éiuuidu thô sâr sliumo arthorr&a ther figboum.

(Tatian 199.22)

'Now in the morning as he returned to the city, he hungered. And seeing <u>a fig</u> <u>tree</u> by the way side, he came to it, and found nothing thereon, but leaves only; and he saith unto it, Let there be no fruit from thee henceforward for ever. And immediately <u>the fig tree</u> withered away.'¹¹

^{11.} The English translations are taken from the American Standard Version of the bible (ASV), released in 1901.

Lat.: Mane autem reuertens In ciuitatem esuriit. & uidens fici arborem unam secus uiam & uenit ad eam. & nihil Inuenit In ea nisi folia tantum. Nondun enim erat tempus ficorum & ait illi, numquam ex té fructus nascatur In sempiternum & arefacta est continuo ficulnea.

There are many sortal nouns, however, lacking a determiner in OHG, suggesting that ±uniqueness of a sortal noun does not have to be expressed overtly. Pertinent examples are provided by the use of the sortal noun *skef* 'ship' in the OHG Tatian. The bare noun may get an indefinite reading as in (21), where *in skef* 'in a ship' is a first-mention use in the particular context. Since OHG has no indefinite article, the lack of a determiner is expected. ¹³

(21) *Imo stigantemo* <u>in skef</u> folgebun imo sine iungiron him entering in ship followed him his disciples 'And when he was entered into a boat, his disciples followed him.'

(Tatian 86.11)

Lat.: Et ascendente eo in nauicula secuti sunt eum discipuli eius

Example (22) on the other hand shows the bare noun *skef* 'ship' in a context where it has been introduced before, hence triggering a definite reading. Consequently the American Standard Bible translates 'the ship'. When *skef* 'ship' is mentioned again in the following sentence, the definite determiner is used in the OHG text, the definite noun phrase is again translated as 'the ship'. The Latin source does not use a determiner with *scef* 'boat' in any of the clauses.

(22) Inti uorliez sie inti sliumo stiganti in scef mit sinen iungoron quam in thiu teil Dalmanutha. Inti mittiu quamun sine iungoron ubar iz uuazaer, argazzun brot zi infahanne, inti nibi ein brot ni habetun in themo scefe. (Tatian 141.11) 'And He sent them away and immediately He entered the boat with His disciples and came to the district of Dalmanutha. And the disciples came to the other side of the sea, but they had forgotten to bring any bread, and did not have more than one loaf in the boat with them.'

^{12.} Note that definiteness can still be expressed by the inflection type of an attributive adjective at the beginning of the OHG period (Behaghel 1923: 184; Braune 2004: 126). In my opinion, there are only a few instances of noun phrases in OHG involving an adjectival modifier exhibiting weak inflection that do lack a determiner. My corpus only includes examples representing functional concepts either by means of a superlative (*in ira bârm si sazta barno bêzista* 'she put (the) dearest child in her lap' (Otfrid I.13.10)) or through the meaning of the head noun as shown here: *himilskin gote* 'divine God' (Muspilli 29), *von himilisgen liohte* 'of divine light' (Otfrid I.12.4). Sortal nouns are not attested with this pattern.

^{13.} Focussing on OHG, Schlachter (2019) discusses the distribution of the determiner in Tatian in much more detail.

Lat.: & dimisit eos Et statim ascendens <u>nauem</u> cum discipulis suis uenit in partes dalmanutha Et cum uenissent discipuli eius trans fretum. obliti sunt panes accipere. & nisi unum panem non habebant <u>in naui</u>.

The data given in (20) through (22) suggest that the definite determiner is not a device to systematically distinguish between definite and indefinite noun phrases in OHG. Examples like (22) show nevertheless that the determiner *ther* might be used as a definite article already, because a demonstrative reading is ruled out by the context in question. This observation is in accord with previous literature noting that there is evidence for the grammaticalization of the demonstrative already in OHG, since it has been observed that scribes involved in the translation of Tatian used to insert the determiner in many cases where the source text lacks a counterpart (Tschirch 1983; Giusti 1995). The difference between the Latin version in (23a) and the Monsee version (23b) on the one hand, and the translation in Tatian (23c) on the other, is considered as evidence for the increasing grammaticalization of *ther* throughout the 9th century.¹⁴

(23)	a.	in illo die exiens <u>de domo</u> sedebat secus mare	(Mt. 13.1)
	b.	in demo tage geng Iesus ûz <u>fona hûs</u> , saz bî sêuue	(MW 13.1)
	c.	inti ûzgangenti <u>fon themo hûse</u> saz nâh themo sêuue	(T 107.24)
		'That day Iesus went out of the house and was sitting by the	sea.'

Even if we find support for the steady grammaticalization of the determiner since the beginning of the 9th century, examples like (23) do not provide compelling evidence that the changes affecting the determiner *ther* have gone to completion by the time the Tatian text is written. ¹⁵ The prepositional phrase *fon themo hûse* 'out of the house' is headed by a sortal noun which can be used with both a demonstrative and a definite determiner. As the larger context shows, the sortal noun $h\hat{u}s$ 'house' has been introduced in the discourse earlier, indicating that the determiner in (23) is either an anaphorically used demonstrative or an anaphorically used definite article. In my view, the observation that sortal nouns with a definite reading may lack a determiner, cf. (22), rather indicates that the grammaticalization of *ther* is still ongoing.

Evidence in favor for the still deictic nature of *ther* comes from noun phrases with a possessive, intervening between determiner and head noun (24). These noun phrases mark both deixis and possession. As Oubouzar (1992) observes, the number of noun phrase patterns comprising a determiner and a possessive decreases

^{14.} Catasso (2011) quotes this example from Giusti (1995), sharing her view about the definite article having completed its grammaticalization process by the time Tatian is translated (830).

^{15.} Oubouzar (1992) reports that there are 245 instances of *ther* 'the' in Isidor and that only 16 of them have a demonstrative (either *ille* or *hic*) in the Latin counterpart.

sharply from the oldest sources to Notker Labeo whose work marks the end of the OHG period (about 1050).

(24) Arliudet uph gardea von iesses uurzom endi blomo arstigit fona dheru grows out rod of Jesse's stem and branch grows of these sineru uurzun (Isidor 657)

his roots

'And there shall come forth a rod out of the stem of Jesse, and a branch shall grow out of his roots.'

Considering the use of sortal nouns in OHG, we find that the definite determiner is optional in contrast to PDG. Even if the use of the determiner in particular contexts suggests that we deal with a definite article rather than a demonstrative pronoun, there are still examples where the context requires the deictic reading of a demonstrative pronoun. To really evaluate the degree of grammaticalization, we have to include the use of functional nouns in our considerations.

3.2 Functional concepts

Behaghel (1923: 12) states that at least the following nouns are used without a determiner in Isidor (25a) and Tatian (25b). In terms of our distinction between sortal and functional nouns, both his lists include one-place and two-place functional nouns, with the latter requiring an additional argument besides the situation argument.

- (25) a. fater 'father', sunu¹⁶ 'son', erdha 'earth', erdrihhi 'earth', himil 'heaven', paradisi 'paradise', sunna 'sun', fiur 'fire', zit 'time'
 - b. *erda* 'earth', *fiur* 'fire', *hella* 'hell', *hellafiur* 'hellfire', *himil* 'heaven', *seo* 'sea', *anagin* 'beginning', *uuintar* 'winter'

Based on a broad corpus including four major text sources of OHG,¹⁷ Oubouzar (1992) registers an increasing use of the definite determiner with the lexical items listed above, ranging from Isidor in the 8th up to Notker in the 11th century. As regards Tatian, she observes that kinship terms like *fater* 'father' or *sunu* 'son' may in fact occur with and without a determiner,¹⁸ and that the same holds for one-place functional nouns like *sunna* 'sun', *mâno* 'moon', *himil* 'heaven' in Otfrid, nouns

^{16.} *Sunu* 'son' also presents a functional concept in OHG sources like Isidor and Tatian, since it always refers to God's son.

^{17.} Oubouzar (1992) includes four major sources from OHG: Isidor (about 790), Tatian (about 830, Chapter 1–78), Otfrid (863–871, Sections II and III) and Notker's Boethius (about 1022).

^{18.} Even though she refers to functional concepts, her terminology is different from ours, making reference to "Unika" (p. 76) or "monosemantische Basissubstantive" (p. 76).

that still lack a determiner in Tatian. With regard to Notker – the latest text in her corpus – Oubouzar states that one-place functional nouns are all marked for definiteness by the determiner in her corpus. She emphasizes the fact that no meaning difference is involved with the appearance of the determiner. Obviously, Behaghel's (1923) and Oubouzar's (1992) findings support what we expect to happen throughout the grammaticalization process of the definite determiner, i.e. its spread from sortal nouns to functional nouns. Adding to their observations, I will provide more evidence for the increasing use of adnominal *ther* with functional nouns, including some numbers.

The following examples for one-place functional nouns are taken from Tatian and illustrate that *himil* 'heaven' and *erda* 'earth' lack a definite determiner, blocked by the still deictic meaning of *ther*. Another instance of a one-place functional noun is provided in (27), with *frithof* 'Praetorium' referring to the official seat of the Roman governor. Quoting Löbner (1985: 100) for similar examples in PDG, we are dealing here with "a public institution which fulfils a specific function for a local domain", i.e. there is only one entity available in the context. Note that the OHG version lacks a determiner only with the first use of the functional noun *frithof* 'Praetorium', while the definite determiner appears when the noun is anaphorically used. As regards the Latin source, both instances of *Praetorium* do not exhibit a determiner.

- (26) a. ir giseh& himil offanan (Tatian 53.4)
 you see heaven open
 'You will see the heavens opened.'
 Lat.: uidebitis cælum apertum
 - b. Inti erda giruorit uuas Inti steina gislizane uuarun (Tatian 318.21) and earth shaken was and rocks split were 'And the earth shook and the rocks were split.'
 Lat.: Et terra mota est
- (27) Inti leittun inan gibuntanan in <u>frithof</u> Inti saltun themo pontisge and led Him bound in Praetorium and delivered the Pontius grauen pilate Inti sie nigiengun In <u>then frithof</u> (Tatian 304.7) governor Pilate and they NEG.went in the Praetorium
 'And they bound Him and led Him away into <u>the Praetorium</u> and delivered Him to Pilate the governor; and they themselves entered not into <u>the Praetorium</u>.'
 Lat.: Et adduxerunt eum uinctum In <u>pretorio</u> & tradiderunt pontio pilato presidi. Et ipsi non introierunt In <u>pretorium</u>

More examples for one-place functional nouns come from uniques like *sunna* 'sun' and *mâno* 'moon'. Four instances of the noun class in question are displayed under (28) with only *sunna* 'sun' in (28b) showing a determiner. The optional use of the

determiner with uniques might be taken as evidence for the ongoing grammaticalization of the determiner in OHG as suggested by Oubouzar (1992), but might also be attributed to the rhyme scheme used in Otfrid.

- (28) a. Er máno ríhti thia náht joh wurti ouh súnna before moon marks the night and got also sun so glát (Otfrid II.1.13) so shining
 - 'Before, the moon marks the night and before the sun started to shine.' b. *Duit máno joh thiu súnna mit fínstere únwunna* (Otfrid IV.7.35) does moon and the sun with darkness sorrow
 - 'The moon and the sun will cause sorrow by darkening.'

Occurences of one-place functional nouns like *himil* 'heaven', *sunna* 'sun' and *mâno* 'moon', drawn from the OHG reference corpus, support the widely held assumption that uniques are increasingly attested with the definite determiner. Six historical sources were searched with respect to the nouns in question, including three texts from Notker. As Table 1 shows, the definite determiner is used more frequently by Notker than by earlier authors.

Table 1.	One-place	functional	nouns in	Old High Ger	man
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	Hi	Himil		Sunna		âno
	– D	+ D	– D	+ D	– D	+ D
Isidor	10	_	2	1	2	_
Tatian	115	_	6	1	2	_
Otfrid	57	7	16	5	2	_
Notker*	35	25	7	19	1	3

^{*} Notker der Deutsche, Boethius, De consolatione Philosophiae. Tübingen: Niemeyer 1986/1990; Notker der Deutsche, Boethius, Categoriae des Aristoteles. Tübingen: Niemeyer 1972; Notker der Deutsche, Der Psalter. Tübingen: Niemeyer 2013/2016.

Besides one-place functional concepts involving only a situational argument as above, functional concepts with a second argument likewise display variation concerning the use of the definite determiner in OHG. One characteristic subclass of two-place functional nouns is provided by nouns denoting events which occur only once like *Anfang* 'beginning', *Ende* 'end', *Geburt* 'birth' and *Tod* 'death' (Löbner 1985: 194). As illustrated by the following data, the non-situational argument may be overtly realized as in (29a) or remain implicit as in (29b) and (29c). With respect to Tatian, we find again variation within the text as regards the use of the definite determiner: while the first instance of *Ende* 'end' is used without any determiner, the second instance involves the definite determiner.

(Tatian 269.22)

(29) a. In haubide dhes libelles azs erist is chiscriban umbi mih (Isidor 294) in beginning of the book at first is written 'It is rewritten about me at the beginning of the book.'

b. in ente minnota sie in end loved.he them 'He loved them to the end.' Lat.: In finem dilexit eos

c. thaz her gisahi thaz enti. (Tatian 300.10) that he saw the end 'That he saw the ending.' Lat.: ut uideret finem

The overall picture is more complicated as with one-place functional nouns, since many instances of two-place functional nouns like enti 'end' and giburt 'birth' include a non-situational argument in prenominal position which is the unmarked position in OHG. In addition to the prenominal argument, some instances display a definite determiner preceding the genitive phrase (30), a pattern no longer attested in recent stages of German. Note that even an adjectival modifier may occur between the definite determiner and the genitive phrase (30b).

(30) a. In dhemu druhtines nemin (Isidor 279) in the Lord's 'in the name of the Lord' b. In dhemu heilegin daniheles chiscribe (Isidor 437) in the holy Daniel's scripture 'in the holy scripture of Daniel'

On the other hand, further examples from Isidor seem to suggest that the occurrence of the determiner hinges on the position of the genitive phrase as it does in PDG, i.e. the prenominal position of the genitive excludes the determiner from this position.

(31) a. In dhemu nemin cyres (Isidor 162) in the name Cyrus' 'in the name of Cyrus' b. in cyres nemin (Isidor 151) in Cyrus' name 'in Cyrus' name'

Because of examples like (30) and (31), I will count noun phrases with a prenominal genitive as a special case in my small survey due to the possible cooccurrence of prenominal possessive and definite determiner. ¹⁹ Only with *giburt* 'birth' not with *enti* 'end', we find seven occurrences of a prenominal genitive preceded by the definite determiner, hence appearing in two columns of the following Table 2.

	Enti*			Giburt**		
	– D	+ D	Prenominal possessor	– D	+ D	Prenominal possessor
Isidor	_	_	1	1	2	12
Tatian	13	1	1	2	1	2
Otfrid	21	2	3	9	3	12
Notker	16	9	5	2	3	3

Table 2. Two-place functional nouns in Old High German

In contrast to one-place functional nouns, the definite determiner with two-place functional nouns such as *Ende* 'end' and *giburt* 'birth' frequently lacks even in Notker's work. In my view, this is due to the fact that possessive phrases predominantly occur in prenominal position. Only when the word order change affecting possessive phrases in the history of German has gone to completion (Demske 2001), the definite article is used to an increasing degree with functional nouns. This step in the history of the definite determiner will be dealt with in Section 4.

3.3 The historical record in Old High German

The data considered above suggest that sortal and functional concepts behave alike in OHG with respect to the definite determiner: while the determiner is used to refer to previously mentioned nominal concepts irrespective of their semantics, it is missing when the nominal concept is mentioned for the first time. 20 Information about \pm uniqueness is provided by the context with sortal nouns, and by the

^{*} Excluded from the table are three plural instances in Tatian and one in Notker as well as eight instances from Otfrid with Ende 'end' combining with the indefinite pronoun thehein 'any': Éigun iamer scóna fréwida gizáma thuruh síno mílti ána thiheinig énti! (Otfrid IV.37.45) 'We still have endless great joy by His grace in a proper way'. One further example from Notker combines with the interrogative pronoun welîh 'which' and is not included as well.

^{**} Excluded from the table are four plural instances of *giburt* 'birth' as well as three instances including an indefinite pronoun (Tatian, Otfrid).

^{19.} This decision extends to attestations with an adnominal possessive pronoun which likewise allows for a definite determiner to cooccur.

^{20.} Oubouzar (1992: 18) points out that this is true for noun phrases with possessor arguments as well. According to her, the noun phrase *in dhemu druhtines nemin* 'in the Lord's name' (Isidor 279) includes a definite determiner, because it refers back to *druhtines uuordu* 'the Lord's words' (Isidor 278). Note that *namo* 'name' is used as a functional concept.

nominal concept with functional nouns. Throughout the period of OHG, sortal concepts increasingly include the determiner when they get a definite interpretation. Definiteness hence becomes an overtly marked grammatical category over the course of OHG, cf. Sonderegger (2003) and Oubouzar (1992). The grammaticalization of the determiner in OHG is also reflected by its increasing use with functional concepts. Recall that functional concepts do not need the determiner to overtly indicate uniqueness, because they are inherently unambiguous. At the end of the OHG period, the grammaticalization of the determiner is well advanced. With Notker, we find the determiner with sortal nouns involving a definite interpretation, with functional nouns including uniques (32) and even with Latin nouns (33):

- (32) Ter âbent-stérno chúndet îο dia náht (Notker 223.23) the evening-star announces always the night 'The evening star always announces the night.'
- (33) a. Ér chît ter scriptor uuólti. dáz man dar ána he says the scribe wanted that one there.on únderskéit hábeti (Notker 56.23) distinction have 'He says that the scribe wanted to have a distinction.'
 - b. Álso dáz íst dáz ter accusator chît (Notker 60.11) so that is that the accuser says 'So that is what the accuser says.'

Notker in fact distinguishes two uses of the definite determiner by means of stress: when the determiner has a deictic meaning, we find the determiner marked for stress, otherwise the determiner is unstressed. This distinction can be illustrated by contrasting a functional and a sortal noun with the determiner carrying stress only in the second case (i.e. marked by the acute accent).

(34) a. diu súnna ána skînen mág (Notker 210.26) there him the sun shine may at 'There the sun may illuminate him.' b. Únde dér fógel. dér-dar féret fóne bóume and the bird that flies from tree ze bóume sîngendo (Notker 118.1) to tree singing 'And the bird that flies from tree to tree, singing.'

The grammaticalization process of the definite determiner has obviously completed stage I with the definite article used to overtly mark the uniqueness of a referent, provided either by an inherently unique noun or an appropriate context (semantic and pragmatic definites in Löbner's model). Generally, stories about the rise of the definite article do end here. In my view, however, the OHG development is only one part of the story. We have to take into account the further grammaticalization process as well, i.e. the extension of the definite article to weak definites.

The rise of weak definites

In Present-Day English, the definite article may have a weak reading as introduced in Section 2.2 for the two most prominent types of weak definites. The focus in the current paper will be on possessive weak definites with an indefinite possessor phrase following the nominal head:

(35) Fred got these data from the student of a famous linguist.

The head of the possessive weak definite is restricted to relational nouns, since sortal nouns do not have arguments. They share distributional properties with indefinite rather than with definite noun phrases, since uniqueness only holds in abstract situations (cf. Section 2.2). As I will show below, data from ENHG testify to the spreading of the definite determiner to this context as well.

A crucial prerequisite for the appearance of a determiner in possessive constructions is the postnominal position of the genitive phrase. It is in fact a well-known observation that internal complements of noun phrases undergo a word order change throughout the history of German: they develop from pre-head complements in OHG to post-head complements in later stages of German.²¹ According to the literature, examples like the following illustrate the unmarked patterns in OHG for genitive complements with animate and inanimate head nouns, a distinction that is decisive for the later development. Note that the Latin source text provides the opposite order, i.e. head noun preceding the complement, for both examples, indicating that the OHG word order is not influenced by the basic word order in Latin.

(36) a. uuvo mag her In sinero muoter uuambun how may he in his mother's womb abur Ingangan (Tatian 196.14) again enter 'He cannot enter a second time into his mother's womb.'

Lat.: numquid potest In uentrem matris suae Iterare Introire

b. scouuot thes accares lilia uuvo sie uuahsen (Tatian 70.25) observe the field's lilies how they grow 'Observe how the lilies of the field grow.' Lat.: considerate lilia agri

^{21.} Cf. Demske (2001) for a comprehensive account of this development as well as an overview of the pertinent literature.

As the literature also states, the change from prenominal to postnominal complements set off by the end of OHG. Two stages are distinguished in particular, depending on the complement head being [±animate]: (i) Beginning in OHG, complements carrying the feature [-animate] occur with increasing frequency in postnominal position, a development that has gone to completion at the end of the 15th century; (ii) about 200 years later, complements implying the feature [+animate] almost always follow their nominal head. In PDG, only proper names and a few kinship terms are admitted in prenominal position (Demske 2001). Table 3 gives a snapshot of the situation in the first half of the 16th century.

Table 3. Order of attributive genitive and head noun (1500–1540)

Type of Genitive	Genitive << Head	Head << Genitive	
Proper name/title	353 (93%)	27 (7%)	
Individual noun [+animate]	155 (63%)	92 (37%)	
Individual noun [-animate]	83 (13%)	569 (87%)	

(Source: Ebert 1988; summarized data taken from Demske 2001)

The figures in Table 3 show a clear distinction between animate and inanimate nouns with respect to word order: while the majority of genitive phrases including an inanimate noun follows the nominal head in the 16th century, genitive phrases with animate nouns still tend to precede it. With the word order change obviously under way, it seems promising to take a closer look into a corpus comprising texts from the 15th to the 18th century to learn more about the rise of possessive weak definites in the history of German. The examination of twenty-six texts altogether (about 2.272.381 word forms)²² shows that the rise of possessive weak definites is actually in progress during the language period considered here. With the indefinite possessor predominantly preceding the nominal head in the 15th century, cf. (37a), possessive weak definites often lack any determiner if the possessor phrase occurs postnominally (37b).

15th century: 282.848 tokens in 7 texts, 16th century: 589.212 tokens in 11 texts, 17th century: 723.813 tokens in 8 texts.

^{22.} The distribution regarding the respective time slot is as follows:

Cf. section 'sources' for a complete corpus list. GerManC was used for data from the 17th and 18th century, providing additional 676.508 tokens in corpus size.

b. *Vnd wie wol ich bin sone eins konigs* (1450: Pontus 142.14) and though I am son a king's 'And though I am the son of a king.'

The latter pattern is likewise attested with definite possessor phrases and the nominal head being a two-place functional noun, cf. (38). Recall that both patterns differ with respect to the type of situation they refer to: while the noun phrase including a definite possessor anchors the nominal expression in a particular situation, the noun phrase including an indefinite possessor unambiguously refers only in an abstract situation.²³

(38) der was genant Herlandt vnd was marschalk <u>des konigs Haguel</u>
he was called Herlande and was seneschall the king's Haguel
<u>von Britanigen.</u> (1450: Pontus 57.9)
of Bretagne

'He was called Herlande and was the seneschall of the king Haguel of Bretagne.'

Evidence that possessive constructions as illustrated in (37) get in fact a weak reading is provided by the use of so-called V2 relative clauses which require an indefinite noun phrase as antecedent (Gärtner 2001; Axel-Tober 2012), as shown in (39a). The possessive construction in (39b) supplies an indefinite antecedent as well.

(39) a. *Und do sy kament in <u>ein statt,</u> die do*and then they came in a town which PRT

heyßt Simea

(1481: Wilhelm 209.30)
is Simea

'And then they came into a town which is called Simea.'

b. Wir haben eins průders sun, der
we have a brother's son who
heyßt Paruck
is.called Paruck
'We have a brother's son called Paruck.'

The historical sources display two further variants of possessive constructions with an indefinite possessor in postnominal position: the head noun may combine either with an indefinite or a definite article with only the latter being licensed in PDG, cf. also the English translation for (40a).

²³. The definite determiner may be absent with noun phrases representing functional concepts still in PDG (*Er war Außenminister der Schweiz* 'he was foreign minister of Switzerland').

(40) a. Sie namen einen Zahn eines Thiers / welches so groß ist wie eine Ratte mit welchem etliche jhr Antlitz / etliche jhren Leib mit vnterschiedtlichen Strichen reissen / welche sehen / als weren sie mit einer Stecknadel geritzet /

(1599: America 6.16)

- 'They took the tooth of an animal which was as big as a rat. Quite a few scratched their face, others their body with different lines which looked like scratched with a pin.'
- ich verstunde gleich aus ihrem Diskurs (...) daß ihr Mann beim Senat wäre, und ohngezweifelte Hoffnung hätte, denselben Tag die Stell eines Landvogts oder Landamtmanns zu bekommen (1669: Simplicissimus 533.35) 'From her conversation I came to discover that her husband was in the senate (...) He was also supposed to have had good expectations of receiving the position of a district governor or a bailiff that very day.'

As an indefinite noun phrase, Example (40a) behaves as expected: it is the firstmention use of both the tooth and the animal introduced in the discourse by the author to describe a tattooing procedure carried out by a particular tribe in South America. This also holds for the possessive weak definite in (40b) with the position of district governor or bailiff introduced in the discourse by a definite noun phrase. Note that the indefinite article may also be used when the noun phrase functions not as an argument as above but as a predicate:

(41) das waren drei rote Larven in einem weißen Feld, und auf dem there were three red masks in a white section and on the Helm ein Brustbild helmet a half-length.portrait eines jungen Narrn (1669: Simplicissimus 237.15)

young court.jester's

'There were three red masks in a white section and the half-length portrait of a young court jester on the helmet.'

The following table displays the distribution of possessive constructions in the underlying text corpus according to the position of the possessor phrase - disregarding the feature [±animate]. The findings support the earlier observation that most possessor phrases still precede the nominal head in the 16th century.

Table 4. Possessive constructions with indefinite possessors

	Prenominal poss	Postnominal poss	Total
15th century	43 (80%)	10 (20%)	53
16th century	110 (66%)	57 (34%)	167
17th century	59 (26%)	171 (74%)	230
18th century	22 (8%)	257 (92%)	279
Total	234	495	729

Table 5 provides information on whether possessive constructions with postnominal indefinite possessor phrases include a determiner and if this is an indefinite or a definite determiner in case the determiner is present.

	-			
	No D	Indefinite D	Definite D	Total
15th century	4 (40%)	3 (30%)	3 (30%)	10
16th century	19 (33%)	18 (32%)	20 (35%)	57
17th century	67 (39%)	27 (16%)	77 (45%)	171
18th century	51 (20%)	17 (7%)	189 (73%)	257
Total	141	65	289	495

Table 5. Determiners in possessive constructions

Table 5 supports our assumption that there is a growing number of weak definites since the 16th century, whereas the number of possessive constructions with an indefinite determiner decreases at the same time. What is surprising however, is the high number of possessive constructions lacking a determiner as late as the 17th and 18th century. As the evaluation of the historical record shows, this lack correlates with the morphological makeup of the nominal head, since many pertinent examples include a deverbal head noun (42a). Even in PDG, this subclass of possessive constructions often lacks a determiner (42b) due to the verbal nature of the nominal head. Other determinerless instances of possessive constructions involve nouns like *Gestalt* 'shape' as in *in Gestalt eines/einer* 'in the shape of'. I conclude therefore from the historical record presented in Table 5 that the grammaticalization process of the definite determiner is reflected by the ratio of indefinite and definite possessive constructions rather than by the number of constructions lacking any determiner.

- (42) a. Sonsten ist <u>durch verwahrlosung eines Kochs</u> in dem Päbstlichen Pallast Vaticano auf der seithen Bellvedere Fewr auskommen/ (1667: Relation 44.21) 'Otherwise, a fire broke out in the pontifical palace on the part of the Belvedere by absentmindedness of a cook.'
 - b. *Den Job hat er <u>durch Vermittlung eines Freundes</u> bekommen.* 'A friend has found him the job.'

Even if possessive constructions with an indefinite postnominal possessor behave differently as regards the occurrence of a determiner, they are all alike regarding uniqueness which only holds in abstract situations, because nouns like *Zahn* 'tooth', *Sohn* 'son' and *Tochter* 'daughter' are relational nouns, which may exhibit one-to-many relations. The two kings mentioned under (37) may as well have more than one daughter and more than one son each, the same holds for the speaker's brother in (39b). In addition to merely relational nouns, functional

nouns are attested with indefinite possessors as well. The weak definite in (43), for example, refers to an abstract situation where the two-place functional noun Fuß 'foot' plays a prominent role.²⁴

(43) Den 8. Maji zohen wir von dannen mehr denn 5. Leguas weiter vnnd an dem Fuß eines Bergs traffen wir einen Obersten mit 3000. Indianern an (1599: America 54) 'May 8, we moved on more than 5 leguas and met a colonel with 3000 Indians at the foot of a mountain.'

A final case to consider concerns weak definites including a definite possessor. Barker (2005) gives examples like the following for Present-Day English, which does not presuppose that the road has a single side:

(44) It is safer to mount and dismount towards the side of the road, rather than in the middle of traffic.

A few instances of possessive constructions along the lines of (44) are in fact attested for ENHG towards the end of the 16th century. Certainly, (45) does not imply that the river in question has a single bend. As in the example of Present-Day English, a definite article is used with the possessor phrase.

(45) Da wir aber an das Eck deß Flusses / in welchen sie sich hatten eyngeschleyfft / kamen / ... / fuhren wir dapffer zu (1599: America 27.12) 'When we however arrived the river's bend into which they had pulled we hastened to move on.'

Accommodating the fact that possessive constructions with indefinite possessor phrases behave as indefinites in many respects (cf. Section 2.2), the indefinite article is frequently used when the possessor phrase appears in postnominal position in historical sources of the 16th century and still in the 17th century. From the earliest attestations on, however, the indefinite article competes with the definite article in this position. The historical record shows that the definite article has in fact outrun the indefinite article by the 18th century, i.e. possessive weak definites are well established in German by then, witnessing the further grammaticalization of the definite article.

^{24.} In PDG, the preposition and the definite article would be contracted: am Fuß eines Berges 'at the foot of a mountain', indicating the functional nature of the noun.

5. Grammaticalization and Noun Phrase Structure

Tracing the development of the definite determiner from OHG to the 18th century, we can identify the following steps:

- In the oldest sources of OHG, the determiner is anaphorically used with sortal
 and functional noun phrases to refer to entities previously introduced in the
 discourse. Many sortal nouns in the singular, however, lack the definite determiner. First-mention uses are only scarcely attested.
- Throughout the period of OHG, the definite determiner gradually develops into a definiteness marker, combining with sortal nouns as well as with first-mention uses of one-place-functional nouns.
- Over the course of the 16th to the 18th century, noun phrases with weak interpretations increasingly exhibit the definite determiner including both merely relational and two-place functional nouns.

Taking into account that the determiner is frequently absent in the earliest attestations of OHG, irrespective of the type of noun, I assume that there is no DP layer present at the earliest stages of German. Instead, the definite determiner occupies the specifier position of the highest adjectival projection. The definite determiner in OHG hence patterns with adjectives like *folgend* 'following' or *nächst* 'next' in PDG, which are likewise confined to the left edge of the DP.²⁵

(46) Naturfreunde wird vor allem folgender wohltönende Satz freuen.

(A00/JUN.41759)²⁶

'Nature lovers will be pleased primarily with the following well-sounding sentence.'

Support for the assumption that noun phrases in OHG lack a DP layer comes from the particular development of the demonstrative *solch* 'such' in German: While *solch* 'such' is a demonstrative adjective in PDG exhibiting a sortal meaning as opposed to the individual meaning expressed by the demonstrative *dieser* 'this', cf. (47a) vs. (47b), it was ambiguous between a sortal and an individual meaning in OHG (48). The demonstrative adjective has a sortal meaning only in (48a), whereas it refers to an individual pair of eyes in (48b). In my view, this ambiguity can be accounted for when we assume that demonstratives head APs but not DPs in OHG (Demske

^{25.} The example from PDG even illustrates how the adjective *folgend* 'following' determines the inflection type of the adjective *wohltönend* 'well-sounding', a behavior characteristic for D elements.

^{26.} Example taken from the DeReKo.

2005). With the rise of a DP layer motivated by the increasing grammaticalization of the definite determiner, the demonstrative *solch* 'such' gets confined to the sortal, i.e. adjectival reading.

- Diese Filme sind an der Zensur gescheitert. (47) a. 'These movies failed due to censorship.'
 - b. Solche Filme sind (gewöhnlich) an der Zensur gescheitert. 'Such movies (usually) failed due to censorship.'
- (48)thisu allu sprah ther heilant in ratissun zi thero menigi inti spoke the Savior by parables to the crowd and sulihhen ratissun managen sprah hér in uuort (Tatian 109.28) parables many announced he in word 'The Savior announced all this to the crowd through parables and he proclaimed the Word by many such parables.'
 - sculut mit súlichen óugon selbon vou shall with such eyes yourselves drúhtin scowon (Otfrid II.16.23) Savior see 'You will see the Savior yourselves with these eyes.'

In contrast to Oubouzar (1992), I do not take the prenominal genitive in OHG to function as a determiner, because this would rule out a demonstrative and a genitive to cooccur in prenominal position. Examples such as (49) with even an adjective intervening between determiner and prenominal genitive provide empirical evidence against such a claim (cf. also Section 3).

(49) In dhemu heilegin daniheles chiscribe (Isidor 437) holy Daniel's scripture 'in the holy scripture of Daniel'

Over the course of OHG, the historical record shows growing numbers of the definite article with sortal and one-place functional nouns. The increase of the latter indicates that the occurrence of the definite article is no longer semantically but rather morphologically motivated. According to Diessel (1999: 15), the determiner loses its referential function and turns into a formal marker of definiteness, as has also been noted elsewhere in the literature. Vergnaud & Zubizaretta (1992), for instance, invoke the notion of an expletive determiner. It has been argued that this assumption is supported by the changing distribution of adjectival declension types, which becomes morphologically instead of semantically driven (Demske 2001). Definiteness hence becomes a morphological category, reflected by the rise of a DP layer.

As to the question why the definite article arises, the literature provides several explanations: The most prominent proposal relates the rise of the definite article to the loss of nominal case markers in German (Catasso 2011; Giusti 1995; Tschirch 1983). Oubouzar (1992), however, has argued convincingly that the grammaticalization of the demonstrative is well advanced in the period of OHG, while the weakening of unstressed syllables has not yet affected the inflection of nominals. She therefore proposes in line with Sonderegger (2003) to attribute the rise of the definite article to the need to explicitly mark the distinction between definite and indefinite noun phrases. In my view, this need perfectly fits in with the observation that other formal distinctions have conventionalized throughout the history of German, such as the distinction between independent and dependent clauses: according to the literature, subordinate markers such as the final position of the finite verb and unambiguous subordinators are well established only by the end of the ENHG period (Ebert 1986; Betten 1987; von Polenz 2000). Another example for the need to formally mark semantic and pragmatic properties concerns the increasing frequency of topologically integrated subordinate clauses throughout the period of ENHG: while dependent clauses tended to appear before the prefield in OHG, they rather occupy the prefield position from the 15th century onwards, strengthening the V2 grammar of German. What we observe, obviously, is the conventionalization of syntactic patterns to unambiguously express semantic and pragmatic categories.

The need for explicitly marking the contrast between definite and indefinite noun phrases, however, covers only part of the history of the definite article. With the emergence of weak definites over the course of ENHG, the grammaticalization of the definite determiner proceeds one step further. Uniqueness as expressed by the definite article now holds in abstract situations as well. Observing the further expansion of its distribution since ENHG, we might hence assume the further semantic bleaching of the definite article with no further structural change involved.

6. Conclusion

The emergence of the definite article from a demonstrative pronoun observed in many languages is nowadays well understood. Crucial for the timing of the change is a conscientious distinction between demonstrative and definite determiner on semantic grounds. Only when the historical record supplies noun phrases where the determiner functions in a way excluded for demonstratives, we are allowed to assume that the definite article became part of noun phrase grammar. As regards the history of German, it is safe to assume a definite article as soon as semantic definites are attested, i.e. definite noun phrases which uniquely refer irrespective

of a particular situation, indicating that the determiner is no longer semantically but rather morphologically licensed. The present paper has provided new data to that effect. It goes beyond previous studies insofar as it looks into the rise of weak definites in the history of German, focusing on possessive constructions. With possessor arguments following the head noun to an increasing extent throughout the history of German, the possessive patterns in question exhibit at first an indefinite instead of a definite article, thus accommodating the fact that their distribution rather resembles the distribution of indefinite noun phrases. It is only over the course of ENHG that the indefinite article gets replaced by the definite article, giving rise to weak definites in German, a further step in the grammaticalization of the definite article so far not acknowledged in the literature.

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What genericity reveals about the establishment of the definite determiner in German

Svetlana Petrova

This contribution deals with the rise of the definite determiner in generic noun phrases in German. It calls attention to a by now neglected part of the diachronic development of the determiner system of German and provides a special contribution on the subject, building upon newly collected, first-hand corpus data and its interpretation in the context of the current semantic debate on genericity.

Keywords: definite determiner, generic NPs, Old High German, grammaticalization of the determiner system of German

1. Introduction

Genericity is a notion that refers to the property of noun phrases to denote classes of objects and individuals, rather than single representatives of a class. This semantic domain plays a special role in current approaches to explaining the rise and consolidation of the category of determiners across languages, which is generally accounted for in terms of the gradual spread of various markers along the phases of evolutionary (also called implicational) scales. In these accounts, the different synchronic meanings of definite or indefinite noun phrases are mapped as individual stages onto a diachronic timeline, and the grammaticalization of the respective determiner is considered as the process whereby the individual marker passes through these stages gradually, step by step (Greenberg 1978, Givón 1981, Heine 1997, Himmelmann 1997). Crucially, the domain of generic interpretation is located towards the end of such evolutionary scales, implying that the acquisition of generic meaning indicates a nearby-completed stage of development of the respective type of determiner.

Explanations along these lines have been particularly influential since Greenberg (1978) who shows that in a number of genetically non-related languages, demonstratives consistently develop from deictic markers towards definite articles, and eventually into gender markers on the noun. The initial step in this development

is the evolution of the deictic marker toward a discourse-anaphoric definite article, which later becomes a non-anaphoric and general one (see also Section 1.1 in the introduction to this volume).

In a similar vein, Givón (1981) accounts for a seemingly universal process whereby indefinite determiners evolve from numerals by way of a three-stage development, with the intermediate stage of a referential-specific interpretation of the original category. The subsequent acquisition of generic and non-referential (predicative) function marks the ending point of this scale. A more fine-grained, five-stage model of this development is proposed by Heine (1997), who also locates the stage of generic interpretation toward the end of the grammaticalization process.

Such scenarios, building on the idea of a gradual spread along the stages of evolutional scales, are systematically adopted when explaining the evolution of the determiner system of German. The relevant approaches share the assumption that the predecessors of the modern German determiners, the simple demonstrative *ther* 'this' and the numeral *ein* 'one', first acquire the function of definite-anaphoric or specific-referential markers, while they enter the domain of generic interpretation only later in their development. In this vein, it is often stated in the literature that in the beginning of the attestation, in texts of the OHG (c. 750 to 1050 AD) period, the emerging definite or indefinite articles are completely missing in noun phrases used in generic function (see Demske 2001, Schrodt 2004 for definites, Oubouzar 2000, Szczepaniak ²2011 and 2016 for indefinites).

But this is a very general picture because examples of generic nouns displaying a determiner are sporadically found already in texts of the OHG period. Let us consider generic nouns with the definite determiner first. Outouzar (1992: 80) presents the example in (1) from *Tatian* (c. 830 AD), claiming that this instance indicates an important innovation in the determiner system of the period:¹

(1) nimág ther man Iouuiht intphahén / noba imo íz gigeban

NEG.can the man anything receive unless him it given

uuerde fon himile

PASS.AUX.SUBJ from heaven

'man cannot receive anything unless being given it by Heaven'

Non potest homo quicquam accipere, / nisi ei fuerit datum de caelo (T 57, 6–7)

Hodler (1954: 60) discusses even earlier evidence, namely from the *Monsee Fragments* (c. 810 AD), given in (2).

^{1.} Academic handbooks on grammaticalization such as Szczepaniak (²2011: 75) and Ferraresi (2013: 43) also adopt this view, quoting this example.

(2) So auh fona des baumes obaze uuir (dit) arcennit if also from the GEN tree GEN fruit DAT recognized PASS.AUX daer baum [...] the tree 'If the tree is truly recognized by its fruit [...]' Siquidem ex fructu arbor cognoscitur (Mt 12:33) (MF 6, 15–16)

Hodler (1954: 62) argues that the definite determiner extends its usage towards generic nouns already within the OHG period. He provides parallel examples, as e.g. different translations of Mt 12:12 quanto magis melior est homo oue, given in (3a) vs. (3b). He shows that generic nouns appear without a determiner in the earlier text of the Monsee Fragments but display a determiner in the somewhat later text of the *Tatian* translation:

- (3) a. huuemihhiles ist bezira man danne scâf (MF 4, 25-26)how much.gen is better man than sheep
 - b. mihhiles bezira ist ther man themo scafe much.GEN better is the man the.DAT sheep.DAT 'How much then is man better than sheep' (T 106, 30)

This data shows that in fact, the definite determiner starts to be used in generic nouns more or less as early as with other semantic classes of definite expressions. What is special, however, is the fact that with generic nouns, its complete grammaticalization takes particularly long. Starting at the beginning of the OHG period, the consolidation of the definite determiner in generic use remains incomplete for centuries. Oubouzar (2000: 267) demonstrates the variation between bare and definite generic nouns in the work of the late-OHG writer Notker (by 1022 AD), see (4a-b). According to the literature (Behaghel 1923: 62-7 and 125-9, Desportes 2000, Paul ²⁵2007: 352–3 and 379), singular bare nouns in generic use can be found until late in the following periods, e.g. in MHG (1050 to 1350 AD), and even as late as in ENHG (after 1350 AD). Consider the data in (5) and (6) taken from Behaghel (1923: 127-8):

- Chánst tu mír dánne geságen. uuáz ménnisko sî (4) a. you me then tell.INF what man.NOM is.PRES.SUBJ 'Can you tell me what the human being is' (N Boeth I 38, 19-20)
 - b. Ter ménnisko íst keskáffen ad imaginem [...] dei is created ad imaginem the man dei 'the man is created similar to God' (N Boeth I 29, 1-2)
- (5) *allez*, des menske ie bedorfte everything that.GEN man.NOM ever needed 'everything that man ever needed' (Waag V, 18)

(6) fraw sol niht herr sein ym hause
woman should not ruler be.INF in.the.DAT house.DAT
'the woman should not be a ruler at home' (Luth. XXVI, 357, 10)

The same applies to indefinite noun phrases which in some languages, among those in English and in German, may also appear in general statements of the type *The/A lion has a mane* (although some basic differences will be outlined below). Oubouzar (2000) reports that the equivalent of the modern German indefinite determiner *ein* is missing in generic use during the entire OHG attestation, including the work of Notker, although it is regularly used with referential indefinites in affirmative statements already by Otfrid (by 871 AD). But some sporadic uses of *ein* with generic nouns may be identified in earlier parts of the attestation (see Petrova 2015 for a recent investigation of indefinites in OHG). The earliest conclusive example is given in (7a) from Otfrid's *Gospel Book*, another one from Notker is given in (7b):

- (7) a. soso éin man sih scal wérien
 as a man REFL should protect.INF
 'as a man is supposed to protect himself'
 (O IV 17, 13)
 - b. éin uáreuua nemág uuésin uuîz únde suárz a colour NEG.can be.INF white and black 'a colour cannot be white and black at the same time'

(N Boeth.Cat. 35, 11)

The competition between bare nouns and singular indefinite generic NPs continues during the MHG period, as (8a–b) reveals:

(8) a. alfo vater kinde râten fol
as father.NOM child.DAT advise.INF should
'as a father should advise his child'
(Spec 6, 1)
b. An deme felbem ftîge fchvln wir fpringen alfo ein hîrz
on the.DAT same.DAT way.DAT should we leap.INF like a deer
'on this way, we should leap like a deer'
(Spec 9, 9)

Given this situation, it becomes evident that determiners emerge relatively early in all semantic domains, including generic nouns, in German, but that the consolidation of these determiners in generic use takes an especially long period of time, giving rise to yet poorly understood variation in this semantic domain.

Following the main goals of the present volume, which is dedicated to the rise of the definite determiner in German, and considering the role of (singular) definite nouns as genuine formal correlates of generic reference established in the semantic literature (see below), the present investigation addresses the formal variation between bare and definite nouns in generic use in historical German, based on corpus evidence from OHG and early MHG. The study is organized as follows:

Section 2 describes the properties of the corpus, the methods of the corpus search and the quantitative distribution of bare and definite generic NPs found in the data. Section 3 discusses potential factors that influence the distribution of the various types of generic expressions and the increase in the use of the determiner in singular generic NPs over time. Section 4 summarizes the main outcomes of the analysis and discusses their implication for interpreting the process of grammaticalization of determiners out of other categories.

Corpus, methods and a quantitative overview

Recall that the equivalent of the modern German definite determiner is sporadically found in generic noun phrases already in OHG, giving rise to the alternation represented in (9) and (10):

(9) selit bruoder bruoder in tód / Inti ther fater then sell brother brother in death and the father the.ACC son 'The brother shall deliver up the brother to death, and the father the child' Trad& autem frater fratrem in mortem.' / & pater filium

(Mt 10:21) (T 78, 6-7)

(10) súm uuás kelîh éhere súm demo léuuen one was similar boar.DAT another.one the.DAT lion.DAT 'one looked like a boar, another one like a lion' (N Boeth IV 199, 22)

To determine the quantitative distribution of these two types of generic noun phrases and the principles that govern the choice of the one type over the other in the records, I collected a corpus of generic nouns from texts of the OHG and MHG period. Using the electronic resources available at the time while completing the study,² I conducted a complete search for the noun man and mennisco and selected those items in which this noun was used in its general meaning 'man, mankind'. I also searched for animal terms like esil 'ass', scaf 'sheep', ohso 'ox' etc., and selected those instances in which the nouns establish reference to the entire class of objects. Finally, to find instances of generic nouns involving other lexemes, I searched the main records of the OHG attestation manually, using the text editions given in the references, and collected a sample from MHG for comparison. Isidor (I), the Monsee Fragments (MF) and Tatian (T) were searched in complete length. For Otfrid's

^{2.} First and foremost, I searched the OHG texts included in the newly launched Referenzkorpus Altdeutsch REA-0.1, searchable via ANNIS, https://korpling.german.hu-berlin.de/annis3. For Notker, I used the word searching tool of TITUS, http://titus.uni-frankfurt.de/indexd.htm because Notker's work was not available REA-0.1.

Gospel Book (O), I restricted myself to Books 1 and 2, for Notker (N) I examined the *Psalter* (N Ps), more precisely Psalms 1–10. For MHG, I collected conclusive examples from *Speculum Ecclesiæ* (Spec), by evaluating the first 50 pages of the edition by Mellbourn (1944).

An important methodological consideration governing the selection of the data must be clarified in some detail. Seminal work on genericity, foremost Krifka (1987) and Krifka et al. (1995), has revealed that *genericity*, usually related to the faculty of natural languages to express regularities, laws, habits etc. (Carlson 1977, 2011), is a complex phenomenon, involving at least the following two notions: (i) *reference to kinds* as a property of noun phrases, and (ii) the expression of generalizations as a property of the entire sentence, in so-called *characterizing sentences*. These two notions of genericity are independent of each other, i.e., a kind-referring NP may occur both within and outside a generalizing sentence³ (e.g., *The rat is a mammal vs. The rat reached Australia in 1770*), while generalizing sentences do not dwell on the presence of a kind-referring NP but rather express general statements about the referents of different semantic types of noun phrases, e.g. of proper names (*Peter usually smokes after dinner*), mass nouns (*Gold is a precious metal*), abstract nouns (*Life is beautiful*), etc.

This bears consequences for the selection of the data in the corpus. Note that in the historical data, various types of nouns may be found in sentences expressing general facts. But crucially, not all of them count as kind-referring NPs in the proper sense of this term. E.g., thie geist 'the wind' in (11), thiu gelóuba 'faith' in (12), or the mouth in (13) do not refer to kinds, although the sentences represent general statements at their best. But in (14) to (16), the respective noun phrases refer to classes of individuals as such. The latter type of instances is in the center of the attention in the present investigation:

(11) ther geist thara her uuili blasit her the wind where it wants blows it 'The wind blows wherever it wants to' spiritus ubi uult spirat

(T 196, 27)

(12) Tiu gelóuba íst ter hábit únde daz fánt the faith is the place and the guarantee téro dingo the.GEN.PL hope.GEN.PL 'Faith is the place and the guarantee of all hopes' Fides est sperandarum substantia rerum

(St Galler Schularbeit 7, ed. Steinmeyer 1971: 121)

^{3.} The latter are termed *particular sentences*, see Krifka et al. (1995: 3).

- (13) fon thero ginuhtí thes hérzen / sprihhit ther mund from the.dat abundance the.gen heart.gen speaks the mouth 'The mouth speaks from the fullness of the heart' ex abundantia enim cordis.' / ós loquitur (T 74, 13–14)
- (14) thaz uuib thannez birit gitruobnessi habet
 The woman when.it gives.birth trouble has
 'The woman suffers in childbirth'
 mulier cum parit tristitiam habe (T 288, 21)
- (15) in themo einen bróte nileb& ther man
 in dem.dat one.dat bread.dat neg.lives the man
 'Man shall live not alone from bread'
 non In solo pane uiuit homo (T 50, 1)
- (16) Ésil, wízun wir tház, theist fíhu filu dúmbaz ass know we that DEM.is animal very stupid 'We know that the ass is a very stupid animal' (O IV, 5, 7)

Krifka et al. (1995) propose some tests facilitating the proper identification of kind-referring NP. First, kind-referring NPs must be possible outside characterizing sentences, especially as arguments of predicates like *die out, be extinct, exterminate, invent* etc. Second, they refer to well-established classes of entities (*The coke bottle has a narrow neck* vs. ?? *The green bottle has a narrow neck*). I considered these properties of generic NPs while collecting the corpus of this study, in order to arrive at a homogeneous dataset.

An additional important distinction that Krifka (1987) and Krifka et al. (1995) account for relates to the formal type of kind-referring NPs. It is argued that the ability of various types of noun phrases, among all definite singulars, indefinite singulars, bare plurals and definite plurals, to refer to kinds, suggested by examples like The/A lion has a mane and Lions/The lions have manes, is only apparent. The alternation between these types of phrases is possible as long as the sentence in which they appear represents an instance of a characterizing sentence, which, as shown above, is indifferent regarding the type of noun phrase involved. Note, first, that singular indefinites fail as arguments of predicates selecting kind-referring NPs (*The lion*/**A lion will be extinct soon*). Second, indefinite singular NPs are felicitous in characterizing sentences expressing a relevant definitorial property of the subject, while they fail in sentences assigning an episodic property to the subject (The/A madrigal is polyphonic vs. The/*A madrigal is popular). Based on these restrictions, Krifka (1987) and Krifka et al. (1995) argue that singular indefinite NPs cannot act as kind-referring NPs but only express a relevant property of a referent in characterizing sentences.

Definite and bare plurals, in contrast, pass both predicate tests, i.e. they are fine as complements of kind-selecting predicates (*The lions/Lions will be extinct soon*) and are compatible with sentences expressing episodic properties (The madrigals/ Madrigals are popular), but they differ with respect to their property to refer to kinds on additional grounds. Definite plurals, contrary to bare plurals, denote the totality of individuals of a kind (see Chierchia 1998) and presuppose the existence of the class of referents (see Laca 1992, Chur 1993 and the discussion in Schaden 2012). Reference to kinds in bare plurals, finally, is argued to result not from the type of the NP itself but rather from the type of the predicate (see Krifka 2004). In examples like Dogs are barking vs. Dogs bark, the interpretation of the bare plural is governed by the type of the predicate, i.e., a predicate expressing an episodic event triggers an interpretation of the bare plural as a regular existential indefinite expression introducing novel referents to the discourse, while a habitual predicate type-shifts the indefinite into a generic expression. Given these differences, Krifka (1987) and Krifka et al. (1995) argue that the genuine expression of reference to kinds proceeds by way of singular definite noun phrases exclusively. In order to eliminate semantic effects that pertain to the presence of the determiner in plurals, I restricted the corpus to bare and definite nouns used in the singular.

By applying the criteria described above, I collected a corpus of 148 nominal expressions acting as kind-referring NPs in the records. The number and the ratio of bare vs. definite NPs for each individual text are represented in Table 1.

	Bare NPs		Defini	te NPs	Total
	Total	%	Total	%	N = 148
I	4	100.0	0	0.00	4
MF	10	76.9	3	23.1	13
T	37	72.5	14	27.5	51
O	22	84.6	4	15.4	26
N	21	56.8	16	43.2	37
Spec	2	11.8	15	88.2	17

Table 1. Number and ratio of bare vs. definite generic NPs in the corpus

Table 1 shows that the ratio of bare nouns declines over time, while the ratio of definite expressions increases. We also observe that the major steps in the rise and consolidation of the definite determiner in generic use take place already within the OHG period. In the earliest text, the *Isidor* translation, the few generic NPs found in the text appear as bare nouns exclusively. Already about a decade later, in the *Monsee Fragments*, we find definite generic nouns which amount at about 25% of the occurrences. This ratio of definite NPs remains relatively stable over the classical OHG period, with a slight increase in *Tatian* and a slight decline in

Otfird's *Gospel Book*. But already towards the end of the OHG period, the ratio of definite generic NPs increases to more than 40%. Finally, in the early-MHG text of *Speculum Ecclesiæ*, it is already slightly below 90%.

This development is exemplified in Diagram 1.

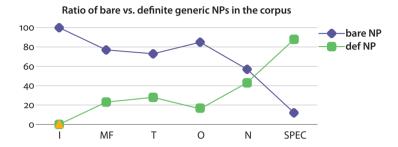


Diagram 1. Ratio of different types of generic expressions over time

While the quantitative investigation of the distribution of the various types of generic NPs in the corpus confirms previous suggestions on their early rise and continuous spread within the OHG period, nothing is said about the conditions that license these forms and the factors that govern their choice over time. This will be examined in Section 3.

3. Exploring the variation

3.1 Previous suggestions

According to Hodler (1954), definite generic NPs that emerge in the OHG period are free variants of canonical bare expressions, which they replace over time:

Fragen wir endlich, ob es einen Unterschied zwischen artikuliertem und artikellosem generellen Substantiv gibt, so ist diese Frage grundsätzlich zu verneinen" = Finally, if we ask the question of whether there is a difference between a general noun with a determiner and one without a determiner, the answer should be negative (Hodler 1954: 70; translation SP)

Hodler also accounts for the fact that this situation still applies in the MHG period:

"Die weitgehende Indifferenz zwischen artikuliertem und artikellosem generellem Substantiv wirkt bis ins mhd. Volksepos nach" = The overall lack of difference between general nouns with and without a determiner is perceivable as late as in the MHG vernacular epic writing. (Hodler 1954: 71; translation SP)

Hodler (1954) nevertheless expresses some suggestions regarding the principles that might trigger the use of the definite determiner in generic NPs. On the one hand, he observes that some discourse-related factors like anaphoricity and emphasis play a role in article placement in general, including generic NPs. On the other hand, he considers some formal properties of the nouns themselves, such as nominalizations and special classes of nominal derivation (e.g. *nomina agentis*). Some of these factors, e.g. givenness, play a prominent role in the literature on the rise of the definite determiner in referential NPs (see Demske 2001). But the effect of these factors on the use of the article in generic NPs has not been tested so far.

In addition, the traditional literature has claimed that there is a relation between the breakdown of morphological case marking on the noun and the rise of the determiner system in Germanic (see Ebert 1978: 43–4 for discussions and references). It might be objected that there is no causal relation between the rise of determiners and the necessity to preserve morphological case marking, at least because in languages like English and the Romance varieties, morphological case marking was lost despite of the emergence of a system of definite and indefinite determiners. But the potential role of the differences in the degree of case syncretism on the use of the determiner within the individual declensional classes of nouns has not been examined for historical German until now.

In the remainder of this paper, the impact of these individual factors on the choice of bare vs. definite generic NPs in the corpus will be examined. The significance of each individual factor on the dependent variable will be determined at the .05 level. For calculating the statistic value of the contingency tables, I used Fisher's exact text because the frequency of the occurrences is particularly small for some of the texts. A respective factor has a statistically significant impact on the choice of the dependent variable if the statistic value that the test produces is below chance level (p < .05).

3.2 Activation

It has been shown in previous work (Hodler 1954, Demske 2001) that referential expressions conveying an anaphoric relation to an antecedent in the previous discourse are a prominent domain in which the demonstrative pronouns start to be used as a marker of definiteness. Hodler (1954: 30) remarks that general nouns, just as abstract NPs, reject the anaphoric article because the notions they represent are part of the world knowledge of the interlocutors, and therefore need not be activated in the previous context. Nevertheless, he discusses examples in which general nouns refer to a kind that is previously established, as in (17), and observes that the article is present in such cases (see Hodler 1954: 60):

(17) *so hirti /* zisceidit scáf fon zigon / Inti sezzit thiu scáf / fon sineru as shepherd separates sheep from goats and puts the sheep to his zesauuvn / Inti thio zigun fon sineru uuinistrun. and the goats to his 'as the shepherd separates the sheep from the goats and puts the sheep to his right and the goats to his left' sicut pastor / segregat oues ab hedis / & statu& oues quidam / a dextris suis / hedos autem a sinistris (T 266, 15–19)

But in my opinion, neither the bare nouns nor the definite expressions in (17) counts as generic. The bare nouns should be analysed as instances of bridging anaphors (Himmelmann 1997: 36), i.e. they do not refer to sheep and goats in general but rather to the sheep and the goats of the particular shepherd, which are subsequently taken up by anaphoric expressions.

Note, however, that there are examples involving generic nouns in which mentioning a particular kind is activated by the contents of the previous context. In (18) = (2), which translates Mt 12:33, the preceding discourse is about good and bad trees and their fruit. In view of this, the subsequent generalization about trees (daer baum 'the tree') comes as activated by the contents of the previous context:

```
(18) So auh fona des
                            baumes obaze
                                               arcennit
                                                           uuir (dit)
      if also from the GEN tree. GEN fruit. DAT recognized PASS. AUX
      daer baum [...]
      the tree
      'If the tree is truly recognized by its fruit [...]'
      Siquidem ex fructu arbor cognoscitur
                                                         (Mt 12:33) (MF 6, 15–16)
```

I tagged the generic NPs in the corpus for activation and determined the effect of this factor on the use of the definite determiner for each text. The results are given in Table 2, including the absolute number of bare and definite generic NPs. I also calculated the statistic value of the contingency for each text.

Table 2. The effect of activation on the use of the definite determiner in generic NPs

	+activated	-activated	Statistic value
I_bare	0	4	1
I_definite	0	0	not significant
MF_bare	1	9	0.108392
MF_definite	2	1	not significant
T_bare	11	26	0.741539
T_definite	5	9	not significant
O_bare	1	21	0.052308
O_definite	2	2	not significant

(continued)

Tuble 2. (commucu)				
	+activated	-activated	Statistic value	
N_bare	0	21	0.061276	
N_definite	3	13	not significant	
Spec_bare	0	2	0.485294	
Spec_definite	7	8	not significant	

Table 2. (continued)

The calculation reveals that activation has no statistically significant effect on the distribution of bare vs. definite generic nouns in the corpus. Consequently, this factor is not responsible for explaining the alternation of these two types of phrases in the corpus.

3.3 Emphasis

Emphasis on a noun phrase is another factor that according to Hodler (1954: 19) triggers the use of the definite determiner in historical German. Very generally, emphasis results from the presence of alternatives mentioned in the discourse. Such alternatives are explicitly marked when an element in the discourse is set into a relation of exclusion, additivity etc. to other elements in the linguistic context. In (19), e.g., emphasis results from the relation of semantic contrast between two alternatives present in the discourse:

(19) ther geist giuuesso funs ist / thaz fleisc ist abur ummahtic the spirit indeed willing is the flesh is but weak 'The spirit indeed is willing but the flesh is weak'

Spiritus quidem prumptus est / caro autem infirma (T 295, 4–5)

Hodler (1954: 62) assumes that emphasis may trigger the use of the determiner in generic nouns as well. In (3b), repeated as (20), emphasis results from the semantic opposition of two concepts:⁴

(20) mihhiles bezira ist ther man themo scafe
much.gen better is the man the.dat sheep.dat
'How much then is the man better than the sheep'
(T 106, 30)

I tagged the generic NPs in the corpus for the emphasis and examined the effect of this factor on the use of the definite determiner. The results are given in Table 3:

^{4.} Hodler (1954: 60) assumes that contrast between 'fruits' and 'the tree' is in place in (18) and acts as the trigger for the use of the definite article in this sentence.

	+emph	-emph	Statistic value
I_bare	4	0	1
I_definite	0	0	not significant
MF_bare	7	3	0.06993
MF_definite	0	3	not significant
T_bare	18	19	0.224833
T_definite	4	10	not significant
O_bare	1	21	0.005953
O_definite	3	1	significant
N_bare	8	13	0.136768
N_definite	2	14	not significant
Spec_bare	1	1	1
Spec_definite	5	10	not significant

Table 3. The effect of emphasis on the choice between bare and definite generic NPs

The figures in Table 3 reveal that emphasis does not affect the choice between bare and definite generic expressions in a systematic way in the corpus. There is one text in which emphasis favors the use of definite generic NPs in a statistically significant way, namely Otfrid's Gospel Book, while it shows no effect in the remaining texts. Given that the *Gospel Book* is the only metrical text in the corpus, it can be assumed that the difference in the effect of emphasis results from differences regarding the text type, or genre. But it is inconclusive why the more novel form, that of the definite generic noun, should be preferred over the more archaic form in a poem. A comparison with other early poetic texts might have revealed a clarification, however, generic NPs were not found in any of them.

Nominalization 3.4

Hodler (1954: 71) observes that nominal derivation, especially nominalization and the formation of nomina agentis (agent nouns) correlates with article placement in historical German. In the corpus, nominalization of adjectives and participles is a common means of creating noun phrases expressing reference to well-established classes, as in (21) and (22). But examples involving agent nouns referring to kinds are missing in the corpus.

(21) fóne Góte uuirt inzúndet der armo ad uirtutem from God.dat pass.aux inflamed the poor to virtue 'The poor man is turned to virtue by God' (N Ps 9, 31, 8) (22) alliu / sint odiu themo giloubenten all are possible the.DAT believing.DAT 'everything is possible for the believing man' omnia / possibilia credenti

(T 148, 30-31)

It might be assumed that the shift into the category of nouns is related to the use of the article as its formal correlate. If this is true, then the formation of generic nouns via nominalization will create an effect in the use of the article. But consider the results in Table 4:

	+nom	-nom	Statistic value
I_bare	0	4	1
I_definite	0	0	not significant
MF_bare	3	7	0.527972
MF_definite	0	3	not significant
T_bare	3	34	1
T_definite	1	13	not significant
O_bare	1	21	1
O_definite	0	4	not significant
N_bare	0	21	0.000333
N_definite	8	8	significant
Spec_bare	0	2	1
Spec_definite	1	14	not significant

Table 4. The effect of nominalization on the choice between bare and definite generic NPs

Nominalization is obviously not associated with the use of the definite determiner in generic nouns until late-OHG, the working time of Notker. Here, nominalization triggers the use of the article in a significant way. But in the earlier documents, the process of shift of adjectives and participles to the class of general nouns does not increase the use of the definite determiner in a statistically significant way.

3.5 Case marking

The final factor tested is case marking. It is well-known that the presence of morphological case marking on the noun itself, incl. the formal differences among the various case endings, decreases over time and is later expressed on the determiner as a category accompanying the noun. Additionally, the paradigms of the nouns *man* and *mennisco* 'man, human being', which are among the prototypical generic NPs in the records, display a high degree of case syncretism due to the inflectional behaviour of these lexemes. E.g., the paradigm of the root noun *man*, all case forms

may be identical, namely man (but consider that there are doublets using the endings of the vocalic class, see below). Without the Latin equivalent, an example like (23) is ambiguous in several respects. Similarly, in the paradigm of *mennicso*, which belongs to the weak declensional class of nouns, there is well-known identity in the domain of the oblique case forms, giving rise to ambiguities regarding the proper identification of case and number in a sentence like (24):

- (23) unsar euua tuomit siu man our law judges it man.ACC.SG/ACC.PL 'Does our law judge the man/men' lex nostra iudicat hominem.ACC.SG (T 213, 13)
- (24) *Gotes* tât mínnota ih. mennischen tât házeta ih God.gen deed loved I man.gen.sg/pl deed hated I 'I loved God's deed, but I hated the deed of man/men' (N Ps 100, 366, 19)

In view of this, it might be assumed that introducing the determiner would help dissolving ambiguities regarding case and number of nouns in general, including of those referring to kinds. In order to investigate the effect of case marking, two tests are applied. The first one examines if the determiner is preferred with generic nouns in the oblique cases (i.e. in non-nominative case) in order to produce unambiguous case marking. The results are presented in Table 5.

Table 5.	The effect of oblique case realization on the choice between bare
and defin	nite generic NPs

	+oblique	-oblique	Statistic value
I_bare	2	2	1
I_definite	0	0	not significant
MF_bare	4	6	0.559441
MF_definite	2	1	not significant
T_bare	18	19	1
T_definite	7	7	not significant
O_bare	6	16	0.563344
O_definite	2	2	not significant
N_bare	7	14	1
N_definite	5	11	not significant
Spec_bare	1	1	0.227941
Spec_definite	1	14	not significant

As the statistical calculation reveals, the fact that a noun is in the oblique, i.e. nonnominative case, has no statistically significant effect on the use of the definite determiner in generic NPs.

Let us look whether the differences in the degree of case syncretism among the individual declensional classes play a role in article placement, investigated in the second test. It is well-known that the paradigm of nouns belonging to the various vocalic classes displays less case syncretism while in the paradigms of the different consonantal classes, including root nouns like *man*, identical forms dominate. Note, however, that the root noun *man* displays doublets that use case endings for the various oblique cases, e.g. *mannes*.GEN.SG, *manne*.DAT.SG and *mannan*.ACC.SG. Consider that there is variation between the ambiguous canonical forms of *man* as in (25) and the more to transparent forms, e.g. *mannan*.ACC.SG illustrated in (26):

- (25) sambaztag thuruh man gitan ist
 Sabbath because.of man.ACC made is
 'The Sabbath was made for man'
 Sabbatum propter hominem factum est (Mc 2:27) (T 106, 4)
- (26) durah mannan
 because.of man.ACC.sG
 'for man's sake'
 propter hominem

(MF 28, 19)

I tested how the transparency in morphological case marking influences the use of the determiner in the corpus. I determined how often forms of the weak declensional classes and of the canonical paradigm of *man* appear with and without an article and compared this to the more case-transparent forms of the strong inflectional classes, including the doublets of *man*. The results of this examination are given in Table 6:

Table 6. The effect of case transparence on the choice between bare and definite generic NPs

	+ambiguous	-ambiguous	Statistic value
I_bare	2	2	1
I_definite	0	0	not significant
MF_bare	5	5	0.230769
MF_definite	0	3	not significant
T_bare	23	14	0.529097
T_definite	7	7	not significant
O_bare	13	8	0.268933
O_definite	4	0	not significant
N_bare	19	2	0.633858
N_definite	13	3	not significant
Spec_bare	2	0	1
Spec_definite	13	2	not significant

As in the previous test, the calculation yields no statistical significance, i.e. article placement is no compensation for insufficient transparency regarding morphological case marking and the interpretation of the noun phrase. But what is revealing is the observation that all forms of the general noun *man* in the oblique cases found in *Tatian* display an article, while the canonical oblique forms with no special case marking can be used with and without the article. Consider Table 7:

Table 7. The effect of case transparence on the choice between bare and definite generic NPs in oblique case forms of man in Tatian (n = 14)

	+ambiguous	-ambiguous	Statistic value
T_bare	8	4	0.164835
T_definite	0	2	not significant

This result is not statistically significant either. In fact, it reveals that the reverse dependency is more probable, namely that article placement correlates with the presence rather than with the absence of an overt case feature on the noun. It can be speculated that this case feature on the noun requires agreement with a formal correlate in the head of a functional projection, e.g. D°, in which the formal properties of the noun phrase are specified. This aspect, however, cannot be discussed in detail within the limits of this investigation.

4. Conclusion and discussion

Starting from the observation that contra some previous accounts, the definite determiner appears with generic nouns already in the OHG period, co-occurring with bare nouns for a considerably long period of time, the present investigation addresses the quantitative and qualitative distribution of bare vs. definite noun phrases in generic use in a corpus collected from OHG and MHG documents. It shows that while the quantitative distribution of bare vs. definite noun phrases undergoes conclusive development over time, indicating the gradual spread of definite forms already in OHG times, the examination of the qualitative variation cannot be explained in a straightforward manner. Four factors generally associated with article placement in historical German were tested, namely activation, emphasis, nominalization, and case syncretism. The statistical evaluation reveals no effect of activation and case syncretism at all, while the remaining two factors show statistical significance in single texts of the attestation. Emphasis is tested significant on the choice between different bare and definite generic nouns in Otfrid, the only poetic text in the corpus, indicating that the noun phrase variation in OHG is potentially sensitive to genre and register. Nominalization has a statistically significant effect

on the preference of the definite form over the bare one in Notker's writings. This result, however, says little about the rise of the article in generic nouns in OHG. The effect discovered in Notker's work is surely an epiphenomenon of the general advance in the use of the determiner with all nouns in late-OHG. Finally, note that although case syncretism tests insignificant for article placement, the data shows that in *Tatian*, one of the relatively early texts, article use in general nouns correlates with the more transparent case forms rather than with those displaying case syncretism, contra to expectation.

The principles that govern the proper distribution of bare vs. definite generic nouns in historical German remain a puzzle, but this variation is a challenge to well-known grammaticalization scenarios accounting for the consolidation of determiner systems by way of gradual spread of categories along the stages of implicational, or evolutionary scales. Such approaches build on the assumption that categories like demonstratives or numerals develop into articles by incrementally passing through stages associated with the various semantic classes of (in)definiteness, expanding to some more discourse-bound, referential interpretations first and acquiring a more general, abstract meaning later. Modelling diachronic developments in terms of implicational scales is attractive in that it enables a precise determination of successive phases of development on the basis of independent semantic notions and criteria. Also, as outlined by Keenan (2011: 2), such scenarios open the perspective of viewing the development of the definite and indefinite article in a uniform way, assuming that "articles emerge and develop in a consistent, predictable order based on diminishing discourse relevance" across languages. But such scenarios are challenged by empirical observations suggesting that there is huge formal variation in the expression of individual semantic classes of definites and indefinites, and substantial synchronic overlap in the use of determiners across the individual stages of the implicational scale, which does not support a representation of the evolution in terms of single, clear-cut successive phases of change.

Text editions

- I Der althochdeutsche Isidor. Facsimile-Ausgabe des Pariser Codex nebst christlichem Texte der Pariser und Monseer Bruchstücke. Mit Einleitung, grammatischer Darstellung und einem ausführlichen Glossar, ed. by George A. Hench, Straßburg: Karl J. Trübner, 1893.
- MF The Monsee Fragments. Newly collated text with introduction, notes, grammatical treatise and exhaustive glossary and a photo- lithographic facsimile, ed. by George A. Hench, Straßburg: Karl J. Trübner, 1890.
- O Otfrids Evangelienbuch, ed. by Oskar Erdmann. Tübingen: Max Niemeyer, 1973.
- N Boeth Notker von St. Gallen, De Consolatione philosophiae, ed. by Petrus W. Tax, Vol. I–V, Tübingen: Max Niemeyer, 1988–1990.

- N Boeth.Cat. Notker der Deutsche, Boethius' Bearbeitung der 'Categoriae' des Aristoteles, ed. by James C. King, Die Werke Notkers des Deutschen, Vol. 5, Tübingen: Max Niemeyer, 1972.
- N Ps Notker von St.Gallen, Psalter, ed. by Petrus W. Tax, Vol. I-III, Tübingen: Max Niemeyer,
- Spec Speculum Ecclesiæ. Eine frühmittelhochdeutsche Predigtsammlung. (Cgm. 39). Mit sprachlicher Einleitung, ed. by Gert Mellbrourn. Lund: Gleerup.
- T Die lateinisch-althochdeutsche Tatianbilingue Stiftsbibliothek St. Gallen Cod. 56, ed. by Achim Masser, Göttingen: Vandenhoeck & Ruprecht, 1994.
- Die kleineren althochdeutschen Sprachdenkmäler, ed. by Elias von Steinmeyer, Dublin/Zürich: Weidmann, 1971.

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SECTION II

"Syntactic contexts, cognition and grammaticalization"

The role of the definite article in the rise of the German framing principle

A comparative study of verbal and nominal constructions in the Old High German *Muspilli* and the Old English *Dream of the Rood*

Elke Ronneberger-Sibold

This paper develops ideas broached in Ronneberger-Sibold (2010) on the origins of the divergent typological developments of English towards a "classical" analytic S-V-O language, and German into a "framing" language, in which the dominating typologically relevant feature is the framing of different constituents by two elements related to each other, such that the recipient can conclude from the appearance of the first element that the constituent in question will not be complete before the second element appears. This principle was discovered and gradually implemented by German language users in a self-fortifying process from OHG on. To isolate specifically OHG prerequisites for this process, two comparable alliterative poems, one in each language, were analysed with respect to separable verbal complexes, verb position as a marker of sentence type, and the structure of complex noun-phrases. The most radical differences concerned the noun-phrase, and particularly the definite article, whereas the differences in verb position were less pronounced. Therefore, a scenario of the first steps of the typological divergence is outlined in which the OHG definite article plays a decisive role.

Keywords: Muspilli, Dream of the Rood, Ruthwell Crucification Poem, Old High German, Old English, typological divergence of German and English, German Framing Principle, prerequisites for framing, German noun-phrase, definite article

Introduction: Research question and material

The rise and spread of the definite and indefinite articles in many Indo-European languages has traditionally been considered as part of a general typological development from syntheticity towards analyticity, in combination with the rise of

https://doi.org/10.1075/silv.23.04ron © 2020 John Benjamins Publishing Company obligatory subject pronouns, analytic verb forms, particle verbs, etc.¹ While this trend undoubtedly exists in an overall manner, it neither explains the initial emergence of the new constructions in every case, nor the syntactical distribution of the analytical elements, in particular the tendency to split up the cognitively and grammatically closely related elements of bipartite constructions, such as an auxiliary and the related main verb. Although this tendency existed in several Old Germanic languages, it became particularly pervasive in German, where it finally contributed to the rise of the well-known framing constructions. The main research question of this paper is therefore the following: Why did framing evolve into a typologically relevant principle in German, pervading bit by bit the entire linguistic system, although similar constructions also existed in other languages? In answering this question, this paper concentrates on German and English as the two poles of a possible scale aligning the Germanic languages according to their use of framing. (The details of this scale, which have to take into account not only grammatical, but also extralinguistic factors, are by far beyond the scope of this paper.)

A central idea underlying this study is the following: In search of the structural prerequisites for the spread of framing it is not sufficient to count constructions resembling New High German frames in the oldest stages of the two languages. If we find a higher rate of such constructions in Old High German than in Old English (which will indeed be the case), this simply tells us that the typological split was already under way even in the oldest texts, and possibly in which type of constructions it started, but it does not tell us anything about the reason why framing was so much more productive in Old High German than in Old English. In fact, this is not so much a question of the quantity than of the quality of the constructions in question. If the typological split is not due to mere chance, the German ones must have contained certain features or constellations of features suggesting to the language users that these constructions were in fact to be interpreted as frames. For it is this interpretation which enabled language users to spread the principle productively in their system. In other words, framing as a grammatical device was not simply given with constructions that looked like modern frames; rather, it had to be discovered by the language users. Formal features favouring this discovery were, e.g., the frequency and salience of the framing elements, their integration into the grammatical system (you would not consider an exceptional form as the base of a central grammatical feature), their reliability (e.g., of a finite verb as a closing signal for a subordinate clause) and - most importantly - their grammatical usefulness for the parsing of sentences. (It makes sense to frame a noun-phrase or a subordinate clause, or even the rheme of a sentence, but not, say, the first third of a sentence.)

^{1.} Cf. already Schlegel (1818: 16).

In this paper, possible prerequisites for the discovery of the framing principle are systematically compared in three fields of Old High German and Old English grammar with special reference to the formal features discussed above. The three fields are (1) the inventory of separable verbal complexes, which, being considerably enlarged by the newly arising periphrastic verb forms, offered ample opportunity for the construction of frames, (2) the position of the finite verb in different clause types insofar as it was not motivated by the framing principle itself, and (3) complex noun phrases.² The aim of the comparison is, of course, to isolate those prerequisites that were present in Old High German, but not (or to a much lesser degree) in Old English and which may therefore have "set the ball rolling" in the history of German only.

Although much relevant information is contained in the classical textbooks³ and in specialised studies mostly on word-order in the longer Early Old High German and Early Old English documents,4 it seemed necessary to take a fresh look at old texts in view of the comparative perspective and of the prerequisites not directly related to word order, such as the form of the definite article. The historical documents chosen are the Old High German Muspilli and the Old English Dream of the Rood. These two texts are comparable with respect to genre - alliterative poetry -, length - 103 lines for the Muspilli, 156 for the Dream of the Rood⁵ -, presumable date of composition - second half of the 9th century⁶ -, theme and

^{2.} Verbal and adverbial particles are omitted because of their scarcity and doubtful status in the texts analysed in this paper. Separable pronominal adverbs such as in the *Muspilli* line 5 dar pagant siu umpi, literally 'there fight they about' 'they fight about that' are interesting, but too rare for having played an important part in the discovery and spread of the framing principle.

^{3.} E. g. Behaghel (1923–1932) and Mitchell (1985).

^{4.} I am particularly indebted to the impressive and insightful comparative study on the order of elements in the early Germanic languages by Fourquet (1938), who, however, does not take into account the quantitative aspect, to Robinson (1997), who offers detailed information on word-order in the OHG Isidor translation, but not in a comparative perspective, and to the in-depth quantitative and contrastive study by Cichosz (2010) on word-order in different text types in Old English and Old High German. The most interesting results of a study by Flick and Szczepanisk (2018) on the structure of the nominal phrase in the OHG *Isidor* in the perspective of syntactical framing are perfectly in line with the findings for the Muspilli presented below. Furthermore, I profited from the studies on the interaction of word-order and information structure in different long early OHG texts by Axel (2007), Schlachter (2012) and in Hinterhölzl and Petrova (eds.) (2009).

^{5.} The relative shortness of the texts proved to be less of a problem than one might have thought, for the relevant features are very frequent.

^{6.} Cf. Sonderegger (2003: 118) for the Muspilli and Swanton (1996: 39) for an "intermediate version" of the Dream of the Rood from "perhaps 885". "Intermediate" here means between an assumed Northumbrian original from the early 8th century and the "West-Saxonized" version of the Vercelli Book (second half of the 10th century), which has come down to us.

purpose - Christian admonition/exhortation of the faithful to lead a God-fearing life on earth in view of an eternal life in paradise -, and style - reflective and sermon-like passages along with lively accounts of dramatic events: the fight between Elias and the Antichrist as well as the end of the world in the Muspilli, the passion of Christ from the perspective of the Cross in the Dream of the Rood. Most importantly however, both texts date back in time well beyond the dates of their presumable composition and even more so of their recording, for both of them include parts of earlier poems. For the Muspilli, this can be concluded from linguistic, metrical, and textual evidence. In a careful evaluation of the available evidence and earlier discussions of possible sources, Minis (1966) even comes to the conclusion that the greater part of the poem is an achievement of an older poet, which was only marred by certain insertions through a later interpolator.

For the *Dream of the Rood*, part of the earlier text even survives as a runic inscription on the Ruthwell Cross, probably from the mid-eighth century. According to Swanton (1996: 39 and 41) and to Bammesberger (forthc.), both the Ruthwell Crucification Poem and the Dream of the Rood in the Vercelli Book independently go back to an even older poem from the first half of the eighth century. The comparison of the two extant versions reveals certain developments within Old English, especially concerning the structure of noun-phrases, which are perfectly in line with the scenario of the earliest steps of the typological bifurcation between English and German outlined in this paper.

It is mainly this archaic (or archaizing) character, besides their close comparability, which motivated the selection of the Muspilli and the Dream of the Rood as the text basis for the investigation of framing prerequisites in this paper. It is true that poetry is often considered as less suited for syntactical studies than prose due to the constraints imposed by metre and rhyme. While this is undoubtedly true for modern texts, it must, however, be kept in mind that especially in the the Old High German literature, the alternative to poetry are almost exclusively prose translations from Latin. The disadvantages on both sides seem to be more or less equal: Any investigation has to take into account either the language of the original, or the rules of poetry. Both are well-known and can be handled. Therefore, questions

^{7.} Cf. Waxenberger (forthc.) with runic evidence.

^{8.} Cf. Sonderegger (2003: 118) concerning the archaizing character of the Muspilli.

^{9.} Cf. also the consideration of the respective advantages and disadvantages in Fleischer (2011: 39-50) and the defence of poetry as a source of linguistic evidence by Mitchell (1985, vol.2:982) as well as the comparison of poetry and prose with respect to word-order in Cichosz (2010).

concerning the peculiarities of alliterative poetry will be carefully considered in the following analyses. 10

For the Muspilli, I rely on the original edition of the manuscript Clm_14098 in the Bavarian State Library, Munich, by Schmeller (1832) for the text, 11 and on the online edition in the TITUS collection for the numbering of lines, ¹² for the *Dream* of the Rood on the edition by Swanton (1996: 93-101), for the Ruthwell Crucification Poem on the reconstruction by Bammesberger (forthc.) (without the passages taken over from the Vercelli Book).

The structure of this paper is as follows: In Section 2, the framing principle is defined and illustrated by examples from New High German. Some important (and frequently misunderstood) issues are discussed. Section 3 is devoted to an explanation of each prerequisite and to its realisation in the Muspilli. In Section 4, the same prerequisites are studied in the *Dream of the Rood* (and, where appropriate, in the Ruthwell Crucification Poem) and the results are compared with the results obtained for the Muspilli. Section 5 contains a comparative summary and evaluation of the findings. On this basis, a tentative scenario is developed concerning the possible first, decisive steps of the typological bifurcation of German and English. This is where the importance of the definite article is most evident. The paper closes with a discussion of some limitations of the study and of fields for further research, possibly going even further back in time.

The framing principle in New High German: Survey and general considerations

German framing in its most general form may be defined as follows: Framing is a device by which a constituent is framed "by two elements related to each other such that the hearer or reader can conclude from the appearance of the first element that the constituent in question will not be complete before the second element appears"

^{10.} The archaic or archaizing character of alliterative poetry is somewhat blurred in Cichosz (2010), because, in her poetry sample, poems in the Germanic alliterative tradition, such as the Muspilli, are lumped together with works in the then modern, Latin-based end rhyme poetry, such as Otfrid's Evangelienbuch (Cichosz 2010: 53). Cf. also note 28.

^{11.} Online under https://books.google.de/books?id=EQFKAAAAcAAJ&printsec=frontcover&hl=de&source=gbs_ViewAPI&redir_esc=y#v=onepage&q&f=false

^{12.} http://titus.uni-frankfurt.de/texte/etcs/germ/ahd/klahddkm/klahd.htm. The text of this edition, relying on Steinmeyer (1963), was not suitable for this investigation, because it contains certain conjectures and grammatical emendations at relevant points. The numbering of lines is, however, clearer than in Schmeller's edition.

(Ronneberger-Sibold 2007: 212). The constituent may be defined by grammar (e.g., a subordinate clause) or by information structure (e.g., the so-called middle field of a main clause, containing - roughly speaking - its rheme).

In contemporary Standard German, this principle is implemented on different levels of the linguistic system, ranging from syntax to phonology. The most notorious cases concern the syntax of verbs. 13 Thus, in a main declarative sentence with a verbal complex, the middle field is framed by the finite auxiliary or modal verb in V-2-position and the corresponding non-finite main verb in final position, e.g. in the following sentence:

(1) Der Student hat der Bibliothekarin das Buch gestern zurückgegeben. The student has to the librarian-fem. the book yesterday back given 'The student gave the book back to the librarian yesterday.'14

Subordinate clauses are framed by a subordinating conjunction or relative pronoun at the beginning and the finite verb at the end, 15 e.g.

(2) ...dass der Student der Bibliothekarin das Buch morgen zurückgibt ...that the student to the librarian-fem. the book tomorrow back-gives "... that the student will give the book back to the librarian tomorrow."

Most noun phrases are framed by the concord of the so-called strong inflection for gender, number, and case on a determiner or attributive adjective at the beginning, and the gender and inflection of the head noun at the end. All attributes in concord with the head-noun must be included in this frame, together with their complements,16 e.g.,

14. Another type of frames in a declarative main clause is formed by the finite main verb in V-2-position and a verbal particle in final position, e.g.

> Der Student gibt der Bibliothekarin das Buch morgen The student gives to the librarian-fem. the book tomorrow back 'The student will give the book back to the librarian tomorrow.'

As this type is not yet realised in the OHG and OE poems analysed, it is not considered in this paper.

15. The assignment of subordinating conjunctions and relative pronouns to different positional fields in Wöllstein (ed.) (2016: 874) has no impact on their functioning as framing elements. I therefore treat them together, following the descriptive use in earlier editions of this standard grammar.

16. Attributes not in concord with the head-noun are postposed. For details cf. Wöllstein (ed.) (2016: 814-815).

^{13.} Cf. Wöllstein (ed.) (2016: 871-875)

(3)	Das	bereits	gestern	zurückgegebene	Buch
	The	already	yesterday	backgiven	book
	nom./acc.				nom./acc.
	sg.				sg.
	neuter				neuter
	'the book which was already given back yesterday'				

More syntactical frames can be found in non-standard varieties. For instance, in Bavarian the auxiliary clause frame is strengthened – in a synchronic perspective – by the copying of certain inflections from the finite verb onto the subordinating conjunction, 17 e.g.,

```
(4) wenn-sd ån a so an Doog fümf (...) Laid
    if-2nd sg. at such a day five (...) people have-2nd sg.
                                                      (König et al. 1991: 50ff.)
    if you have five people on such a day
```

In morphology, the framing principle is realised, e.g., in the circumfixes ge...(e)tand ge...en of past participles such as ge-red-et 'talked', ge-sproch-en 'spoken', and even German phonology is known for the numerous boundary signals marking the left and right edges of words, such as the initial glottal stop before a vocalic onset, which avoids liaison with a preceding word, and final devoicing, which strengthens the right edge.¹⁸

Thus, framing as a structural principle runs all the way through the linguistic system of New High German. It may therefore be considered as an important feature of the immanent typology (the "inner form") of this language. Before focussing on the initial steps of its implementation, some important points need to be clarified:

Firstly, framing is a surface phenomenon. As shown by the examples cited, the linguistic categories and functions of the framing elements as well as their structural relations with each other are extremely diverse. Each of them has its own functions and structural principles besides framing. These are in no way diminished in their importance by the framing principle. What all these constructions have in common is that, on the surface, they bring about the situation described in the definition of the framing principle: The recipient, having heard or read the left element, knows that the constituent he or she is perceiving will not be complete before the right element appears.

^{17.} Cf. Harnisch (1989).

^{18.} Cf. Szczepaniak (2007) for the diachronic shift of German from a ,syllable language' to a ,word language'.

Secondly, the function of framing follows from the above definition: In the view underlying this paper, it is above all a device which helps the listener or reader in parsing sentences online. A German listener or reader knows "where he or she is" in a sentence practically at every moment of the spoken or written chain. So-called syntactical garden-path analyses are much less possible in German than, e.g., in English.¹⁹ The price of this advantage is, of course, the obligation to wait for the closing element, e.g., for the finite verb of a subordinate clause or the head-noun of a noun phrase. As in all left-branching constructions, the exact function of the satellites can only be determined when the head appears. ²⁰ Moreover, the separation of structurally and semantically closely related elements appears illogical. However, the anticipatory state created by framing on the part of the listener or reader has also been interpreted as an advantage of framing, or even as its primary aim.²¹

Thirdly, framing is not indispensable for parsing sentences. The boundaries of constituents may also be recognized by other means such as word-order and marking the parts of speech in English: The subject ends when the finite verb comes. This solution is less costly, but also less secure than German framing. In the end, the problem boils down to a question of typological preferences.²²

Prerequisites of framing in the Muspilli

The inventory of separable verbal complexes 3.1

Separable verbal complexes are bipartite constructions the parts of which, for some reason or another, may be separated in the speech chain. As such, they are an ideal prerequisite for the formation of constructions allowing for an interpretation as frames. Formal features favouring this interpretation are morphological clues marking the structural relatedness of the framing elements.

^{19.} For a comparison cf. Agricola (1968). A notorious English sentence in the relevant literature is the horse raced past the barn fell. Cf. Pritchett (1988).

^{20.} This is frequently considered as a severe disadvantage by native speakers of VO languages, e.g., in the performance theory of Hawkins (1994), based on the idea that listeners and readers, so to speak, gather information online. An advantage of framing not taken into account in this theory is that the listeners and readers receive a signal when to start and when to stop gathering. Considered from this point of view, framing is even one of the features qualifying German as a language with a "'tighter fit' between surface form and semantic representation" than English (Hawkins 1985: 122).

^{21.} Cf. already Drach (1937), refined by Eroms (2002).

^{22.} For a systematic analysis of the advantages and disadvantages of different language types as compared to framing cf. Ronneberger-Sibold (1997).

A rather frequent traditional type of separable verbal complexes in the *Muspilli*, inherited from Germanic, is a modal verb governing an infinitive, e.g., in line 72

manno nohhein miatun (5) niscolta sid intfahan. not-should therefore men's no one bribe money accept 'Therefore, nobody should accept bribe money.'

As outlined above, numerous new types of verbal complexes were provided in Old High German by the typological trend for analyticity. These were the newly arising analytical tense forms of the perfect, pluperfect, and future as well as the analytical passive. These forms evolved from verbal periphrases, which were increasingly grammaticalised in the course of Old and Middle High German.²³

The perfect and pluperfect were formed with haben/eigan 'have' or sin 'be' as auxiliaries, as in New High German. In the Muspilli, the grammaticalisation was in its initial stage. The poem contains no examples with *sin*, and only two with *haben*:

Line 36

(6) pi daz er in uuerolti kiuerkota hapeta. by that earlier in world done had "... for what he had done in the world before."

Line 99

(7) der gipuazzit [h]apet who done penance has 'who has done penance.'

Semantically, both examples obviously contain complex verb forms, i.e., the pluperfect in (6) and the perfect in (7). However, formally, in (6), the relatedness of the participle with the auxiliary haben is still obscured by the inflection on the participle kiuerkot-a (acc. sg. neut., weak infl.) in concord with the direct object daz,²⁴ whereas in (7), the absence of inflection on the participle already clearly signals a complex word form. In fact, gipuazzit hapet is even used intransitively in (7).²⁵

^{23.} Cf. Behaghel (1923, vol II:199-210, 256-260, 270-302) and, in the light of modern grammaticalisation theory, Szczepaniak (2009: 129-150) as well as, in a constructionist framework and in comparison with Old Saxon, Gillmann (2016).

^{24.} Originally, the participle of the haben-construction was in a predicative relation with the direct object of haben, in the sense of 'that what he possessed as something done', which is semantically aberrant here.

^{25.} In the subsequent evolution during Old and Middle High German, the inflection of participles lost its function of distinguishing between predicative use and use in complex word forms, because all words in predicative function became uninflected (cf. Behaghel 1923, Vol I:217-225).

In both examples cited, the elements of the complex word forms are not separated from each other, because they occur in auxiliary clauses (cf. 3.2). Split verb forms are, however, to be found in main clauses in the future tense and in the passive voice.

The future is analytically expressed by a finite form of scal 'shall' and the infinitive of the main verb in the Muspilli, like in English. Due to its prophetic nature, the text abounds in such constructions, ²⁶ e.g., in line 35:

(8) Dar scal er uuora demo rihcche az rahhu stantan, There shall he before the ruler to account stand 'There, he shall be held accountable to the ruler.'

The passive voice in the Muspilli is formed with finite forms of sin 'be' or werdan 'become' plus the past participle of the main verb. The forms with 'be' describe states, the forms with 'become' future processes concerning the subject as a patient or experiencer.²⁷ On the whole, the passive, especially when formed with 'be', is less grammaticalised than the perfect and pluperfect formed with 'have', but examples such as in (9) (line 100) are nevertheless difficult to interpret in a "literal" compositional way.

(9) [uuir]dit denne furi kitragan daz frono ch[ruzi], becomes then fore carried the divine cross 'Then the divine cross is carried to the fore.'

Verb position 3.2

As in New High German, the position of the finite verb is clearly used in the Muspilli to distinguish between different clause types: Diagram 1 shows an almost complementary distribution between final position in subordinate clauses and second position in declarative main clauses (and one wh-question).²⁸ Cf.

^{26.} However, following the Germanic tradition, the simple present may also be used with a future meaning.

^{27.} Cf. Behaghel (1923, Vol. II:200-201).

^{28.} The preference for final verb position in subordinate clauses is less clear in the German poetry sample of Cichosz (2010: 201). This may be due to the inclusion of narrative end-rhyme poetry such as Otfrid, which might come closer to prose style, where the difference in verb position between main clauses and auxiliary clauses is less pronounced. Nevertheless, Cichosz's overall conclusion that Old High German and Old English exhibit important differences with respect to word order - contrary to Davis and Bernhardt (2002) - is supported by our findings.

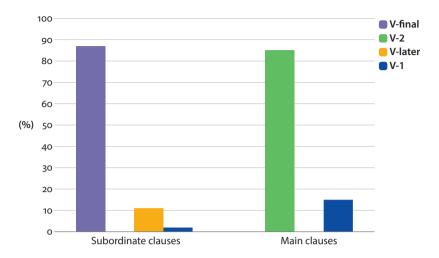


Diagram 1. Position of the finite verb in subordinate (n = 62) and main clauses (n = 67)in the Muspilli

(6) and (7) as examples of subordinate clauses and (5) as an example of a main clause 29

All cases of verb-initial and verb-later (i.e., later than second, but earlier than final) position of the finite verb in subordinate clauses are motivated by special constellations such as citations taken from the Creed (lines 74 and 86), the word-order of which followed the Latin original, furthermore reported speech in form of a main clause (line 38), 30 attraction of its head by a postposed relative clause (line 11), and different exigencies of alliterative poetry.³¹ In main clauses, V1-position seems to have fulfilled an expressive function for highlighting particularly dramatic scenes.

mit den miaton marrit d[a]z re[h]ta When-he with the bribe violates the law 'when he violates the law for bribe money'

the finite verb marrit was in final position, the first stressed word of the second half-line, which should alliterate with one or two stressed words of the first half-line (cf., e.g., Mitchell & Robinson 2012: 156–157), would be rehta. Hence the alliteration with miaton in the first half-line would be upset.

^{29.} The scope of this paper does not allow for tackling the involved and much-discussed questions concerning the history of this distribution (did it originate from one Indo-European or Proto-Germanic positional type, and if so, was this type verb-final, V-1, V-2 or completely "free") as well as the typological implications for the basic word order of German (OV or VO). For an excellent, short summary cf. Hinterhölzl and Petrova (2009: 1-13).

^{30.} For examples from the OHG *Isidor* translation cf. Robinson (1997: 72–75).

^{31.} E.g., if in line 67

The final position of the finite verb in subordinate clauses was a particularly powerful prerequisite for the discovery of the framing principle because of its grammatical relevance and its reliability: A listener or reader having perceived a subordinating conjunction or relative pronoun could be almost³² sure that he or she was in a subordinate clause and that this clause would be closed by the finite verb. Thus he or she would await the finite verb not only because of its meaning and its grammatical valence, but also because of its function as a boundary signal. From this realisation, it is only a small step to considering the subordinating conjunction or relative pronoun and the finite verb as two parts of a frame embracing the entire subordinate clause.

While, in this way, almost every subordinate clause represented a potential frame, in main clauses, frames were possible only if these contained a separable verbal complex. This was the case in 16 out of 67 clauses, i.e. in only 23%. This figure alone shows that the subordinate clause must have been more important for the discovery of the framing principle than the main clause. Moreover, framing the rheme of a clause seems less obvious and grammatically less useful for the listener or reader than framing a subordinate clause, i.e., a clause within a longer sentence. Therefore, it is perhaps no wonder that the framing potential of main clauses was fully exploited only in 12 out of 16 clauses, i.e. in 75%, by final position of the non-finite main verb.³³ Cf. Example (5), cited above. In four cases (25%), the non-finite main verb was placed in a position later than V2, but not final, e.g., in Example (9). In this clause, the position of daz frono chruzi in absolutely final position after the main verb seems to fulfil the same purpose it would have in New High German: placing a special emphasis on this central term. Moreover, the alliteration between furi and frono requires daz frono chruzi in the second half-line. Similar conditions obtain in the other examples.

In sum, the position of verbs in the Muspilli is already remarkably close to the New High German standard, though not quite as close in main as in subordinate clauses. The few exceptions are motivated by different factors such as an indirect

^{32.} The reservation expressed by *almost* is necessary because of the few non-final verb positions mentioned above and because some conjunctions, such as den(n)e, could also function as adverbs in main clauses. In such cases, the position of the finite verb differentiated between a subordinate clause with final and a main clause with V2-position, e.g., in line 65 dene ni dar[f] er sorgen dene er ze deru suono quimit 'Then he need not worry, when he comes to the Last Judgement'. This difference possibly even enhanced the attention paid to the position of the finite verb by language users. (The verb *darf* is in second position in the first clause, because the negation particle *ni*, being automatically placed immediately before the finite verb in negative clauses, does not fill a positional slot on its own.)

^{33.} This quantitative argument is, however, not very strong because of the low absolute figures.

Latin influence in certain cases or the requirements of alliterative poetry. Especially the final position of the finite verb signalling a subordinate clause is a powerful prerequisite for the interpretation of this verb together with the subordinating conjunction or relative pronoun as a frame embracing the entire subordinate clause. The question as to whether the users of Old High German had already discovered this interpretation by the time the Muspilli was composed will be deferred until after the analysis of the Dream of the Rood.

3.3 Complex noun phrases

In the nominal domain, the most important innovation of Old High German in view of the framing principle was the introduction of the definite and – somewhat later – the indefinite articles.³⁴ In addition to their primary functions of overtly expressing definiteness as a new grammatical category and of assuring the inflection of the noun phrase for case, number, and gender together with the endings of the head-noun,³⁵ the articles also introduced the structural prerequisites for the formation of nominal frames: Noun phrases became increasingly bipartite, and the relation between the two parts was marked by the morphological concord between the head noun and the article.

In the Muspilli, the definite article is used in approx. two thirds (65%) of all cases in which it would be obligatory in New High German (64 incidences with an overt article vs. 34 without). Where it is used, the definite article already has the same structural and semantic scope as in New High German:³⁶ It may endophorically refer to referents mentioned in the text before (e.g., line 38 der antichristo 'the Antichrist' – line 39 der warch 'the enemy') or later (e.g. line 40 diu kosa 'the matter of dispute' - line 41 den heuigon lip 'the eternal life') or exophorically to unique referents, such as the above-mentioned Antichrist, or to entire classes of referents in so-called generic use (e.g. in line 51 die perga 'the mountains = all mountains'). There even seem to be idioms containing the definite article, e.g. sih in den sind arheuit '(literally 'rises in the way', 'sets off' in lines 2 and 74).

^{34.} For the grammaticalisation of the indefinite article cf. Szczepaniak (2016).

^{35.} The common idea that the articles were introduced as substitutes for the dwindling nominal endings is somewhat oversimplified, for the dominating pattern was (and still is) a mutual disambiguation of the article and the head-noun with respect to case, number, and gender (cf. Ronneberger-Sibold 1993). E.g., the article form diu could be the nom. sg. fem. or nom./acc. pl. neut. or instr. sg. masc./neut. In turn, a strong feminine noun such as geba 'gift' could be nom. or acc. sg. or pl., or genit. sg., but together with diu, the complete noun phrase could only be nom. sg.

^{36.} Cf. Behaghel (1923, Vol. I:37-45).

Proper names such as *hlias* 'Elias' normally do not take a definite article in the *Muspilli*, unless they are accompanied by an attribute (*der* [*h*]*eligo Christ* 'the holy Christ' in line 101).³⁷

An indefinite article is not clearly attested in the *Muspilli*. The only candidate *ein heri fona himilzungalon* 'an army from the stars of heaven' (line 4) might still allow for an interpretation as the numeral 'one' in this context.

The word order within most complex noun phrases containing an attribute in the *Muspilli* is article – attribute – head-noun, e.g., *daz himilisc*[a]³⁸ *horn* 'the heavenly horn' (line 73), der mahtigo khuninc 'the mighty king' (line 31).³⁹ These two noun-phrases are not entirely equivalent as to their logical structure: Himilisca is a restrictive attribute; without it, the noun-phrase would not be definite. The article therefore marks the definiteness of the entire phrase himilisca horn: [daz [himilisca horn]]. Mahtigo, in contrast, is non-restrictive, for der khuninc, referring to God, is definite without this attribute in the context of the Muspilli. An appropriate analysis of the semantic structure is therefore [der [mahtigo] kuninc] with the attribute inserted between the article and the head-noun. Thus, in the non-restrictive type, the position of the adjective between the article and the head-noun is not only a matter of superficial word-order, but also of semantic structure. This makes this type of complex noun-phrases a particularly valuable prerequisite for the discovery of the framing principle. This discovery and its extension to the restrictive type were more likely, the more salient the encoding of the relation between the article and the head-noun was by their concord in gender, number, and case. 40

The importance accorded to concord between nouns and the pronouns accompanying or replacing them has a long tradition in the history of the Germanic languages, dating back to the insertion of strengthening infixes into forms of the simple demonstrative pronouns in pre-Germanic times. ⁴¹ The resulting strengthened pronominal paradigm influenced the so-called strong inflection of adjectives and other pronouns in all old Germanic languages. As a result, the inflections of the

^{37.} Cf. Behaghel (1923, Vol. I:49-51, 59-63).

^{38.} The final -a is not clearly legible in the manuscript, but may be safely reconstructed.

^{39.} As pointed out by Flick and Szczepaniak (2018) for the OHG *Isidor*, attributive genitives are quite common in the *Muspilli*, but very rare in combination with a definite article of the head-noun as in *daz satanazes kisindi* 'the Satan's vassals' (line 8).

^{40.} In addition to this morphological factor, the close relation between article and head-nouns was supported by the distributional fact that, due to the increasing grammaticalisation of the definite article, nouns were more and more often accompanied by an article, but not necessarily by an attribute.

^{41.} Cf. Krahe (1969: 61-66).

simple demonstrative pronoun (i.e. the later definite article) and the strong inflection of adjectives and other pronouns/determiners (demonstrative, interrogative, indefinite etc.) contained many clearly distinctive forms resembling each other in their endings such that both may be subsumed under the term 'strong inflection'.

A further development in this long tradition of strengthening first the inflection of the simple demonstrative pronoun/definite article and then, on this basis, the strong inflection of adjectives and other pronouns/determiners was exclusively German: The first step was the creation of the form *der* as an unambiguous marker for the nominative singular masculine of the simple demonstrative pronoun or definite article. The typological relevance of this form was pointed out already by Dal (1942) with respect to the retention of case inflection in German, for der was more clearly marked for case than, e.g., Old Saxon the (nom.sg.masc. or nom./ acc. pl. masc./fem.), 42 which, according to Dal, may easily have been considered as uninflected, thus forming a "germ" of the loss of inflection of the definite article and hence of case inflection altogether. Dal's argument can easily be extended to number and gender, which were unambiguously marked by der as well. Obviously, this salient and unambiguous form with its impact on the maintenance of article inflection, and hence on concord with the head-noun, was a precious prerequisite for the discovery of the nominal frame.⁴³

Although the details of the creation of the form der are not quite clear, 44 its relation with the personal pronoun er (nom. sg. masc.) is obvious. Thus, from the beginning, der was firmly integrated into the pronominal inflection system of Old High German. (This is an important point in contrast to Old English, to be treated below.) The integration of der is shown, among other things, by its productivity in the second step of the development: the analogical creation of the so-called long forms in the nominative singular of the strong inflection of adjectives and other determiners (in the neuter also accusative singular), e.g., guot-er, guot-iu, guot-az

^{42.} Gallée (1993: 238).

^{43.} Once discovered, the framing principle in complex noun-phrases even survived the loss of unstressed final vowels in the paradigm of the definite article, bringing about three homonyms of der 'nom. sg. masc.' in New High German, namely 'genit. sg. fem. (< OHG dera), dat. sg. fem. (< OHG deru), and genit. pl. (< OHG dero). This constellation is easily compatible with the framing principle, because the gender and number of the head noun at the right edge of the frame disambiguates the article at its left edge, thus extending the constellation with OHG diu, mentioned in footnote 35. Nevertheless, for discovering the framing principle, the Old High German overt concord of unambiguous forms was probably a better prerequisite.

^{44.} Cf. Schlachter (this volume). Recently, Hill (2016) has suggested Celtic influence on the developments of the definite article, the third person of the personal pronoun and the "long forms" of the strong adjective inflection in Pre-Old High German.

'good' (nom.sg. masc., fem., neut.), after the respective forms of the definite article *der, diu, daz.*⁴⁵ Like *der,* these forms were exclusively Old High German. They existed side by side with the old, endingless strong form *guot* 'good' (nom. sg. for all three genders and acc. sg. neut.) which had developed by regular sound change. The *Muspilli* contains the long forms only in the indefinite pronouns *allaz* 'all' (nom. and acc. sg. neut.) in lines 58, 59, 71, 76, 83 (but endingless *al* in line 96) and *kilihaz* 'every' (nom. sg. neut.) in line 32 (but endingless *gilih* in line 81).

The creation of the new long forms thus re-established clearly inflected forms in the nominative singular of the strong inflection of adjectives and other pronouns/determiners. As a result, every definite and many indefinite complex noun phrases, including those in the nominative singular, had a chance of beginning with a strongly inflected element (article, other determiner or adjective) with an explicit ending in grammatical concord with the head-noun. This was an important formal prerequisite for the discovery of the framing principle.

The functioning of this principle, of course, presupposed that the head-noun was sufficiently unambiguous with respect to its grammatical categories to be able to fulfil the expectation developed by the listener or reader at the beginning of the noun-phrase. In this respect, the category of gender was particularly important, because this inherent feature of nouns does not depend on the pitfalls of the phonetic realisation of inflectional endings – provided that each noun has exactly one gender and that every new generation has the chance of firmly learning this gender. The fulfilment of both conditions was repeatedly ensured against different reductive changes in the history of German. An early, even Pre-Old High German, development in this line was the creation of a special paradigm for feminine n-stem nouns and, after this pattern, for the feminine forms of the weak adjective inflection. This paradigm became particularly important for the framing principle in complex noun-phrases with a nominalised, weakly inflected adjective as head-noun, such as dia uuerolt reht uuison, literally 'the world-law-wise' (acc.pl.masc.) in line 37. The article dia could be either nom./acc.pl.masc. or acc.sg.fem. Therefore, a listener or

^{45.} Braune/Reiffenstein (2004: 219).

^{46.} As pointed out by Leiss (1997) and Froschauer (2003), the gender of nouns was not yet as fixed in Old High German as it is today. The authors suggest that the Old High German variation reflected an older Indo-European system, in which the same noun could be used with different genders to express different shades of meaning. This system was, however, no longer active in Old High German.

^{47.} Cf. Ronneberger-Sibold (2007, 2010, 2018).

^{48.} On the (unclear) identity of these "world-law-wise" people cf. Haug (1977: 41) with further references.

reader would wait for an unambiguously masculine respectively feminine noun to clarify the meaning and to close the nominal frame at the same time. uuison was unambiguously masculine and thus decided for nom./acc.pl., for the corresponding feminine form would have been *uuisun (in the admittedly at the time culturally improbable case that there were 'world-law-wise' women).

Unambiguous marking for gender in the weak adjective inflection was, of course, less important for the framing principle if the adjectives were used as attributes within a noun phrase before the head-noun after a strongly inflected determiner, cf. daz himilisca horn, cited above. In this position, the weak adjective inflection was virtually obligatory, though morphologically almost completely redundant compared to the joint marking for case, gender, and number on the determiner and the head-noun. 49 So what was (and still is) signalled by the weak inflection was simply that the adjective was an attribute and that it was preceded by an inflected determiner. From this observation, it was only a small step to a new interpretation of the function of the weak adjective inflection, namely signalling that the adjective was inside a nominal frame.⁵⁰

Although, logically, this conclusion only presupposes that the weak inflection was not used in contexts other than after a determiner, it would have been even more convincing if no strongly inflecting adjective had been possible in this position. In the Muspilli, this was almost the case. Only the old endingless strong form of the nominative singular *andar* is used after the definite article in *daz andar* [heri] 'the other [army]' (nom. sg., line 5). Otherwise, the strong inflection (including the endingless forms) is never used after an inflected determiner in the Muspilli; rather, it occurs in all other constructions containing adjectives, e.g., as predicates, as attributes or heads in noun-phrases without a determiner, etc.

This almost complementary distribution of the two adjectival inflections is likely to have contributed to a structural analysis of the noun-phrase on the part of Old High German language users, according to which the head noun and the strong inflection of its determiner together carried the inflection in case, number and gender, whereas the main function of the weak adjective inflection was the signalling of the syntactic function and position of the adjective as an attribute placed between a determiner and its head-noun. This structural analysis of the complex noun phrase was, of course, an ideal prerequisite for its interpretation as a framing construction and hence for the discovery of the framing principle.

^{49.} Cf. Behaghel (1923, vol. I:179-186), Szczepaniak (2009: 107-109).

^{50.} The original function of the weak adjective inflection before the rise of the definite article had been the indication of definiteness (though not as an obligatory grammatical category). In the Muspilli, this function can still be observed in the noun-phrase himiliskin gote (dat. sg., line 29) 'to the heavenly God', Cf. Braune/Reiffenstein (2004: 226).

The strengthening of the nominal categories in (Pre-)Old High German concerned also the expression of the category of number on the head-noun. Due to several phonological and morphological changes in the paradigm of the former i-stems, the original stem formative -i- and with it i-mutation was limited to the plural, thus yielding a very salient plural marking, e.g. in OHG gast - gesti 'guest guests'. This marker became highly productive in the subsequent evolution of the German noun inflection.

In sum, complex noun phrases with the definite article or some other strongly inflected determiner are good candidates for having contributed to the discovery of the framing principle by several prerequisites. These are, on the one hand, concord between the head-noun and the determiner, the salience of which was enhanced by the exclusively German form der of the definite article and by the long forms in the nominative singular of the strong inflection for other determiners; on the other hand, the weak inflection of attributive adjectives preceded by a strongly inflected determiner, which set off the attribute from its surrounding frame. Finally, the relatively high incidence of the definite article (65%) provided sufficient possibilities for discovering the framing potential of these features.

4. Prerequisites of framing in the Dream of the Rood (and the Ruthwell Crucification Poem)

With some significant exceptions, the *Dream of the Rood* contains parallels to most prerequisites of framing found in the Muspilli. In the following, examples of each relevant construction are given for the Dream of the Rood, complemented by the Ruthwell Crucification Poem, where possible, in comparison with the corresponding Old High German constructions.

The inventory of separable verbal complexes 4.1

As in the Muspilli, the majority of separable verbal complexes in the Dream of the Rood consists of a modal verb and the corresponding main verb in the infinitive, e.g., in line 47

(10) ne dorste ic hira nænigum sceððan Not dared I of them no one injure 'I dared not injure any of them.'

^{51.} For details in comparison with other Germanic languages cf. Ronneberger-Sibold (2010: 725-731).

Grammaticalisation of the new tense forms was in its beginnings, though possibly somewhat further developed than in the Muspilli. Thus, there are not only examples of the perfect and pluperfect formed with hebban 'have', but also with sin 'be' as auxiliaries. A perfect with 'have' occurs in line 50:

(11) Feala ic on bam beorge gebiden hæbbe Much I on that mountain endured have 'I have endured much on the/that mountain'.

and a pluperfect in line 49:

(12) ... siððan he hæfde his gast onsended. ... when he had his ghost sent on "... when he had given up his ghost."

A perfect with 'be' is to be found in line 80:

(13) ... Is nu sæl cumen ... 'Is now time come' ... 'The time has now come'

and a pluperfect in line 87:

(14) *Iu* ic wæs geworden wita heardost Once I was become of the tortures hardest 'Once I had become the hardest of tortures' 52

In such constructions, the participle is never inflected in concord with the subject or object in the Dream of the Rood, even though explicitly inflected forms were available. Thus, the perfect and pluperfect are full-fledged grammatical tense forms with respect to their meaning and form. Nevertheless, in (12), the participle still immediately follows gast, yielding the split construction which is now typical of German (though not in dependent clauses). In fact, the line allows for a translation word by word into a New High German main clause: Er hatte seinen Geist entsendet.

As to the future as a grammatical tense, will or shall plus infinitive oscillate between a grammatical and a modal reading, much like in the Muspilli.

In the *Dream of the Rood*, the clearest example of a temporal use of will is found in lines 107-108:

^{52.} Perfective intransitive verbs such as cuman 'to come' and weorðan 'to become' regularly took 'be' as an auxiliary in the old Germanic languages (Behaghel 1923: vol. II:277). This is still the case in New High German.

(15) *þæt he þonne wile deman* (...)*anra gehwylcum* That he then **will judge** ones' each 'that he will then judge everyone.'

An interpretation of *shall* as a marker of future tense (in a split construction) is probable in the following prophecy in lines 119–120:

(16) ac ðurh ða rode sceal rice gesecan of eorðwege æghwylc sawl but through the rood shall kingdom reach from earthly way every soul 'But through the rood, every soul from earth shall reach the kingdom (of heaven).'

No tense periphrases are attested in the original passages of the *Ruthwell Crucification Poem*.

Passive constructions, however, abound in both poems due to the passion of Christ as their theme. For instance, line 5 in the *Ruthwell Crucification Poem* and line 47 in the *Dream of the Rood* both read:

(17) ... (Eall) ic wæs miþ blodi/e bistemid
(All) I was with blood moistened
'I was (all) moistened with blood.'

Note that this split construction could be translated word by word into New High German: *Ich wurde mit Blut benetzt*.⁵³

In sum, with respect to the existence of split verbal complexes as a prerequisite for framing, there is no great difference between the Old High German *Muspilli* and the Old English *Dream of the Rood/Ruthwell Crucification Poem*. Hence, the typological bifurcation of the two languages is probably not due to these constructions.

4.2 Verb position

The position of the finite verb is much less reliable as a clue to sentence type in the *Dream of the Rood* than in the *Muspilli*. This is clearly shown in Diagram 2.

The almost complementary distribution in the *Muspilli* between final position in subordinate and V2-position in main clauses revealed in Diagram 1 above is reflected by mere tendencies in the *Dream of the Rood*: Whereas the verb-final type dominates in subordinate clauses, it is clearly dispreferred in main clauses, where

^{53.} As the line describes the scene where Christ's side is wounded by a soldier's lance after His death, such that His blood spills out and drenches the Cross, E. wæs cannot be translated by German war, because this would describe the state of being drenched, but not the process of becoming drenched.

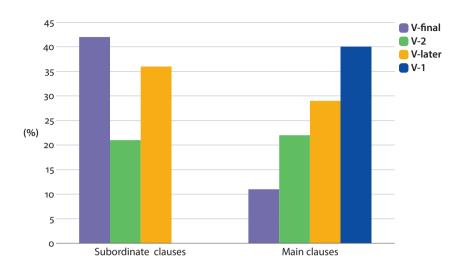


Diagram 2. Position of the finite verb in subordinate (n = 47) and main clauses (n = 114)in the $Dream of the Rood^{54}$

the dominant type is V1. 55 However, in both sentence types, the most preferred type covers less than 50%. Thus, although the relative preferences concerning the position of the finite verb point in the same direction as in Old High German, they are too weak to justify the grammatical function of distinguishing between different sentence types in the Old English poem.

It might be tempting to assume that a new grammatical function of verb position was emerging in English already at this early date, namely the identification of the subject through the order S-V-O as a substitute for the lost or dwindling case inflections.⁵⁶ This was, however, not the case, at least not in the *Dream of the Rood* compared to the Muspilli, as proved by Diagram 3. This diagram shows the results of an analysis of both poems according to the criteria based on the position of the finite verb relative to its subject, which are traditionally used in English historical syntax.⁵⁷

^{54.} Most of the different positional types in Diagram 2 are contained in examples cited above. Cf. for subordinate clauses V2-position in (12), V-later position in (15), for main clauses verb-final position in (11), V2 in (16), V-later in (14), V1 in (13). An example of the pivotal verb-final type in subordinating clauses is in line 127 bæt ic bone sigebeam secan mote, literally that I that victory-beam seek may; 'that I may seek the/that victory-beam'.

^{55.} In the Ruthwell Crucification Poem, the percentage of V1 is even higher (53%). Cf. Swanton (1996: 61) for the stylistic effect of the sequences of "short inverted clauses" serving to "increase the emotional intensity [of the Dream of the Rood]".

^{56.} Cf., e.g., Mitchell and Robinson (2012: 65).

^{57.} Cf., e.g., Mitchell (1985, vol. II:957–992).

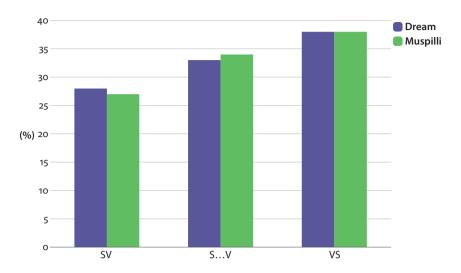


Diagram 3. Relative positions of subjects and finite verbs in the *Dream of the Rood* (n = 142) and the *Muspilli* $(n = 118)^{58}$

The near-identicalness of the percentages in both poems is amazing. In both texts, the order SV is the least preferred. Thus, the difference between Old High German and Old English rests entirely on the position of the finite verb in relation to its clause type, but not in relation to its subject.

As a consequence, Old English listeners and readers could not rely on the finite verb signalling the end of a subordinate clause. Hence the position of the finite verb in subordinate clauses was much less powerful as a prerequisite favouring the discovery of the framing principle in Old English than in Old High German.

Under these circumstances, it is no wonder that even the parts of verbal complexes are often placed less far apart from each other in main clauses than in the *Muspilli*. Although there are clauses with a split verbal complex the non-finite verb of which is in final position closing the main clause, as in New High German, e.g. in (10), (13), and (17), there are others such as in (11) and (14), where the verbal complex is not split at all, like in Modern English.

^{58.} The lower absolute figures as compared to Diagrams 1 and 2 are due to the fact that for this count, all clauses without an explicit subject pronoun were excluded.

Complex noun phrases 4.3

The grammaticalisation of the definite article is much less advanced in the Old English poems than in the Muspilli. Whereas the Ruthwell Crucification Poem does not contain any articles in its original parts, the *Dream of the Rood* exhibits an overt definite article in 33 out of 127, i.e., in 26% of the cases which would require it in Modern English. This is in sharp contrast with the 65% of overt articles in the Muspilli. Moreover, the functional variety of the definite article is also less developed in the Dream of the Rood than in the Muspilli: In almost all incidences, the definite article is used endophorically, i.e., the referent is identified within the text. Most often, it has been explicitly mentioned before. For instance, the Holy Cross is introduced in line 4 as syllicre treow '(a) most wonderful tree'. In line 6, this is taken up in a poetic variation without a definite article as beama beorhtost '(the) brightest of beams' and as bæt beacen 'that/the beacon' with the definite article (or still a demonstrative pronoun?). The article is used cataphorically in line 111, which deals with being afraid for ham worde he se Wealdend cwyð 'of the word that the Ruler says'. This 'word' is only revealed in the next line.

The endophoric use comes closest to the original deictic function of the demonstrative pronoun from which the definite article developed. In fact, a demonstrative reading is still possible in many cases, such as for *bæt beacen* cited above. Assuming a demonstrative function in such cases would reduce still further the number of definite articles in the text. A demonstrative reading is, however, excluded in three indirectly anaphoric incidences, where the definiteness of a referent does not result from a previous mention of this referent, but can be concluded from the presence of another referent mentioned before. E.g., the definite articles in on bam eaxlegespanne 'on the crossbeam' (line 9) and on þa swiðran healfe 'on the right side' (line 20) are justified by reference to the Holy Cross, mentioned before, because crosses normally have crossbeams and a right and left side. An exophoric, generic use might obtain in *bam halgum* 'to the saints' (lines 143 and 154). It is, however, not entirely clear whether this noun phrase refers to all sanctified souls in an abstract generic manner, or to Dryhtnes folc 'the Lord's people' (line 140), which the lyrical self of the poem hopes to join after his death, thanks to the Holy Cross. The second reading seems to be more in line with the general message of the text. In this case, even this use of the definite article in the *Dream of the Rood* would be endophoric. Unique referents such as the world, the earth etc. are never used with the definite article in the poem.

Even with respect to its form, the definite article was more conservative in Old English than in Old High German. In the nominative singular, Old English maintained the forms se (masc.) and seo (fem.), used also in the Dream of the Rood, as opposed to all other forms of the paradigm beginning with p-. Contrary to Old

High German, Old English thus continued the old suppletive paradigm of the simple demonstrative pronoun, inherited from Indo-European.⁵⁹

The Old English definite article se was as unambiguous with respect to case, number, and gender as Old High German der. Therefore, the advantage of der as a possible prerequisite favouring the discovery of the framing principle cannot have been its lack of ambiguity alone. A further factor may have been the higher frequency of the definite article, and hence of der, in Old High German. However, the decisive feature distinguishing Old English se and Old High German der with respect to their possible relevance for the discovery of the framing principle seems to be the different degree of integration into their respective linguistic systems: Thanks to its formal similarity to the pronoun er 'he', der was far more transparent with respect to its grammatical features than Old English se. In other words: With se, language users had to *learn* its grammatical subcategories nominative, singular, masculine, whereas with der, they could guess them. This made the concord with the head-noun more obvious and hence more salient for *der* than for *se*. Moreover, quite generally, a form at the core of a linguistic system is more likely to be considered as structurally or even typologically relevant to this system than an exceptional form at the periphery of the system. Therefore, Old High German der was a better prerequisite for the discovery of the nominal frame than Old English se.

The peripheral systematic status of se and its feminine counterpart seo may have been one of the reasons why the definite article was never productively used in the formation of any Old English "long forms" in the strong inflection of adjectives and determiners. Thus, the old endingless forms of the nominative singular remained without an alternative and gradually spread across the entire paradigm. Moreover, the unsystematic stem *s*- in *se*, *seo* was levelled to δ-, yielding δ*e*, δ*io*/δ*iu*/ δy , 60 and the seemingly uninflected form δe was finally generalized. 61 So, the Old High German prerequisites for the discovery of the framing principle concerning the left edge of the nominal frame (explained in 3.3) had no parallel in Old English.

The right edge, too, was less strengthened with respect to gender and number in Old English than in Old High German. A specific inflection for feminine *n*-stems was created only in the nominative singular (wicca 'sorcerer' - wicce 'witch') as compared to an entire feminine paradigm in Old High German, and the stem formative -i and with it i-mutation was realized in the entire paradigm of the former i-stems (OE giest - giestas 'guest - guests')⁶² and could thus not serve as a plural marker.

^{59.} Cf. Krahe (1969: 61).

^{60.} Cf. Campbell (1959: 291).

^{61.} Brunner (1962: 131).

^{62.} Cf. Campbell (1959: 240-241).

The distribution of the strong and weak inflections of adjectives and pronouns is, on the whole, similar in both poems: Weak inflection is mainly used after a strongly inflected determiner, strong inflection otherwise; e.g., weak: æfter ðam miclan gewinne, after the great struggle' (line 65), eall beos mære gesceaft 'all this great creation' (lines 12 and 82), but strong: *ælmihtig God* '(the) almighty God' (line 106), God ælmihtig 'God almighty' (line 39), syndon þa dolg gesiene 'the wounds are visible' (predicative, line 46) etc. The distribution is, however, less reliable than in Old High German, for weak inflection may also occur without an article in indefinite noun-phrases, such as of beorhtan stane 'of bright stone' (line 66) or on deopan seabe 'in a deep pit' (line 75). Weak inflection is also occasionally possible with postposed attributes in definite noun-phrases, e.g., Dryhten sylfa '(the) Lord himself' (line 105), and even after a postposed definite article in the address formula hæleð min se leofa, 'my dear man; literally: man my the dear' (lines 78 and 95). However, all in all, weak inflection as a sign of the attributive function of an adjective placed between an inflected determiner and the head-noun is as reliable in the Dream of the Rood as in the Muspilli.

Thus, in sum, the structural prerequisites for the discovery of the framing principle were considerably less developed in Old English than in Old High German complex noun phrases. The differences, in the first place, refer to the left and right edge of the nominal frame to be discovered. At the left edge, they concentrate on the definite article concerning its frequency and functional diversity, its form, especially in the nominative singular masculine, and its productivity in shaping new, clearly inflected forms in the strong inflection of adjectives and determiners. At the right edge of the potential nominal frame, an important difference concerns the avoidance of homonymous masculine and feminine *n*-stems and the use of i-mutation as a salient plural marker in Old High German, but not in Old English.

Summary, conclusion and outlook

This paper has investigated possible reasons for the different development of German and English with respect to framing. Although the two languages are genetically relatively closely related and share many features in their oldest texts, their subsequent typological evolution was radically different: Whereas English evolved in the direction of the classical analytic S-V-O type, German developed framing as its pivotal typologically relevant feature. (The other Germanic languages may be aligned between these two poles.) The central idea of this paper is that there must have been some features or some constellation of features in the earliest stages of Old High German, but not of Old English, which suggested to the language users that constructions allowing for an interpretation as frames (such as, e.g., split verbal

periphrases) were in fact to be interpreted in this way. It is rather this interpretation than the constructions as such that allowed for the discovery of framing as an abstract principle. German language users had to understand this principle before they were able to spread it bit by bit across their entire linguistic system.

In order to isolate those structural prerequisites for framing which may actually have "set the ball rolling" in the history of German, but not in English, a large number of possible prerequisites were systematically compared in Old High German and Old English texts. As a text basis for the demonstration and evaluation of the differences, two alliterative poems were used, namely the Old High German Muspilli and the Old English Dream of the Rood. In addition to their common poetic genre, these two texts are comparable with respect to their length, age, theme and style, and, most importantly, both of them incorporate earlier texts. For the Dream of the Rood, part of the earlier text even survives as a runic inscription on the Ruthwell Cross. For large parts of the Muspilli, their far-reaching identity with an earlier original has been argued in the relevant literature mainly on the basis of the alliterative verses and of the structure of the poem.

The results of the investigation are summarized in the following table. The possible prerequisites for the discovery of the framing principle are listed in the left column, the degree of realisation of each prerequisite in Old High German and in Old English in the central and right columns respectively. ++ stands for full realisation of a prerequisite, + for a clear tendency towards full realisation, (+) for a very low tendency, - for no realisation.

Table 1. The realisation of prerequisites for the discovery of the framing principle in the Muspilli and the Dream of the Rood

Possible prerequisites for framing	Musp.	Dream		
Separable verbal complexes				
Perfect/Pluperfect	++	++		
Future	++	++		
Passive voice	++	++		
Modal verb + infinitive	++	++		
Verb position				
Finite verb preferred in final position in subordinate clauses	++	+		
Non-finite part of a verbal complex separated from the finite verb	++	+		
in main clauses, preferably in final position				
Complex noun phrases: determiners				
Concord between determiner and head-noun	++	++		
Frequency and functional diversity of the definite article	++	+		
Transparent and systematically integrated nom. sg. of the definite	++	_		
article (der)				
Productivity of the def. art. in the creation of explicitly inflected	++	_		
strong ("long") forms in the nom. sg. of adjectives/determiners				

Table 1. (continued)

Possible prerequisites for framing	Musp.	Dream	
Complex noun phrases: head-noun			
Avoidance of gender ambiguity in nouns and nominalised adjectives	++	(+)	
I-mutation used as a salient plural marker in the former i-stems	++	-	
Complex noun-phrases: Attributes			
Preferred sequence: determiner – adjective – head-noun	++	+	
Weak inflection after inflected determiner only	++	+	

The table clearly shows that the most radical differences between Old High German and Old English concern the complex noun phrase: All cases with full realisation of a prerequisite (++) in Old High German versus no or very low realisation (- or (+)) in Old English concern the inflection of nominal parts of speech. The most important of these cases is the creation of the German form der for the nominative singular masculine of the definite article. Due to its obvious relation to the third person singular personal pronoun er (nom. sg. masc. as well), der is more transparent and better integrated into the pronominal system of Old High German than its suppletive English equivalent se is into the English system. Therefore, der was able to become productive in the creation of new, explicitly inflected forms in the nominative singular of the strong inflection of adjectives and other determiners/ pronouns after the definite article der, diu, daz, e.g., guot-er, guot-iu, guot-az 'good' (nom. sg. masc., fem., neut.) side by side with older guot for all three genders. As a result, every definite and many indefinite complex noun phrases had a chance of beginning with a strongly inflected element carrying an explicit ending in concord with the head-noun. Contrary to this, English retained the suppletive article form se, later on levelled to δe , and the old endingless forms of the strong inflection, e.g., god 'good'. In the subsequent evolution, both were among the "germs" of the final loss of inflection on the definite article and the adjectives/determiners. Moreover, the frequency and functional diversity of the definite article were by far lower in Old English than in Old High German.

Similar differences between the two early languages concern the avoidance of gender ambiguity and the strengthening of number inflection of the head-noun as important features in the morphological concord between the head-noun and the determiner, and the limitation of the weak adjective inflection to the position between a determiner and the head-noun, i.e., inside a possible frame.

In sum, given all the prerequisites discussed so far, the interpretation of complex noun-phrases as frames was by far more probable in Old High German than in Old English.

Another path leading to the discovery of the framing principle was the association of certain positions of the finite verb with certain sentence types in Old High German, especially the use of final verb position as a syntactical marker for

subordinate clauses. This feature was a powerful prerequisite for the discovery of the framing principle for the following reason: If a listener or reader, having perceived a subordinating conjunction or relative pronoun, can be sure that the subordinate clause thus introduced will be closed by its finite verb, he or she is quite naturally led to the idea that the conjunction or relative pronoun at the beginning and the finite verb at the end are like the two parts of a frame embracing the entire subordinate clause. This idea stands even more to reason if the listener or reader has already got to know the same principle in the noun phrase, where the frame is formed by the determiner and the head-noun.

Thus, the two paths leading to the framing principle on the level of the noun-phrase and of the subordinate clause may have met and reinforced each other in Old High German: One is reminded of two small streams joining to form a river. Once the language users had discovered and fully implemented the framing principle in the noun phrase and the subordinate clause, they could spread it to further constructions. The first was the main clause with a separable verbal complex. The second position of the finite verb had probably already been introduced independently, conditioned by information structure and rhythm, but pushing the non-finite part to the very end of the clause allowed for the construction of a frame embracing the rheme and marking the end of the clause at the same time. 63 Later on (but not yet in the Muspilli) the same pattern was extended to particle verbs.

In Old English too, there was a tendency for final position of the finite verb in subordinate clauses. As, however, no nominal frame was available as a pattern for recognizing the potential of this tendency for the formation of a frame, the preference for final position remained relatively weak in subordinate clauses. In the subsequent evolution (but not yet in the Dream of the Rood) the position of the finite verb acquired a grammatical function quite different from German, namely identifying the subject.

As potential frames were not discovered by the Old English language users in the subordinate clause, their discovery and spread was even less probable in the main clause. Here, the non-finite parts of verbal complexes could be placed at the end of the clause, at a distance from their corresponding finite verb, but there was no clear preference for this pattern.

In the scenario outlined in this paper, the rise of the definite article, particularly of the German form *der*, is the pivotal point for the typological divergence between English and German. Thus, the question suggests itself as to why no equivalent to

^{63.} Hinterhölzl (2010) proposes an interesting information-structural and rhythmical account of this process conditioned by the increasing number of noun-phrases with definite articles. This may have been a link facilitating the spread of the framing principle from the complex noun phrase to the main clause.

this form was developed in Old English. A possible speculation might consider the creation of der as an outcome of the great importance of gender in German, as opposed to most other Germanic languages. This line of argument would imply a much earlier starting point of the typological divergence of the Germanic languages, far beyond Old High German and Old English. In fact, the introduction of a gender opposition in the inflection of *n*-stems, which later was to strengthen the right edge of the nominal frame, has its closest parallel in Gothic. Possibly, the study of framing and its prerequisites will shed new light on some old problems concerning the Germanic languages and their interrelations long before the rise of the definite article.

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Cliticization of definite articles to prepositions in Middle High German – early stages of grammaticalization?

A qualitative study

Sandra Waldenberger

The subject of this contribution is clitic forms of preposition and definite article in Middle High German (AD 1050–1350). Given the fact that some of these contractions (e.g. am, im, ins, zum, zur) have, in varying degrees, undergone grammaticalization and have been integrated into the system of definiteness markers in contemporary Standard German (Er fliegt zum Mond vs. *Er fliegt zudem Mond), it seems likely that the documented instances of such Preposition Definite Article Clitics (PDCs) in MHG constitute an early stage of grammaticalization. This contribution addresses this question by means of a qualitative empirical approach, using the KORPUS DER MITTELHOCHDEUTSCHEN GRAMMATIK. The results show that the MHG forms anticipate the later stage of the development in modern German.

Keywords: clitization, preposition definite article clitics, grammaticalization, Middle High German

1. Introduction: German Verschmelzungsformen

This contribution investigates contracted forms of preposition and definite article in German: *Verschmelzungsformen* like *am* (< *an dem*), *vom* (< *von dem*) or *zur* (< *zu der*). These forms are usually referred to as clitics and they are being discussed as such, i.e. as cliticization of a form of the definite article to a preposition. The diachrony of these forms has become a point of interest in current research (see also Schlachter, this volume), and I will aim to add some insights on *Verschmelzungsformen* in the Middle High German period (1050–1350) in this contribution. To do so, I will conclude this introduction with a short characterization of the phenomenon, give a brief overview of current research on the topic

in Section 2 and then proceed by adding some thoughts on the development of Verschmelzungsformen as a form of grammaticalization in Section 3. Subsequently, I will present the results of a qualitative analysis of Verschmelzungsformen in the Middle High German period in Section 4 and sum up my findings in Section 5.

The main question of this contribution is if and how Verschmelzungsformen can be said to be 'walking on the grammaticalization path of the definite article in German'. Research focusing on this phenomenon¹ commonly agrees on a small group of prepositions with an enclitic form of the definite article (in the following referred to as Preposition Definite Article Clitics, short "PDCs") in StNHG² as not being freely interchangeable with their respective full form:

core group: im, am, zum, vom, beim, zur to a certain extent: ans, aufs, ins

Following the distinction between special and simple clitics suggested by Zwicky (1977 and 1994), these PDCs can be identified as special clitics (cf. Nübling 1992 and later), which are obligatory in a wide range of uses and thus show a certain degree of grammaticalization.

The following cases show obligatoriness of the PDC³ in StNHG:

- 1. The referent of the embedded noun phrase is a given point in time (am Sonntag 'on Sunday', im Juni 'in June').
- The noun is monoreferential
 - a. either because it is inherently unique (*zum Mond* 'to the moon')
 - b. or because it is a proper name (mostly toponyms like zur Donau, beim Rhein, am Mont Ventoux).
- 3. The noun phrase contains a postnominal genitive phrase (im Haus seiner Eltern 'in the house of his parents').
- 4. The noun is a conversion of either a verb or an adjective (ins Dunkel 'into the dark', zum Schwimmen '(in order) to (go) for a swim').
- 5. The noun denotes an abstract concept (zur Erinnerung 'as a reminder') or is a mass noun (im Wasser 'in the water').

^{1.} Hartmann (1980), Nübling (1992, 1995, 1998, 2005), Christiansen (2012, 2016), Steffens (2010, 2012), among others.

^{2.} I will refer to the periods of German language history as follows: OHG (Old High German), 750-1050, MHG (Middle High German) 1050-1350, ENHG (Early New High German) 1350-1650) and I will use the abbreviation StNHG (Standard New High German) to refer to modern German.

^{3.} The following list is based upon the listings in Nübling (2005) and Christiansen (2016).

- 6. The noun denotes a referent that is known because
 - it is common knowledge (die Rede im Bundestag 'the speech at the German parliament') or
 - b. it is inferable or has been mentioned before (sie sind zu Hause im Garten 'they are at home in the garden').
- The noun is used in a generic sense (sie ist vom Theater begeistert 'she is passionate about theatre').
 - The PDC is also obligatory in
- 8. grammaticalized constructions, e.g. am + superlative (am besten 'best', am schönsten 'most beautiful'), am + nominalized infinitive in aspectual constructions (*er ist am r/Rauchen* 'he is currently smoking') and
- 9. lexicalized multi-word expressions such as phrasemes (jmdn. zum Narren halten 'to make a fool out of s.o.'), idioms (Sturm im Wasserglas 'storm in a teacup') and other fixed multi-word lexical units like im Grunde ('essentially') etc. In lexicalized expressions, obligatoriness is not restricted to special clitics, e.g. unterm Rad (literally 'beneath the wheel'), jmdn. übers Ohr hauen 'to trick s.o.'.

Previous research on Verschmelzungsformen

Following Himmelmann (1997: 56), Nübling (2005: 109) identifies the domain of PDC usage as the domain of 'semantic definiteness'. By means of a quantitative survey of StNHG corpora (using COSMAS), Nübling (2005: 113–114) and Steffens (2010: 249) have shown that the core group of six PDCs (i.e. special clitics) is used predominantly – with percentages of over 90% – as opposed to the full form. Clearly this is an indication of the PDC being the unmarked or default form. The figures in Steffens (2010: 249) show that other clitic forms like unters, ums, or fürs are considerably less frequent. They are classified as simple clitics which are interchangeable with their respective full form. The same is true for vors, übers, ums, vorm, überm, *übern* or even more colloquial forms like *nach'm/nachm*, *in'ner/inner* etc..⁵ To draw the line between simple or special clitics, i.e. to test the interchangeability of PDC and full form, one can rely on introspection and grammaticality judgments - if the object of investigation is StNHG. When looking at historical varieties however, introspection is of course not feasible; there are no native speakers available to give grammaticality judgments. Also, variation is to be expected when investigating

^{4.} http://ids-mannheim.de/cosmas2/

^{5.} for a comprehensive account cf. Dedenbach (1987)

non-standardized historical varieties. A possible approach to deal with this 'lack of evidence' in historical linguistics is to make use of one advantage diachronic linguistics has to offer: when looking at the current state of the language system, one may observe which course a language change process that started in the past has taken. Needless to say, a teleological view is incongruous with language change; that is to say, it is of course not a valid approach to conceptualise the stage a process has reached today as the 'goal' of said process. With this in mind, the short summary of obligatory PDCs in StNHG provided above can – given the necessary caution – serve as a signpost in the investigation of the historical language data which is at the centre of this paper. So, in order to obtain usage patterns of PDCs in MHG which might be connected to their possible grammaticalization, the situation in StNHG can be used as a model or reference point (see analyses below). In this contribution, I argue that PDCs undergo grammaticalization. Therefore, some considerations on the grammaticalization of PDCs will be presented next.

Following Nübling (1992, 1995, 1998, 2005), most of the current research on the history of PDCs⁶ connects them to the grammaticalization of the definite article, thus identifying the clitic article as an intermediate stage within the 'life cycle' of the definite article. In this view, the demonstrative determiner represents the starting point of the grammaticalization path and the 'destiny' of the definite article is to become an (inflectional) affix which is attached to the preposition. This assessment is supported by evidence from German dialects in which some PDCs show a certain degree of paradigmaticity.⁷ The question then arises if German prepositions are developing inflections and are therefore in the process of changing their nature as a non-inflectional class (cf. Stolz 1990; Nübling 1998; Schiering 2005).

Figure 1 gives an outline of the grammaticalization path we are supposedly following when looking at PDCs:

demonstrative determiner → definite article → clitic article → inflectional marker

Figure 1. Grammaticalization path of the definite article (abridged version of the figure in Szczepaniak 2011: 70, see also the introduction to this volume)

^{6.} Christiansen (2012, 2016), Steffens (2010, 2012); a corresponding account is presented in Szczepaniak (2011).

^{7.} This has been shown for Berndeutsch, an Alemannic dialect (cf. Nübling 1992: 243) and for the spoken variety of the Ruhr area in North-Rhine Westfalia (Ruhrdeutsch, cf. Schiering 2002: 36; 2005).

According to this notion, the clitic article contained in a PDC is a grammatical form which is (even) further developed than the definite article and has reached a later or 'higher' stage of grammaticalization. The underlying assumption here is that the definite article in German is still walking on the same grammaticalization path which has already led to the development of the definite article in the past (in OHG; cf. Flick, to appear) and that the next stop along the road ought to be the reduction of the article's phonological form, leading to the stage of a mere affix. The language change process in question is therefore conceptualised as heading in a certain direction: "Morphologisierung des Artikels" ('morphologization of the article') (Nübling 2005: 127) is the next 'logical' step the definite article could take, and thus cliticization of the article in PDCs is interpreted as an 'indicator' of the ongoing grammaticalization of the definite article.

I would like to challenge this view and call into question the notion that there is a continuous grammaticalization path which leads from the development of the definite article to the emergence and obligatorification of PDCs. Instead, I would like to suggest that what we have here is not one, but several processes of language change on different levels which need to be more clearly distinguished.

Grammaticalization of PDCs reconsidered

The clitic article in PDCs is commonly described as the result of phonological fusion between preposition and definite article, originating in rapid (allegro) speech. This hypothesis dates back to the very first days of German linguistics: it can already be found in the Deutsche Grammatik (German Grammar) by Jacob Grimm (1837: 368), and is being passed on until today;8 recently, Mads Christiansen has made the empirically based claim that the development of PDCs started out as being "primarily phonologically conditioned" (Christiansen 2016: 176). Phonological factors must have been decisive in this process (cf. Raffelsiefen 1987: 123), otherwise the obligatory PDC would be an ubiquitous phenomenon instead of one which is restricted to a quite specific set of prepositions on the one hand and case-marked articles on the other hand (c.f. the synopses in Nübling 2005: 116f). Nübling (1992: 154) has pointed to the implausibility of a phonological interpretation for PDCs in a StNHG-synchronic perspective. There are some PDCs to be found as

^{8.} Even though the assumption of PDCs as being mainly phonologically determined (cf. e.g. Schaub 1979) has been promptly rebutted (cf. e.g. Hinrichs 1984), the basic assumption remains still that the development of PDCs starts out on the phonological level; "[...] phonological factors are only relevant with regard to the inventory of standardized contracted forms [...], but have no bearing on their status in the grammar" (Raffelsiefen 1987: 123).

early as OHG (see below), so the actual process of phonological fusion took place several hundred, maybe even a thousand years ago. At the same time, the origins of im, am, zum and the others are by no means entirely certain. Taking a closer look at the course prepositions and definite articles have presumably taken during their fusion into PDCs, it seems that this approach raises more questions than it answers. Christiansen (2016: 93-97) proposes the following process sequence for MHG PDCs.9

- 1. in deme [a. omission of /d/; b. centralization and c. syncope] \rightarrow inme
- inme [assimilation of $/n/>/m/] \rightarrow imme$
- $imme [degemination] \rightarrow ime$
- $ime [apocope] \rightarrow im$

The plausibility of the second (assimilation) and fourth (apocope) sub-process are uncontroversial, since instances of these processes are frequent and very well documented. I will leave aside the question of whether gemination is a necessary by-product of complete assimilation and focus on the first step, which implicates as many as three sub-processes (of which the chronological order is, according to Christiansen 2016: 95, unclear). None of the possible intermediate stages of this first step are documented: There are no instances of forms like *andme, *indme or *vondme which would show centralization and syncope of the nucleus of the article's first syllable as the first step. Neither are there any forms like *aneme, *ineme oder *voneme¹⁰ which would provide evidence for the omission of /d/ as first step. So accepting the idea of PDCs as a product of phonological fusion of preposition and definite article would necessitate a more plausible step-by-step explanation. Even though it is clear that phonological change does not necessarily translate into writing directly, the assumption that certain forms 'take three steps at once' might give rise to some doubts, in particular if one more of the assumed intermediate steps turns out to have been quite possibly omitted: In the material of the Korpus der Mittelhochdeutschen Grammatik (KMhdGr, cf. Wegera 2000; Mittelhochdeutsche Grammatik III 2009) - which covers the period in which cliticisation has supposedly taken place - there is no evidence that suggests a chronological succession of the variants anme, am(m)e and am or inme, im(m)e and im (cf. Waldenberger

^{9.} At an earlier stage in his research, Christiansen (2012) included compound spelling in the sequence of events; for a refutation of compound spellings as being connected to PDCs see below.

^{10.} Except, according to Christiansen (2016: 96), some instances involving the preposition uf (StNHG auf). In identifying PDCs like uffeme, uffer and ufen from Steffens (2010) as stemming from omission of /d/ Christiansen has overlooked the fact that MHG uf has a bisyllabic variant uffe (even uffen) in some varieties, including Alemannic (cf. Waldenberger 2009: 29). The instances listed in Steffens (2010) are also mainly Alemannic.

2009: 63; contrary to Christiansen 2016: 96, who argues that varieties with bisyllabic PDCs simply display an earlier state of the development).¹¹

In order to shed some light on the matter, a quite obvious step is to look at the preposition ze and its PDCs, because they are the only instances having been documented to some extent as early as in OHG (cf. Grimm 1837: 368). 12 This preposition was highly susceptible to phonological fusion, probably due to its phonetic structure: it ends in a vowel which most probably could have been unstressed $(\rightarrow / 9/)$ as early as in OHG (cf. Paul 2007: 32). Evidence for this is provided by the varying written forms of the preposition $(zi \sim ze \sim zu \sim zuo \sim za$, among other forms)¹³ and its strong tendency to fuse with words beginning with a vowel, e.g. pronouns like zimo (< ze imo 'to him') and zin (< ze in 'to them'), nouns like zerbe (< ze erbe 'as heir/heritage'; Otfr I 5,65), verb forms like zirlláhanne (< zi irslahanne 'to slay'; Otfr III 16,24) among various others. According to OHG records, ¹⁴ the preposition has a distinct propensity to be reduced to proclitic z-. On the other hand, there is evidence - mainly from Otfrids Evanglienbuch - of a full paradigm of PDCs for the preposition $zi \sim ze$: $zem(o) \sim zimo$ (dat. sg. m/n), $zer(u) \sim zir$ (dat./gen. sg. fem.), zen (dat. plural) and even zes (gen. sg. m/n) in case of prenominal genitive constructions (see Examples (1)–(5)). Nowadays evidence such as the following occurrences is easily accessible thanks to the Referenzkorpus Altdeutsch (reference corpus of Old German):

(1)	thaz was zem ópphere gimah 'it [a sheep] was suitable as an offering'	(Otfr II 9,59)
(2)	Thie síechun quamun álle tho zemo ábande 'the sick came all then in the evening'	(Otfr III 14,55)
(3)	Er léitit mit gilústi thih zer héimwisti 'he leads you with pleasure [towards] home'	(Otfr IV 5, 35)
(4)	ílta in thia búrg in zen liutin '[she] hurried into town to the people'	(Otfr II 14,86)
(5)	zes éwarten kinde	(Otfr I 23,4)

'to the priest's child'

^{11.} Incidentally, *anme* could very well be the product of metathesis *anem* > *anme*.

^{12.} Althochdeutsches Wörterbuch (s.v. in) lists a couple of instances for im (imo, imom) from different sources (glosses, Otfrids Evangelienbuch, Würzburger Beichte), but classifies them as misspellings or assimilations. A comprehensive account on PDCs in OHG is a desideratum.

^{13.} cf. Referenzkorpus Altdeutsch and Schützeichel (2006, s.v. zi).

^{14.} cf. output for proclitic "z" from Referenzkorpus Altdeutsch; query reference link: https://korpling.german.hu-berlin.de/annis3/?id=3fa1d7f6-18ae-47f5-982a-26375f6e8aa0

The evidence on 'proclitic z-' in MHG is similar to the OHG data (cf. Waldenberger 2009: 64-66), and there is a fluid transition between the two periods. So ze can, in a manner of speaking, be considered the progenitor of PDCs. Proclitic z- phonologically interacted with the consonant in the onset of the following determiner (OHG dëmo, dëru, dēn, dës), 15 resulting in a complete assimilation of the fricative (/tsd/ or /ts θ / \rightarrow /ts/). What remains to be resolved is how other prepositions came to develop PDCs. One possible explanation would be that the encliticon underwent reanalysis and thus clitic forms spread to other prepositions. The only form which cannot be accounted for by this explanation is -s (MHG -z) in accusative singular (directional) PDCs like ans or durchs, since ze is a preposition which exclusively governs the dative case. To rewrite the history of PDCs in German is not the objective of this paper, so the question of the development of PDCs will not be pursued any further here. However, in light of the observations made up to this point, their development remains a research desideratum.

In my point of view, the clitic article in PDCs is not necessarily a further developed form of the definite article. Nevertheless, it is well justified to qualify the development of PDCs as grammaticalization, but mainly if we take a look at changes concerning their paradigmatic variability, 16 as I will elaborate in the following paragraph.

Current research which conceptualises PDCs as the next step in the life cycle of the definite article, focuses on the 'bondedness' parameter, c.f. the figure given in Szczepaniak (2011):

increase in terms of bondedness /					
increasing degree of grammaticalization					
simple clitic	special clitic	affix			
interchangeability of	obligatory clitic form;	bonded form is			
clitic and full form	full form evokes	generalized			
	different meaning				

Figure 2. Gradual increase of bondedness, Szczepaniak (2011: 87)

^{15.} *themo*, *thero* \sim *theru*, *then* and *thes* in Otfr.

^{16.} Taking Lehmann's parameters of grammaticalization, Lehmann (2002: 108-159) as basis.

But if the parameters of grammaticalization proposed by Lehmann (2002) are actually applied there is no further increase in terms of bondedness here; coalescence has already taken place. So what happens to a simple clitic when it becomes a special one? Regardless of whether PDCs stem from the fusion of preposition and an older clitic article or from analogous expansion starting with OHG zem(o), zer(u) (and zen), they are what provides the language system with an additional form (signifiant) which opens up the possibility of assigning it to a specific function (signifié). In other words, for some combinations of preposition and definite article, two variants are available, e.g. zu der and zur, an dem and am. Some of the resulting pairs (attached – unattached article) undergo reanalysis, resulting in the emergence of a new rule and thus in obligatorification (or decrease of paradigmatic variability) of the PDC, which is integrated into the system of definiteness markers in German. Some varieties of German display PDCs at a further grammaticalized stage (c.f. Nübling 1992 and 2005; Schiering 2002) due to - and here is where the notion of grammaticalization of PDC suggested in this paper and the notion suggested by Nübling (2005) and others reconvene – the observation that they have reached a higher degree of paradigmaticity.

So far I have argued in favor of a differentiation between grammaticalization of the definite article and grammaticalization of PDCs.

Figure 3 suggests dividing lines between the different processes involved:

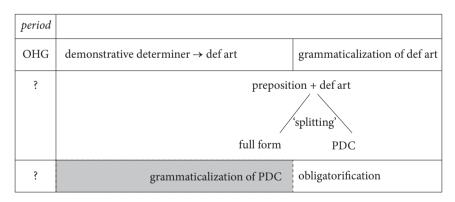


Figure 3. Subprocesses involved in the emergence of PDCs

According to current research in historical linguistics, the grammaticalization of the definite article took place during the OHG period, (c.f. Schlachter in this volume; Flick, to appear). With regard to the grammaticalization of PDCs, the results of the diachronic study by Christiansen (2016) show ENHG as a pivotal point in language history. As mentioned earlier, even if we cannot answer the question when and how PDCs developed, analyses presented later in this paper will aim at answering the question if there are early signs of grammaticalization of PDCs in

MHG. Such early signs are not observable using a quantitative approach; if PDCs in MHG had already been obligatory in a similar way as in NHG, their number would have had to be considerably higher than it is (see below). What can be observed in MHG is the emergence of the functional properties which are attributed to PDCs and in which they become obligatory at a later stage.

Accepting the idea of grammaticalization of PDCs presented here the question of why the preposition and not the noun takes on the marker simply does not arise. 17 But it is of course a feasible question to ask what specific function has been attributed to the PDC, or, in other words, what happens to the preposition if there is a definiteness marker attached to it. Prepositions are, in the words of Grießhaber (1999), "relationing procedures". That is, they establish a specific relation between two concepts that are expressed in the syntactic context. Prepositional relations can be described in terms of Figure-Ground constellations, where "one concept [serves] as a reference point [...] [Ground] for another concept [Figure]" (Talmy 2000: 311). It is in the very nature of prepositions to point beyond themselves, as is visualised in Figure 4:

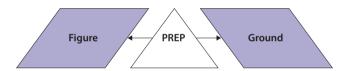


Figure 4. Model of a prepositional relation¹⁸

The Ground concept is always denoted by the NP subordinate to the preposition.¹⁹ If we take into consideration that the clitics in PDCs represent an affix-like definiteness marker, then this marker is attributed to the preposition and thus primarily expresses a property of the prepositional procedure, i.e. not of the nominal referent. All the cases of obligatory PDCs listed above and summed up as instances of 'semantic definiteness' can be seen as complying - following the concept of definiteness as a grammatical representation of identifiability proposed by Lyons (1999) - to one quite simple rule: If the PDC is used, the recipient of the utterance is directed towards the most likely referent the NP can refer to, 20 so that the

^{17.} The view on PDCs as further grammaticalized forms of definite article needs to address that question, cf. (Nübling 2005: 121).

^{18.} This figure has been used before in Waldenberger (2015).

^{19.} The Figure concept can be found in different syntactic positions, according to the syntactic function of the PP.

^{20.} The same applies when there is generic reference instead of reference to a specific entity, see above.

recipient does not have to make any (further) effort to identify the Ground of the prepositional procedure. If, on the other hand, the full (marked) form is used, the recipient is instructed to investigate further to identify the referent, or to wait for a cataphora's meaning to be revealed. So the function of the clitic 'prepositional marker' could be to simplify processing the prepositional procedure by letting the recipient know if the Ground concept is to be presupposed or if it has to be derived by assessing the course of the following discourse.²¹

After having discussed the assumptions on the grammaticalization of PDCs that the approach in this contribution draws on, the following section will address its main concern, which is to answer the question of whether there are any first signs of grammaticalization of PDCs as early as in the MHG period. Current historical studies researching PDCs (Steffens 2010; Christiansen 2012 and 2016) have been focusing on primarily quantitative survey methods.²² In contrast, I will, after a summary of the inventory of PDCs in MHG I have explored in my dissertation (Waldenberger 2009), present the results of a primarily qualitative analysis in this paper.

Verschmelzungsformen in Middle High German

Summary of Documented Instances of PDCs in MHG 4.1

The data for the study in hand is derived from the *Korpus der Mittelhochdeutschen* Grammatik, a corpus for the Middle High German period (1050–1350) containing 101 manuscripts²³ (transliterated, lemmatized and providing part of speech tagging and morphological annotations).²⁴ The corpus architecture accounts for diachronic and diatopic variation, as well as variation in relation to the text type: prose, verse or legal document (Urkunde).

^{21.} I will not discuss in this paper the question if PDCs are linked to the expansion of brace constructions (klammernde Verfahren) in German, cf. Ronneberger-Sibold (1993: 308) and Nübling (2005: 122-123).

^{22.} With the exception of Steffens (2012), who also offers an overview of usage patterns of PDCs in the German translation of the bible by Martin Luther.

^{23.} For details on the corpus texts see http://www.ruhr-uni-bochum.de/wegera/MiGraKo/

^{24.} The MHG data used by Christiansen (2012 and 2016) is also derived from the KMhdGr.

The following PDCs - listed here in descending order according to their frequency - are documented in the KMhdGr:25

Table 1.	Synopsi	s of MHG PDCs from	Waldenberger ((2009)
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		- <i>m</i> dat. sg. m/n	- <i>r</i> dat. (gen.) sg. f.	-s acc. sg. n	-s gen. sg. m/n	-n dat. pl.
ze ~ zuo	344	165	120	0	0	59
in	125	111	10	10	4	_*
von	72	70	1	0	1	_
an	58	51	0	7	0	_
uf	31	15	2	9	1	4
zu	18	10	7	0	0	1
vor	15	15	0	0	0	0
mit	14	5	2	0	0	7
nach	7	6	1	0	0	0
bi	6	6	0	0	0	0
uber	6	0	0	5	0	1
umbe	5	0	0	3	0	2
fur (für)	3	0	0	3	0	0
under	3	1	0	1	0	1
durch	2	0	0	1	1	0
hinder	2	0	0	2	0	0
abe	1	1	0	0	0	0
ane (âne)	1	0	0	0	1	0
gegen	1	1	0	0	0	_
total	714	457	133	41	8	75

^{*} Enclitic n would not be discernible for prepositions which end in n.

In contrast to OHG, where clitic forms are limited almost exclusively to the preposition $zi \sim ze$ (see Table 1 above), 19 different prepositions display an attached clitic article in MHG. The core group of StNHG PDCs can already be found in MHG: zem ~ zum, zer ~ zur, im, vom, am and $b\bar{\imath}m$ (\rightarrow beim), whereas $b\bar{\imath}m$ is only marginally documented. Like in StNHG, dative singular masculine/neuter is the most frequent form (64%). The clitic -r is almost exclusively combined with ze (92%). Dative plural forms -n, which are not to be found as special clitics in StNHG, are considerably more frequent in MHG (10%) than accusative singular neuter -z (6%), which becomes more productive later on (StNHG ins, ans, durchs etc.). Cliticization

^{25.} Since the transcriptions of the corpus texts remain as true to the manuscripts as possible, PDCs can be found by extracting joint forms of preposition and following definite article based on the POS tagging provided in the KMhdGr. The PDCs have been separated from compound spellings by way of manual search.

of a genitive (m/n) form -s in prenominal genitive constructions is very rare (1%) and only to be found in verse (and translations from Latin); this coincides with the fact that prenominal genitive constructions are more common in MHG verse than prose; there, the postnominal position is dominant for attributive genitive NPs (Prell 2001: 202ff), in which case the preposition does not interact with a genitive form of the definite article.

To undertake a reliable quantitative analysis of PDCs, the evidence in the KMhdGr would be required to be continuous and consistent - which is not the case. There is no evidence of PDCs other than ze + -x in corpus texts before 1150 (c.f. Waldenberger 2009: 60); between 1150 and 1200 there are eleven sporadic instances to be found in four of the 16 texts of that period. The number of PDCs increases continuously, although slowly, throughout the course of the MHG period within the corpus, with a peak in courtly epic poetry (mainly *Parzival*, see below). Still, only roughly half of the corpus' texts contain any PDCs at all and there are only six texts with more than twelve instances of PDCs (for a detailed account see Waldenberger 2009: 61-63). In MHG, the use of PDCs appears to be a highly idiosyncratic trait since it is used mainly in particular texts/by individual writers.

Selection of corpus texts 4.2

As I have argued before, grammaticalization of PDCs should be perceived as obligatorification. At an early stage of this process there should be a tendency towards discernible usage patterns for PDCs. To offer a certain reliability, the texts used in this investigation must contain a substantial number of PDCs, since usage patterns of any kind will obviously not be evident in texts with only solitary or scarce instances of PDCs. According to this criterion, four texts have been chosen for this study:²⁶

1. Zwiefaltener Benediktinerregel

(*ZwBR*; Swabian; 1st quarter of the 13th century)

Wolfram von Eschenbach: Parzival (D)

(*Parz*; Upper German; early 13th century)

Von der Gnaden Überlast

(GnaÜ; East Franconian; in the 1340s)

Würzburger Polizeisätze

(WüPo; East Franconian; 1342/43)

These texts represent different types of genres and thus different preconditions for the use of PDCs:

^{26.} See list of sources in the appendix. If the corpus text has been limited to a certain excerpt from the manuscript by the editors of the KMhdGr, this information can be found there. In the case of *Parzival*, the corpus text is limited to the portion attributed to one single scribe.

- 1. ZwBR is an interlinear translation of a Latin rule of the order of St Benedict, therefore it is highly dependent on the Latin version of the text.
- Parz is a MHG epic poem, dependent on rhyme and meter.
- WüPo is a legal document, wording of the law of the town of Würzburg, enacted by bishop Otto II of Wolfskeel.
- 4. GnaÜ is an example of clerical prose and records religious experiences made by nuns at the monastery of Engelthal.

As we will see, text type and function play an important role when it comes to the use of PDCs.

TH C 11 ·	1 4	41		C 1 .	
The following	chart sums	s iin the	specifics	of each fex	۲٠
Tile lolle miling	ciiai c oaiii	orp tire	opecifico	or cacir terr	

text	PDCs*	% of total numb	er prep + def art	Bondedness of the text due to
ZwBR	133	24%	546	translation from Latin
Parz	55	25%	226	Verse
WüPo	25	8%	313	legal context
GnaÜ	23	8%	276	(clerical) prose

^{*} For this study, previously (i.e. in Waldenberger 2009) excluded parts of corpus texts (those exceeding the margin of 12.000 text tokens) have now been included, resulting in discrepancies between the previous study and this one.

Compound spellings as precursors of PDCs? 4.3

Some recent corpus based studies on PDCs in historical German (Steffens 2010, Christiansen 2012) suggest to include compound spelling as some kind of a precursor of the fused form when looking at PDCs. Christiansen (2016) has reconsidered his previous assessment in his doctoral thesis and now regards compound spelling of preposition and definite article as purely "graphematic variants of the respective syntagmas [...] [which] do not have any connection with contracted forms like am, im, vom" (Christiansen 2016: 175). I will add further corpus based evidence to support this assessment.²⁷ I would like to present a detailed analysis of compound spellings in Bartholomäus (Bavarian, late 12th century). This text represents an excellent specimen for this particular question because it includes 179 instances of preposition-article compounds.

^{27.} Since the KMhdGr consists of transliterations which stay true to the original MHG manuscripts, compound spelling is well observable in the corpus and can be included in this investigation.

Table 2 shows where compound spelling²⁸ occurs specifically in *Bartholomäus*:

Table 2. Compound spellings in Bart

compound spelling preposition + [NP	compound spelling preposition + [NP] 310									
preposition + def. article 179 (35%)										
prepositions	in	an	ze	abe	âne	bî	ob	e	über]
	98	70	6	1	1	1	1		1]
preposition + indef. article	50							(10)%)]
prepositions		1	in				an]
		4	18				2			
preposition + noun	33								-	
preposition + adjective ('too much', 'too little')	25									
other cases (e.g. prep. + pronoun)	23									
<pre>determiner (art, pron, numeral) + nou tri ftvnt 'three hours')</pre>	ın (e.ş	g. eín	teil*	one p	iece;				25	5%
ze + infinitive									17	3%
verb form + pronoun (e.g. wellef tv 'de	you	want	")						74	15%
conjunction + following word									12	2%
compound spelling of particle verbs (e.g. <i>nid</i> ' <i>fitz</i> 'sit down')									10	2%
instances of lexical fusion (e.g. als pala	le < a	lso bo	ılde 'a	at once	e')				38	7%
other cases									22	
Total								5	08	100%

^{*} The symbol | is used to mark boundaries between word forms which are not symbolised in the manuscript.

As can be seen, compound spelling in *Bart* is by no means specific to preposition and definite article. There is a strong tendency towards compound spelling when a preposition is involved (61%), but the usage patterns listed above do not reveal any kind of restriction as to which representative of which lexical category can be graphematically fused with the preposition. In some of the cases listed above, grammaticalization (like in ze + infinitive) or lexicalization (like in alsbald) may have contributed to choosing the compound instead of two separate graphematic word forms, but the instances of preposition-based compound spellings do not allow for a clear-cut interpretation of the graphematically fused form.

^{28.} As it is not relevant in the context of this study, the following account does differentiate between compound spelling as purely graphematic variation and instances where there is a phonologically fused form to be assumed (like in *wellef*|*tv*).

Concluding the train of thought elaborated on above I would like to support Christiansen's (2016: 83) notion that compound spellings are not linked to PDCs and therefore cannot be considered to be part of the phenomenon under investigation here.

Analyses of PDCs in the selected MHG texts 4.4

After this short digression, the following part deals with the results of my analyses of PDCs in the four above mentioned texts. Each description begins with an account of the inventory of PDCs used in the text. To determine the usage patterns associated with the available PDCs, all instances of PDCs in these texts have been analysed with regard to the reference of the head of the subordinate NP. Also, the contrasting findings have been examined (with exception of ZwBR, see below): all instances where prepositions co-occur with the same noun in the same texts have been looked up. As will become apparent below, an overall set of criteria to describe the conditions for the usage of PDCs would not be an adequate approach. Instead, each text calls for a specific set of criteria in consideration of the text's specifics.

Zwiefaltener Benediktinerregel

Due to its high degree of dependency on the Latin text it is based upon, this MHG interlinear translation of the rule of St Benedict must be treated in a decidedly different way than the other texts.²⁹ In particular, all instances of PDCs must be aligned with the Latin phrase for which the MHG phrase functions as a word-forword translation.

ZwBR contains six different PDCs, involving four prepositions. Table 3 presents these PDCs in alphabetical order, opposite their respective NHG equivalent (bold letters indicating obligatory PDCs in StNHG). Examples are given in the outmost right column.

^{29.} For clarification on the specifics of the interlinear translation see the images from the manuscript on the pages below.

Table 3. PDCs in ZwBR

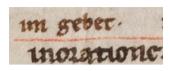
	Prep (le	exeme)	PDC		Case/	Freq.	Occurrences/examples
	MHG	NHG	ZwBr	NHG	gender		
1	ane	an	am*	am	D / mn	8	2x am bůch – in codice 6x point in time (mostly suntag 'Sunday')
2	in	in	im	im	D / mn	47	4x im h'zin – in corde, 2x im ewangeli – in euangelio, 10x im bethus – in oratorio
3	von	von	vom	vom	D/mn	4	vom tische – a mensa (27r,10)
				<i>vō*</i>		7	7x ordinal numbers, e.g. vō hund'tuſten [] – de centeſimo []
4	ze ~ zuo	zu	zen ~ zin	-	D / Pl	11	5x zen wahtun (nahtigen) – ad uigilaſ (nocturnas)
			zem ~ zim	zum	D/mn	40	5x zim e'ftin – in primif 5x other ordinal numbers 4x zim tiſche – ad menſam zim lebē ewigem – ad uitā eternā (9v,9) zim tohde – ad mortem (14r,2)
			zer ~ zir	zur	D/f	16	frequently: point in time, e.g. ze' lehltī ltunde – lexta hora (27r,6) zir noturne – ad nocturnos (21r,2f)
					total	133	

^{*} There is one instance of graphic abbreviation of the nasal which results in an ambiguous writing – \bar{a} can stand for either an or am: $\bar{a}morg\bar{\imath}$ (Lat. mane) (41v,7) is interpreted here as am morgin.

The usage of PDCs in the MHG interlinear translations appears to be linked to the written form of the corresponding Latin phrases. There is a considerable number of compound spellings of preposition and the following noun in the Latin part of ZwBR. If there is a PDC available in the inventory (as listed above), compound spellings in Latin are translated using a PDC in most cases.³⁰

^{*} The variant $v\bar{o}$ can not be classified as a PDC without a doubt. It could also represent a variant of the preposition von as such.

^{30.} As is to be expected in historical texts, spelling varies throughout the text. A more precise assessment providing distribution frequencies would require an analysis of the manuscript, since the Latin portion of this text is not transcribed as part of the KMhdGr. Such a time-consuming investigation has not been made for this secondary aspect and only a rough assessment is given.



MHG im gebet (12v, 12)Lat in oratione

If there is no corresponding PDC available, i.e. if the preposition is not one of the four mentioned above, or if it is not combined with one of the dative singular forms listed above, the MHG preposition displays compound spelling with the following definite article as in (6).

If the Latin manuscript shows a *spatium* between preposition and noun, the MHG preposition and definite article are spelled accordingly most of the time.

There are only a few instances where compound spelling in Latin joins with the full form of preposition and definite article in the MHG part. The answer as to why or when contracted forms are used may be linked to the writing space available. If the Latin phrase offers enough space inter lineas for the corresponding MHG phrase, PDC or compound spelling may not have been considered necessary.



(2r,6)

Within the confines of the space inter lineas and above the corresponding Latin expression, writing space is of course an issue for the MHG text in ZwBR, as can be seen in spellings like the following.



There is a lack of spaces between the German words $von|d^e n|vblen$ ('of the evil', translation to Lat. a malis) here, due to the short length of writing space provided by the Latin word form.

What has been said so far about the use of PDCs in *ZwBR* is not to imply that the patterns observable in this text provide no insights into early grammaticalization of PDCs in MHG. Actually, the usage patterns of PDCs show considerable likeness to what one would expect for StNHG:

- 1. point in time am sunnentag 'on Sunday' (4x)
- monoreferential noun im ewangeli

zī himel (Lat. ad|celum; 11v,13)

postnominal genitive zim tor d^ef munft's (57r,12) 'to the door of the cathedral'

4. conversion im iungisten (Lat. in ultimo; 39r,5) abstract noun zir bikerunge (49r,10) 'to conversion'

common knowledge or inferrable:

A lot of nouns attributed to a PDC in ZwBR can be said to refer to something that is known in the context of a rule of a Christian religious order, e.g. im betehul (Lat. in oratorio, 9x), im closter (3x) or im munst' (7x) (both corresponding to Lat. in monasterio), im falmin (Lat. in psalmo), but also nouns referring to other aspects of monastic life like im acker (Lat. in agro), im garten (Lat. in orto; 2x) etc.

- zim tische (Lat. ad|mensam) (4x), in the sense of 'at dinner, generic use during the common meals'
- 8. fixed expressions (product of lexicalization or grammaticalization) im iungisten (Lat. in ultimo) (2x)

For some phrases, the use of PDCs is consistent (i.e. there are no instances with the full form), e.g. im betehul, zim tilche. Others show a strong tendency towards PDCs, but allow for some variation (im munst' vs. 4x full form).

As we might expect, there is of course no 'obligatoriness' of PDCs in ZwBR. Nevertheless, all instances of PDCs in ZwBR match the list of usages in which PDCs are obligatory in StNHG:

Usage		Occurences/examples
point in time	25*	im tac def h'rin (19r,7) 'at the day of the lord' zē felbin tag (20v,10) 'at the same day' ze' fehftī ftunde (27r,6) 'at the sixth hour' ā morgī (41v,7) 'in the morning'
monoreferential	5	zim schefh' uns'm (61r,7) 'to our creator'
postnominal genitive	7	zim dienist gotis (2x) 'in god's service'
conversion		junction with superlatives and ordinal numbers only (classified as expressions, see below)
abstract noun	12	im flaffa (11v,7) 'in [his/her] sleep' unzi zir fathi (36v,6) fathi ~ sate 'the state of being sated'
common knowledge/ inferrable	47	im chor (Lat. in choro) 2x wir bitten got im gebet (12v,12) 'we ask god in our prayer' am bvche (Lat. in codice) 2x
generic/ non-specific	13	zim lebē ewigem 2x 'ad uitā eternā' im h'zin 4x (Lat. in corde)
fixed expressions	24	zim e'ltin 5x 'at first' võ hund'tultun nivn zehinden unzi zim hund'tultē zwainzigultē libenden (23r,5) 'from the 119th to the 127th'

^{*} The numbers in the middle column do not hold special significance, since some phrases match two categories, e.g. zim dienist gotis contains a genitive phrase, but can also be interpreted as 'known' in the context of this text. Others cannot be classified without a doubt, like im herzen, which could well be lexicalized.

From these findings we can conclude the following: Within the confines of the interlinear translation the translator makes use of a wide range of options the language system of his MHG variety provides in order to perform the task of translating the text satisfactorily. He utilizes the PDCs available as a means of expression if it is a useful way to solve his current linguistic problem. That is the case only if the PDC expresses the appropriate definiteness status of the translated phrase, i.e. if it is a suitable translation. If the available writing space requires brevity, he is free to apply the PDC. And if there is no shortness of writing space one might suggest that he is doing so quite simply out of habit or analogously to previous instances, but then he might not be as strongly compelled to do so.

Due to the specific conditions of the interlinear translation in which PDCs provide a valuable means of expression, ZwBR shows a quite progressive stage of PDC usage which can be said to pre-empt obligatory PDCs in StNHG.

Parzival

The frequent occurrences of PDCs in Parzival may have been one of the reasons why PDCs have been characterized as a much more common phenomenon in the previous grammaticography of MHG than the corpus based study in Waldenberger (2009: 58ff) has revealed it to be. 31 In comparison, the rate of PDC usage is very high with approximately 25% of all occurrences of preposition and definite article.

One factor of considerable influence in this text is the metric form (c.f. Grimm 1837: 368) since PDCs provide a means to shorten an expression, reducing it by one syllable (e.g. an dem > am). A PDC could therefore be used to rhythmize a text. In line with this assumption, most of the PDCs occurring in Parz are singular instances and there is a wide range of different PDCs, including 14 prepositions (see below), dative and accusative forms and the rare genitive constructions³² such as

(7) ins Grals pflege (826,24) < in des Grals pflege 'into the care of the grail'

Table 4 provides a detailed account of all 55 PDCs in *Parz*:

^{31.} Most of the examples listed in Grimm (1837: 368) are from Parz.

^{32.} Most of the very rare genitive PDCs occur in Parz. They are a case apart with respect to the fact that the genitive case is not governed by the preposition, but the genitive form of the article is part of a prenominal attributive construction.

Table 4. PDCs in Parz

	Prep (lexeme)) PDC		Case/	Freq.	Occurrences/examples
	MHG	NHG	Parz	NHG	gender		
1	ane	an	ame	am	D/mn	2	ame Grale (818,25)
2	āne	ohne	ans	_	G/mn	1	ân stŏfeschraft (813,19)
3	bī	bei	bime	beim	D/mn	1	bime hare (521,8)
4	durch	durch	durchs	durchs	A / n	1	dvrchz Foreht Læprisîn (821,12)
5	_		aurens	_	G/mn	1	dvrchslibes scvlde (827,21)
6	hinder	hinter	hinders	hinters	A / n	3	hinderforf (37,29)
7	in	in	ime	im	D/mn	2	Ime wazzer (817,23)
			*	ins	A / n	2	inz herce (810,14)
			ins	_	G/mn	3	inf Grals dienste (819,28)
8	ūf	auf	ufem	auf'm*	D/mn	1	vfem wege (520,5)
			ufen	auf'n	A / m	2	v̂fen teppech (801,2)
				_	G/mn	1	v̂fes libeſchoſte (812,24)
			ufes	aufs	A / n	1	vfez dechlachen (800,26)
			ufs	-	A / n	1	ŷfz gras (37,29)
9	umbe	um	umben	ummen*	A / m	1	vmben berch (508,9)
10	under	unter	unders	unters	A / n	1	vnderz pfært (521,9)
11	ūz	aus	uzem	aussem*	D/mn	4	vzzem velse (508,17)
12	von	von	vome	vom	D/mn	3	vome pfert (514,12)
			vons	_	G/mn	1	vons Grals chrefte (814,21)
13	vor	vor	vors	vors	A / n	1	fvrz pette (801,2)
14	ze ~	zu	zem		D /	8	zem gaste (35,9)
	zuo		zume	zum	D/mn	1	zůme schilte (504,14)
			zer	zur	D/f	13	zer frŏwen (525,11)
(*) T	hese PI	Cs are	document	ed in some	varieties o	f NHG l	ike Ruhrdeutsch.
		-			tota	al 55	

^{*} Apostrophe indicates a NHG PDC which is restricted to spoken varieties.

Contrary to the above-mentioned presupposition the 'dative PDCs' ame, bime, ime, ufem, uzzem, vome, zume as well as ufen and ufes offer no reduction of syllables, because they are bisyllabic – as are their respective full forms: bi dem, in dem, uf dem, von dem and zů dem etc.; the form of the definite article throughout the whole text is dem (i.e. not deme).³³ The prosodic property of these PDCs is that they constitute

^{33.} The evidence of PDCs in Parz, where the full form in dem coexists with the PDC inme, contradicts conspicuously - in my point of view - Christiansen's (2016) above mentioned four-phase model of the PDCs' fusion.

one phonological word, and, more to the point, a trochaic foot, which seems to be the determining factor here. In most of these instances, the PDCs trochee mirrors the trochee of the following noun, establishing an even, rhythmic pattern (stressed syllables are indicated using '):

áme Grále híme háre Íme wázzer vfem wége vzzem vélfe zýme schílte vfen téppech

For those PDCs in Parz which are one syllable shorter than their respective full forms³⁴ (singular occurrences except for hinders), the intention might have been to shorten the line. Contractions of this sort are not uncommon in Parz and not restricted to PDCs as can be seen in (8).

(8) vmbe sich siz dechelachen swanch. fvrz pette vfen teppech *Ipranch* (801,1f) *fiz* ← *fi* daz

'around herself the cover she threw, in front of the bed onto the rug [she] jumped'

So most of the PDCs documented in Parz can be interpreted as a means to meet the requirements of the chosen poetic form. This is consistent with their mostly solitary occurrence.

The most frequent PDCs in Parz, zem (ze dem) and zer (ze der), display patterns on a completely different level, which suggests that adjustment to the metric properties of the text cannot be the only determining factor. A closer look at these occurrences reveals distinct patterns: Six instances of zem and zer are phrases introducing dialogue; the NP refers to a person who is addressed, e.g.:35

(9) Feirefiz. zem priester sprach (818,1) 'Feirefiz said to the priest'

A closer look at the syntactic context of all PDCs in Parz reveals more consistencies: Parz contains 13 (24%) instances of PDCs with an accusative case marking. In all of these instances, the PP is complement to a directional verb or a verb with a directional meaning respectively. Six cases where a PP in the dative case acts as a complement to such a verb add to a total number of 19 (35%).

(10) do er fvr si giench vome sê (826,28)StNHG: vom See 'as he came to her from (out of) the sea/lake'

(11) ein brynne vzzem velse schoz (508,17)StNHG: aus dem Felsen 'a well sprang from the rock'

^{34.} ans (an des), durchs (durch das/des), hinders (hinder das), ins (in das/des), ufs (uf das), umben (umbe den), unders (under das), vons (von des), vors (vor das).

^{35.} This pattern is already documented in OHG: e.g. Er sprah zen éwarton (Otfr I 17, 35).

As the following Examples (12) and (13) illustrate, it might also be the case that the PP functions as a directional complement to the verb which – in these instances – requires an answer to the question where TO/ FROM?

- (12) di halfteren lostr vome pfert (514,12)StNHG: vom Pferd 'he took the holster off the horse'
- (13) ez wal gebvnden valte. zůme schilte an einem aste (504,14)StNHG: zum Schild 'he was bound to a branch along with the shield'

All in all, 50% of the PDCs in *Parz* occur when the PP is governed by the valency of the verb. Since the evidence is not sufficient to allow for a well-founded explanatory hypothesis, I have to content myself with making these observations and concluding that further investigations on the early history of PDCs should take into account the syntactic configurations in which PDCs occur. Governance of PDCs by syntactic parameters might have been a byway in their path of development.

Taking into account the reference of the NP in all instances of PDCs in Parz, the PDC co-occurs mainly with nouns which refer to a referent well-established in the narrative, be that a character (12 instances, e.g. zer frowen 'to the lady'), a central object (9 instances, e.g. gral) or place (15 instances, e.g. zem Forest in Azagoch. 'to the forest in Azagouch' 37,17) of the plot. If not established in the narrative, the referent of the NP is easily accessible, e.g. in (14):

To summarize my observations on PDCs in Parz, I would like to point out the distinctive similarity between this poetic text and the translation discussed above. What both texts have in common is the fact that they are bound by the specifics of their respective text type, here by the metric form, before by the super ordinate Latin text. What I have suggested for ZwBR is applicable here, too: to accomplish his communicative goals within the confines of the metric form, the author is compelled to exploit a wide range of linguistic possibilities available to him. A PDC is used if it is a suitable expression, i.e. if it concurs with the language rules and is appropriate on the one hand, and if its use serves the requirements of the metric form on the other hand.

Würzburger Polizeisätze

The legal document Würzburger Polizeisätze, dated in the last decade of what is referred to as the MHG period, displays a quite different usage pattern. Here, only six prepositions show PDCs, amounting to a total of nine PDCs, five of which correspond to the StNHG core group (in contrast to StNHG, WüPo does not contain an instance of beim).

Table 5. PDCs in WüPo

	Prep (lexeme)		PDCs		Case/	Freq.	Occurrences/examples
	MHG	NHG	WüPo	NHG	gender		
1	ane	an	am	am	D/mn	6	am funtage (247rb,16) am rate
2	In	In	im	im	D/mn	1	ím crutzegange (250ra,18)
3	ūf	auf	uffen	auf'n	A / m	1	vffen lal (244va,29)
			uf(f)m	auf'm	D/mn	6	vfm [al
4	ūz	aus	uzzer	?	D/f	1	vzzer hant (245ra,5)
5	von	von	vom	vom	D/mn	6	vom phunde vier ſchillinge vom heller (250vb,19) vom rate (244rb,12)
6	ze ~	zu	zer	zur	D/f	2	zer glocken
	zuo		zum	zum	D/mn	1	zům nůwenmunster (242va,19)
			zun	zu'n	AP	1	zůn heyligen gelw'n (243va,12)
					total	25	

WüPo displays a strong tendency towards PDCs in specific constructions, which can partly be attributed to the legal context in which formulaic language is prevalent:³⁶

Construction	PDCs	Occurrences with full form
zer glocken 'to the bell' (metonymic reference to the specific time when a bell is rung)	2	-
zůn heyligen gelw'n (243va,12) 'to swear to the holies'	1	3x full form, same construction, zů den heyligen
[] bůzze vom phunde vier schillinge 'legal fee of four schillings from the pound'	4	2x full form, same construction, e.g. vnder der lelben bůzze. von dem pfunde vier lchillinge. (241rb,14f) 3x without bůzze, e.g. vier lchillinge pfenninge von dem phunde phenninge (245rb,5ff)
am rate Iten 'lit.: stand at the council (metonymic)' (also: burger vom rate' 244rb,12; 'citizens [who are members] of the council'	2	-

^{36.} Since there are no further occurences of *uzzer hant ziehen* ('lit.: to pull from so.s hand, i.e. to steal away'), this probably lexicalized multiword expression is not added to the list.

Construction	PDCs	Occurrences with full form
ufm sal 'lit.: at the council chamber (metonymic)' (also fåer den rat vffen sal bringen 244va,29; '[to] bring before the council to the council chamber')	6	-
am +tag 'onday'	4	1x full form, the same construction: an dem vritage noch an andern gebannen valtagen (244ra,2ff) 'on Friday or any other forbidden day of fastening'

Additionally, there are some instances of PDCs for which the reference of the noun can be said to be known/inferable in the context of the town of Würzburg:

And lastly there is one instance of a proper name involving a PDC:

All instances in WüPo allow for an interpretation in accord with the base rule of PDC usage established above: they are used if the Ground concept of the prepositional relation is not one to be in question, but taken for granted either because it is clear and apparent in the given context or because the NP does not refer to a specific entity; the latter is the case for fixed expressions and, more to the point here, for wordings of the law in general. As per their function, they are intrinsically non-specific. When writing down a law, there are no specific referents. To illustrate, consider the following example:

(18) Swer geraubt vihe wizzenklichē kauffet. der sol ie von der kůwe geben sehtzíg phennige. von dem swin dri schillinge phenninge. vo dem schöffe ein schilling. (242ra,8ff) 'If someone buys stolen livestock knowingly, he has to give sixty pfennigs for a cow, three schilling pfennigs for a pig, one schilling for a sheep'

None of the NPs refers to a specific entity; specification is not a characteristic of the language of laws, but of other legal texts like verdicts or records/official documents.

Von der Gnaden Überlast

Like $W\ddot{u}Po$, $Gna\ddot{U}$ is also a text that borders on the ENHG period. Its inventory of PDCs is almost identical to the core group of PDCs in StNHG, with the exception of beim which is not documented in $Gna\ddot{U}$, and variation of the vowel in $zem \sim zum$. $Gna\ddot{U}$ does not contain any occurrences of $zer \sim zur$, there are only dative singular PDC forms in the masc. or neutr. gender.

Table 6. PDCs in GnaÜ

	Prep (lexeme)		PDC		Case/gender	Freq.	Occurrences/examples
	MHG	NHG	WüPo	NHG	_		
1	ane	an	am	am	D/mn	5	3x am karfritag am arm (109,10)
2	in	in	im	im	D/mn	9	3x im himel ím paradís (85,13)
3	von	von	vom	vom	D/mn	4	vom Couent (22,4) vom perg (17,16)
4	ze ~ zuo	zu	zum	zum	D/mn	3	zvm ampt (99,19)
			zem	_		2	zem dritten mal (74,17)
					total	23	

The documented PDCs can be classified as follows:

Usage*		Occurrences
point in time	4	3x am karfritag 'on Good Friday' ím aduent (15,13) 'in Advent'
monoreferential (a) inherently unique NPs	5	3x im himel 'in heaven' zvm himel (90,2) 'to heaven' im paradis (85,13) 'in paradise'
(b) proper names	3	2x vom kungistein swester leugart vom perg (17,16)
abstract noun	1	am tod (17,20) 'at [the time of] death'
common knowledge/ inferrable	6	zvm ampt (99,19) 'to [her]duty/ministry' am arm (109,10) 'in [her] arms' zvm capitel (76,12) 'to the cathedral chapter' im cloft' (83,9) 'at the monastery' vom Couent (22,4) 'from the monastery' im kör (33, 5) 'in the quire'
generic/non-specific	2	<i>ím geist</i> (97,14) 'in [her] mind' <i>uber al ím lande</i> (9,20) 'everywhere/all over the country'
fixed expressions	2	zum andern mal (74,14) 'at another time' zem dritten mal (74,17) 'a third time'

^{*} There are no occurrences of PDCs with a postnominal genitive or conversion in *GnaÜ*.

Taking into consideration the respective counter-examples, <i>GnaÜ</i> displays a dis-	-
cernible tendency towards PDCs.	

Head of the NP	PDCs	Counter-expamples (full form)
mal (zum andern mal, zum dritten mal)	2	0
ampt, arm, kör	1	0
Advent, convent, geist, kapitel, lant, paradis, tod	1	1
himel 'heaven'	2	4
Kloster	1	4
karfreitag*	3	0

^{*} Other compounds with tag and the simplex tag do not share this propensity towards PDCs.

An interesting observation in this context is that contrasting occurrences with the same noun not only appear with the full form of the definite article, but also without any determiner at all, here in the context of a proper name:

The following instance, counter-example to uber al im lande (9,20; 'all across the country'), warrants a closer look:

(20) da uon ward ir leumunt gebreitet in dem lande v\(\bar{n}\) auch in andern landen. (3,18ff)because of that her reputation increased in this country and in other countries, too'

Here, the use of the full form of the definite article displays a distinctly 'demonstrative' character, clearly pointing towards the deictic "here" at this point in discourse. This reading is verifiable through the contrasting PP in andern landen ('to other countries').

Conclusion

To summarise the observations made in the empirical part of this contribution I would like to propose the following course of the PDCs' development: In MHG, PDCs, which have been widely restricted to the preposition ze in OHG, develop into a productive pattern which is linked to the category of definiteness. Both dimensions of definiteness are present: On the one hand, PDCs are used if the referent of the NP (the Ground of the prepositional relation) is easily identifiable. On the other hand, PDCs are used in contexts in which no specific referent is targeted, either because the noun is used in a generic sense or because the reference of the noun has fallen victim to desemanticization

The MHG period can be said to be the time during which PDCs start to spread. In addition to the quantitative details given in Waldenberger (2009) and Christiansen (2016), I have presented in-depth evidence from two texts, Zwiefaltener Benediktinerregel and Parzival, in which PDCs are used quite extensively, to substantiate this claim. The majority of MHG sources lack evidence of PDCs; given the assumption that PDCs are gaining ground in MHG it is quite plausible that writers avoid linguistic expressions – such as PDCs – which are not well-established. Others, like the translator of ZwBR or a poet in the case of Parz, might, by contrast, be drawn to such forms because they allow for a larger variety of expressions. The evidence in the late MHG texts WüPo and GnaÜ points to the upcoming consolidation of PDCs in ENHG which is made apparent by the data presented in Christiansen (2016). Both late MHG texts show patterns which pre-empt obligatory PDCs in StNHG.

All occurrences of PDCs I have analysed for this study have one thing in common: each occurrence can be called an antecedent of one of the uses which are obligatory in StNHG. This applies to those forms which do not belong to the StNHG core group of six PDCs as well: even if the specific PDC is not included in the StNHG inventory of obligatory PDCs, the same 'rule' can be applied to the occurrence in MHG: the PDC occurs only if the reference of the NP, that is the Ground of the prepositional relation, is 'definite' in the sense outlined above. Consequently, I can answer the question I have put at the centre of this paper "are there any signs of grammaticalization of PDCs in MHG?" affirmatively. As mentioned earlier, I would like to suggest that the common notion of the clitic element in PDCs as 'successor' of the definite article through grammaticalization calls for further discussion. While I do not agree, as I have discussed above, with all concepts discussed in this context, I do not question the following assumptions: First: PDCs are embedded in a grammaticalization process. Secondly: The grammaticalization of PDCs is preceded by the grammaticalization of the definite article in German. And thirdly: PDCs are a means to express definiteness, which is their main functional property which has been established during grammaticalization. The notion I would like to call into question is the assumption that PDCs constitute 'a later stage' of the same grammaticalization process that started out with the demonstrative pronoun and resulted in the development of the definite article.

Notwithstanding the open question how PDCs have evolved, their emergence has provided a new linguistic device which has been functionalized and embedded into the system of means for marking definiteness, passing a distinct 'experimental stage' in the MHG period (see the results for ZwBR and Parz). The results of the

analyses of MHG texts presented above have shown that grammaticalization in terms of the assignment of functional properties to a linguistic entity is traceable as early as in MHG.

Clearly, there is a lot of further research to be done on the diachrony of PDCs in German, the early history of PDCs being a particularly significant desideratum. A diachronic study of PDCs throughout the history of German should cover both form and function. As has been shown in this contribution, MHG PDCs tend towards specific usage patterns which pre-empt their obligatoriness in StNHG and therefore their status as a definiteness marker. A diachronic study on the functional properties of PDCs would involve mapping patterns such as those described above based upon a considerably larger corpus which would have to be put together for this purpose specifically, including only such texts which offer a considerable number of PDCs. Such an endeavour would hopefully answer the questions this contribution has raised: What are the origins of PDCs? Which usage patterns have been established first (specific or non-specific), which did provide a gateway for the obligatory uses of PDCs in StNHG? Are there – as can be suspected for Parz – additional factors to be considered on the syntactic level? Why did some PDCs, like uffem and uzem, get lost along the way or, vice versa, which factors were decisive in the obligatorification of PDCs?

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Absence as evidence

Determination and coordination ellipsis in conjoined noun phrases in (Early) New High German

Antje Dammel

In simple noun phrases, the generalization of definiteness marking to all kinds of head nouns was well-advanced by the Early New High German period (ENHG). In conjoined noun phrases, however, coordination ellipsis of determiners was common and subject to fewer restrictions than in Modern Standard German (MSG). A corpus analysis reveals a *there-and-back change* in the frequency of coordination ellipsis within ENHG and early NHG and a substantial structural change in its conditioning towards MSG. The semantic and pragmatic regularities favouring coordination ellipsis across diverging grammatical features in (E)NHG can be described in terms of natural coordination (the probability of concepts to co-occur). Towards MSG, formal constraints on morphosyntactic feature combinations (gender, number) prevail. A possible explanation combines internal and external factors: grammaticalization and codification. Methodologically, it turns out fruitful to regard not only the spread of a new gram, but also constructions favouring its absence.

Keywords: grammaticalization, determiners, definiteness, noun phrase, coordination, ellipsis, natural coordination, German, (Early) New High German, Modern Standard German

1. Introduction

To determine the degree of grammaticalization that definiteness has reached at a certain point in time, it is common practice to investigate in which contexts determiners obligatorily occur. Obligatorification, i.e., the reduction of paradigmatic variability, is indeed a valuable indicator of increasing grammaticalization, cf. for instance Lehmann ([1985] 2015: 148–152, 174). However, when we regard advanced stages of obligatorification, it might be more fruitful to investigate those constructions that favour *a lack* of determiners (persistence phenomena in Hopper's terms [1991: 22, 28–30]). Conjoined determined noun phrases are an interesting

https://doi.org/10.1075/silv.23.06dam © 2020 John Benjamins Publishing Company construction in this respect, and Early New High German (ENHG, 1350–1650) together with early NHG (1650-1800) is an interesting time frame as we will see. Before considering the data, it is necessary to sort out a terminological issue, and to open up a typological perspective on determination in conjoined NPs.

The phenomenon concerning us here is the lack of a determiner (mainly, but also specifier, modifier) in a second NP that is triggered by the presence of a determiner (specifier, modifier) in a preceding NP. If, e.g., the second NP Bruder in der Vater und _ Bruder des Retters 'the father.m.sg and _ brother.m.sg of the rescuer' (cf. (1a) below) were by itself, it would demand its own definite article. Omission is possible in this case, because the definite article preceding Vater fully agrees with Bruder in its form and grammatical features. Blatz (1896) and Hoffmann (1998) use the term analepsis (analogous to anaphor) for this type of omission; they distinguish it from those types of ellipsis that are based more on pragmatic inferences than on the co-text. I use the more common term coordination ellipsis (e.g., Hennig 2015) throughout this article, with scope exclusively on NP coordination, not clausal coordination. Both terms, coordination ellipsis and analepsis reflect the structural givenness of the omitted element in the preceding co-text as the crucial condition for gapping. In contrast to analepsis, the term coordination ellipsis allows a more scalar view on different types of ellipsis, be they resolved using information from the preceding co-text or using pragmatic inference. A possible disadvantage of the term ellipsis could be that some theoretical models take it literally and assume that the element in question is first spelled out in an underlying representation and then deleted in production. I use ellipsis in a theory-neutral, agnostic way as to processing assumptions. (For further discussion of these terminological and theoretical issues see Klein 1993, Hennig 2009, 2015, the papers in Hennig [ed.] 2013, and Auer 2014).

Plank (1991) addresses determination in conjoined NPs from a cross-linguistic perspective, proposing a three-way typology of constraints on coordination ellipsis. This typology (sketched in Table 1) is based on the form and feature combinations licensing ellipsis. Type A languages (leftmost column in Table 1) generally avoid coordination ellipsis in favour of explicit definiteness marking; determiners occur in the second NP, no matter if the morphosyntactic specifications of the conjuncts are the same or not, e.g., Spanish la pluma y la/*Ø tinta. In this way, Type A languages show the highest degree of obligatorification that determination can gain in conjoined NPs. In type C languages (rightmost column in Table 1), coordination ellipsis applies freely, no matter if the morphosyntactic specifications of the conjuncts do agree or not, e.g., French ta mère et (ton) père, where feminine and masculine singular NPs are combined. Here, the obligatorification of definiteness marking in conjoined NPs is weakest.

^{1.} Type C has several subtypes depending on the orientation of ellipsis (first vs. second conjunct, or resolution), cf. Plank (1991). They are not central for the discussion on (E)NHG.

Morphosyntactic Features	Type A (e.g., Spanish)	Type B (e.g., Modern Standard German)	Type C (e.g., French)
Same	Determiner obligatory	Determiner facultative	Determiner facultative
	la pluma y la tinta 'DET.F.SG feather(F):SG and DET.F.SG ink(F):SG'	die Tinte und (die) Feder 'DET.F.SG feather(F):SG and DET.F.SG ink(F):SG'	la plume et (l') encre DET.F.SG 'feather(F):SG and DET.F.SG ink(F):SG'
Different	Determiner obligatory	Determiner obligatory	Determiner facultative
	la madre y el padre 'DET.F.SG mother(F):SG and DET.M.SG father(M):SG'	die Mutter und der Vater 'DET.F.SG mother(F):SG and DET.M.SG father. (M):SG'	ta mère et (ton) père 'POSS.F.SG mother(F):SG and (POSS.M.SG) father (M):SG'

Table 1. Typology of determination in conjoined NPs (cf. Plank 1991)

In contrast to the former two types, Plank classifies Modern Standard German (MSG) as a consequent Type B language across all kinds of determiners and specifiers (mid column in Table 1). King and Dalrymple (2004) come to the same conclusion from an HPSG perspective (cf. also Vater 1993). For Type B languages, the omission of determiners in a second definite noun phrase is possible iff the morphosyntactic features of the conjuncts fully match (as is the case in [1a] der *Vater und* Bruder). If there is a mismatch between feature specifications (as in (1b) with the masculine noun Vater 'father' and the feminine noun Schwester 'sister'), a second determiner is obligatory. Thus, determiners are not as generalized as in Type A languages, but as determination is clearly conditioned by morphosyntax, freedom of choice for language users is reduced considerably compared to Type C.

(1) Determination with conjoined NPs in Modern Standard German sich – beide bewusstlos – der In dem brennenden Labor befinden in the burning laboratory are_located REFL both unconscious the und __ Bruder des Retters. father(M):sG and brother(M):sG of the rescuer 'In the burning laboratory are – both unconscious – the father and brother of the rescuer.' (http://www.sueddeutsche.de/kultur/regine-kollekmein-bruder-wo-bist-du-1.436613; 16/07/2016) und die Schwester hielten sie zuerst mit b. aber der Vater but the father(M):SG and the sister(F):SG held:3PL her at first with Vernunftgründen zurück rational_arguments back 'But the father and the sister held her back at first with rational arguments.'

(Kafka, Verwandlung, Chapter 10; cited from Kafka 2008)

'the players and the club have beaten the big drum to advertise.'

(Cosmas II, RHZ09)

However, Modern Standard German shows some variation in the condition of determiners that match in form, but not in morphosyntactic features, as is the case in (1c) & (d). Here, a feminine singular conjunct (*die Nase* 'the nose') is combined with a plural conjunct (*die Ohren* 'the ears'), both share the definite article form *die*. This constellation raises the question whether the mismatching morphosyntactic features or the matching phonological form of the determiners will turn out as the stronger conditioning factor. Another question is whether all feature combinations and orders of conjuncts behave alike. Cases with a feminine singular conjunct preceding a plural conjunct (1c) seem to be more acceptable than cases in the reverse order as shown in (1d), cf. also Plank (1991). This will be investigated in more detail in Section 2.1. In contrast to the doubtful constellations in (1c) & (d), coordination ellipsis is clearly perceived as ungrammatical in MSG in cases such as (1e) with a mismatch in feature specifications as well as in form (*die Spieler* M.PL vs. *der* (!) *Verein* M.SG).

The conditioning of coordination ellipsis in Early New High German (ENHG, 1350–1650) and early New High German (NHG) differs in interesting ways from MSG. To let the cat out of the bag, I propose for (E)NHG an analysis as a Type C language in Plank's (1991) typology.² The examples in (2) show that coordination

^{2.} Interestingly, Plank classifies present day Low German as both, type B and C. This tentative judgement would be worth a closer look based on diachronic corpus data. A possible link between more pervasive syncretism in Low German and greater freedom of ellipsis suggests itself. However, as Type A languages show by their obligatory double determination in the condition of formal identity, syncretism cannot be the only conditioning factor involved.

ellipsis of a second determiner is not restricted to matching morphological feature specifications. In the second NP in (2a), Mutter 'mother.F.SG', no definite article is used although there is a gender mismatch with the first NP Vater 'father.m.sg'. The omitted determiner would differ in form and features from the one in the first NP.

```
(2) Coordination ellipsis in coordinated NPs in (E)NHG
        So soll-en
                        der
                                                   vnd mutter/
        so shall-PRS.3PL the:NOM.SG.M father(M):SG and
                                                          mother(F):sG
        der Dirnen/ sie nemen
        of the girl her take:INF
        'So shall the father and mother of the girl take her'
                                             (Luther's-Bible 1545: Dtn 22.15)
    b. Ich wolte wünschen/ daß meiner
                                              Nadel
        I would wish
                             that my:F.SG.DAT needle(F):SG
        und Fingerhut
                            zu reden erlaubt
                thimble(M):SG to speak allowedPP be.SUBJ.3SG
        'I would wish that my needle and thimble were allowed to speak'
                           (GerManC, NARR_P1_WOD_1682_Feuermaeuer)
    c. ein reissend Thier hat ihm seinen
                                                  Leib
            ferocious animal has him POSS:M.SG.AKK body(M):SG
        und __ Seele
                          getrennet
                soul(F):sG separated
        'a ferocious animal separated his body and soul'
                            (GerManC, SERM_P1_NoD_1677_LeichSermon)
    d. daz ein andechtiger man hat ainsten gehort von einer sel
        that a
                believing man has once heard of a
                     jemerlich
                                          clag
        a:F/N.SG.AKK miserable:F/N.SG.AKK lamentation:(F):SG.AKK
        vnd __ geschray
               screaming(N):SG.AKK
        'that a believing man once heard a miserable lamentation and screaming
                             (BonnC, HS Pillenreuth Mystik, Nürnberg, 1463)
        of a soul'
```

In (2b) and (2c), the same situation can be observed for possessive articles. The masculine second NP Fingerhut 'thimble' has no possessive article of its own despite a morphosyntactic mismatch in gender with the feminine first NP Nadel 'needle'. In (2c), a masculine first NP (Leib 'body') is followed by a feminine second NP (Seele 'soul') which is again not specified by a separate possessive article. (2d) completes the picture by showing that different feature specifications (clag 'lamentation' is a feminine singular noun, geschray 'screaming' a neuter singular noun) may easily be combined in (E)NHG coordination ellipsis where the form (here of the indefinite determiner ein:F/N.SG.NOM) would be the same. (2d) is symptomatic for ENHG,

as feminine and neuter indefinite articles and adjectives are frequently unmarked in the nominative and accusative case in this period.

From a conceptual perspective, all examples in (2) have in common that the coordination embraces concepts that are semantically and/or pragmatically quite close to each other. This type of relation has been termed natural coordination (Wälchli 2005) and is discussed in Section 3 as a possible factor favouring coordination ellipsis.

To sum up this introductory part, Table 2 provides a preliminary picture of how (E)NHG differs from Modern Standard German regarding the three possible constellations of (mis)matching forms and features.

Constellation	Form	Grammatical features	MSG	(E)NHG
I	match	match	possible	possible
II	match	mismatch	?	possible
III	mismatch	mismatch	*	possible

Table 2. Restrictions on coordination ellipsis in MSG and ENHG

The first constellation with matching forms and feature specifications allows coordination ellipsis in MSG as well as in (E)NHG. The second constellation with matching forms but mismatching grammatical features is evidenced in (E)NHG but exceptional in MSG. The third constellation discloses the strongest diachronic contrast. While a mismatch in forms as well as features (III) prevents coordination ellipsis in MSG, this constellation is possible in (E)NHG and will be focussed on in the corpus analysis of Section 2.

The next sections are structured as follows: In Section 2, the picture drawn above is reviewed empirically. Quantitative corpus analyses ascertain frequencies for constellation II in MSG (2.1) and, more importantly, for constellation III in (E)NHG (2.2). Based on examples from the corpora, Section 3 discusses natural coordination as a possible determinant of coordination ellipsis in earlier stages of German. In Section 4, the changes towards MSG are discussed in the light of grammaticalization theory: The increasing restrictions on coordination ellipsis are interpreted as evidence for the obligatorification of determiners and scrutinized considering two assumptions:

(E)NHG and MSG differ in the status of definiteness: semantic-pragmatic conditioning in (E)NHG changes towards morphosyntactic conditioning in MSG (cf. Demske 2001). This internal aspect of grammaticalization is discussed and linked to the constructional development of the nominal frame in Section 4.1.

The constraints on coordination ellipsis beyond NP-coordination increase due to an ongoing development from an orate to a literate language (cf. e.g. Hennig 2009; Ong 1982, Maas 2010). Increasing scriptualization favours morphosyntactic explicitness and goes along with the stigmatization of coordination ellipsis. This possible social impellent of obligatorification is addressed in Section 4.2.

For both assumptions, a straightforward decline of coordination ellipsis towards MSG would be the most solid basis. However, the empirical situation is still unclear. Hennig considers texts from 1600 on and focuses on types of coordination ellipsis beyond phrase level, and Demske discusses the phenomenon from a purely qualitative perspective. Thus, a thorough empirical analysis is a necessary step to determine the frequency and crucial time range of NP coordination ellipsis with morphosyntactic feature mismatches.

Corpus analysis

Modern Standard German 2.1

A mismatch between morphosyntactic features (such as die Spieler.(м):pl und Verein.(M):sG in 1e above) renders coordination ellipsis inacceptable in MSG. Thus, the interesting question for MSG is how matching forms without matching features behave. The Duden Grammar (2016: 914; emphasis mine) states quite decisively:

Ausgeschlossen ist die Einsparung von Artikelwörtern mit gleicher Form, aber unterschiedlichen Merkmalen: [..] die Mutter und die Kinder; das Studium der Mathematik und der Naturwissenschaften"

'The omission of determiners with identical form but diverging features is excluded: the mother [F.SG] and the children [N.PL]; the study of the [DET:F.SG.GEN] mathematics [F.SG] and the [DET:F.PL.GEN] sciences [F.PL]'

However, my intuition as a native speaker and informal inquiries of other native speakers suggest that acceptability judgements vary for different feature constellations and classes of determiners and modifiers. Thus, combining nouns of all genders within the plural paradigm is unproblematic (e.g., die Hunde, Pferde und Katzen 'the dogs.m, horses.n, and cats.f'). Within the singular number, it is also marginally acceptable to combine nouns of masculine and neuter gender, which systematically share non-nominative paradigms. Examples are not hard to find, e.g., mit dem Pferd und Hund 'with the horse.N and dog.M' in (3).3

^{3.} The Duden Grammar (2016: 914) attenuates its restriction on coordination ellipsis for combinations of masculine & neuter modifiers, but not for articles.

(3) In Ihrer Arbeit geht es darum, mit dem Pferd und Hund eine ganz besondere Beziehung aufzubauen und ihre faszinierende Sprache zu erlernen.

'Your work is about establishing a very special relationship with the horse [N.SG] and __dog [M.SG] and to learn their fascinating language."

> (http://asimaliloski.blogspot.de/2013/05/asim-aliloski-imgesprach-mit-dem.html, 16/07/2016)

Across number features, the constellation combining a feminine singular noun with a plural noun of any gender seems to be moderately acceptable. It is easy to find tokens for exactly the examples excluded in the Duden Grammar, see (4a, b).

- (4) Coordination ellipsis of article form die across number
 - Die Mutter und Kinder sind zurzeit in einem Flüchtlingslager in Oberhausen

"The mother [F.SG] and __ children [N.PL] are currently in a refugee camp in Oberhausen [...]' (http://hinter-den-schlagzeilen.de/2014/08/22/ eine-roma-familie-und-die-herren-des-morgengrauens/, 16/07/2016)

b. Die Mathematik und Naturwissenschaften liegen damit mit den Ingenieurwissenschaften gleichauf [...]

'The Mathematics [F.SG] and __ natural sciences [F.PL] are thus on a par with the engineering sciences [...]'

(http://www.dzhw.eu/pdf/pub_fh/fh-201006.pdf, 16/07/2016)

As the latter constellation combining a feminine singular with a plural conjunct of any gender is a frequent case of matching forms & mismatching features, a corpus search was conducted for this constellation in the tagged archive C1 of Cosmas II, which consists of newspaper texts from the German speaking countries, ranging from 1994 to 2009. One aim was to learn more about the frequency of coordination ellipsis (vs. double determination) in this constellation. As intuitions were that singular preceding plural is more acceptable than plural preceding singular, the order of the two conjuncts was included as a second variable (Table 3).

Table 3. Variants considered in Cosmas search for Modern Standard German

Determination	Singular preceding Plural			Plural preceding Singular		
Coordination ellipsis	die N _{sg}	und	N _{PL}	die N _{PL}	und	N _{SG}
Double determination	$die { m N}_{ m sg}$	und	$die N_{_{PL}}$	die $N_{_{PL}}$	und	$die N_{_{SG}}$
Example	die Nase 'the nose(F):sG		(die) Ohren (the) ear(N):PL'	die Ohren 'the ear(N):PL		(die) Nase (the) nose(F):SG'

For the four constellations presented in Table 3, random samples of 5000 tokens were drawn and analysed manually and independently by two researchers, who excluded all cases with a second NP they perceived as indefinite.⁴ The findings for the four random samples were extrapolated to the overall tokens found for each constellation.5

Figure 1 shows that cases of coordination ellipsis with a feminine singular and a plural conjunct are indeed rare, but existent. The order of the conjuncts turned out significant in a chi-square test (Yates' p = 0): coordination ellipsis is more frequent where the conjunct with feminine singular specification precedes. A reason for this asymmetry could be that a mismatch is less material when a plural form is processed after a singular form, as the gender specifications present in singular forms are weakened in plural forms.

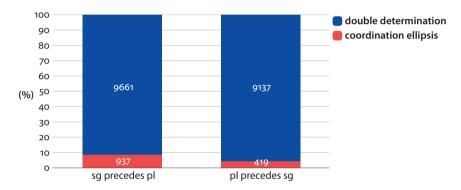


Figure 1. Coordination ellipsis with feminine singular and plural conjuncts (Basis: Random samples of 5000 tokens for each condition from Table 3, proportion of relevant tokens extrapolated to overall tokens for each condition)

A closer look at some instances of coordination ellipsis in their context (see [5] for the condition with a singular noun preceding a plural noun, and [6] for a plural noun preceding a singular noun) reveals that close semantic or contiguity relations between the conjuncts are a good candidate for a common denominator of coordination ellipsis across grammatical features. This doesn't come as a surprise with the (E)NHG situation in mind, which is discussed in the next section. Where the plural noun precedes the singular noun (6), the second (singular) conjunct frequently has

^{4.} The criterion was whether a determiner would be used in the respective context if the second NP was on its own.

^{5.} II thank Stefan Hartmann for conducting the corpus searches, for the idea to extrapolate the findings, and for co-analysing the findings with me.

abstract semantics. As abstract nouns are weakly specified for number, it could be easier for them to combine with a first conjunct with singular features.⁶

(5) Feminine singular noun preceding plural noun a. [...] dass die Berichterstattung und __ Informationen '[...] that the reporting(F):sG and information(F):PL neutral und sachlich gestaltet sind (Tagged C1, M09) are fashioned in a neutral and factual way' b. [...] durchsuchte gestern die Wohnung und __Büros '[...] searched vesterday the appartment(F):SG and office(N):PL des Ex-Chefs [...] (Tagged C1, V99) of the ex-boss. (6) Plural noun preceding feminine singular noun und __ Politik a. [...] sein Vertrauen an die Behörden in the authority(F):PL and '[...] his trust politics(F):sG (Tagged C1, RHZ09) aufrechtzuerhalten [...] to retain' b. Die Depression beeinträchtigt die Gefühle und __ Stimmung' depression impairs the emotion(N):PL and mood(F):sG immer und überall. (Tagged C1, NON09) always and everywhere' c. Das Bühnenprogramm für die Kleinen und __ Jugend 'the theatre program for the small one:N.PL and youth(F):sG [...]'

(Tagged C1, NON09)

The flowchart in Figure 2 summarizes these tentative generalizations regarding the licensing of coordination ellipsis in Modern Standard German: If the forms of the determiners differ, the case is clear-cut: morphosyntactic mismatches of this kind are not tolerated. Where the form is the same, the grammatical feature constellation is influential. Feature combinations within one number value (sg+sg/ pl+pl) are less problematic than mismatches crossing the number border. The neutralization of gender specifications in the plural and systematic syncretism between masculine and neuter determiner forms facilitate coordination ellipsis in these within-one-number constellations. The syncretized determiners of feminine singular and plural of all genders seem to be more resistant to coordination ellipsis, which would cross two category borders in this case. As it does not form a natural morphological class, the syncretism between feminine singular and plural of all genders is not systematic in the sense of Zwicky (1991).

^{6.} These are only first observations; of course, it would be necessary to cross-check frequencies of abstract and plural second conjuncts in the sample without coordination ellipsis and to test processing ease with experimental designs.

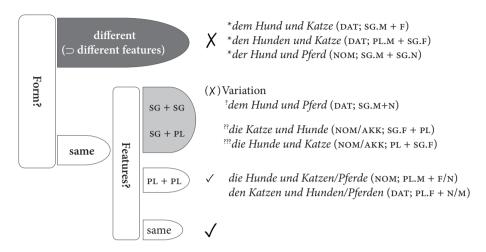


Figure 2. Flowchart for coordination ellipsis of determiners in conjoined noun phrases of Modern Standard German (examples: Hund - Hunde 'dog; M, SG-PL', Katze - Katzen 'cat; F, SG-PL', Pferd – Pferde 'horse; N, SG-PL')

It fits well into this picture that the SG+PL-constellation is sensitive to linear order, allowing the plural form (less specified for gender) to occur as a second conjunct more easily. As illustrated above in (5) and (6), cases of coordination ellipsis across category borders go along with semantic closeness/ contiguity of the conjuncts. This is an interesting observation to take into the analysis of (E)NHG in the next two sections.

(Early) New High German (1350–1800) 2.2

As the most striking difference between Modern Standard German and (Early) New High German is the behaviour of conjuncts with a mismatch in form and feature specifications, the corpus analysis focusses on these extreme cases. It addresses the following quantitative and qualitative questions:

- How frequent is coordination ellipsis in conjoined NPs with diverging forms and features between 1350 and 1800? Is it possible to identify changes in frequency?
- Is it possible to identify semantic, pragmatic, or stylistic factors that favour NP coordination ellipsis?

Samples from the Bonn corpus for ENHG (1350–1700 = BonnC) and from the subsequent Manchester Corpus for early NHG (1650-1800 = GerManC) were analysed. Both corpora are structured according to period and region, GerManC moreover for genre. The Bonn Corpus contains mainly religious and narrative texts (in part or full; 30 norm pages); of two texts per sub-period and region only one was publicly available. All available corpus texts were completely analysed for five regions: Central Bavarian and East Franconian for the East Upper German area, Upper Saxon for the East Central German area, Hessian for the West Central German area and Swabian for the West Upper German area. All publicly available sub-periods were included (1350-1400, 1450-1500, 1550-1600, 1650-1700).

GerManC overlaps with the Bonn Corpus in its first sub-period and extends to 1800 (1650–1700, 1700–1750, 1750–1800). The first overlapping period was included, as this allows direct comparison of the two corpora. To keep the data from both corpora as comparable as possible, only the genres narrative prose and sermons were picked from GerManC. All available regions in GerManC were considered: East and West Upper German, East and West Central German, and North German (i.e., High German texts from the Low German area).

In both corpora, all variants of 'and' occurring in the texts (und, vnd, vnnd, unnd, $v\bar{n}$) were searched, and all conjoined NPs with a determined or modified first conjunct were manually extracted if they met the following conditions: The NPs had to follow each other directly (e.g., without repeated prepositions) and in case of double determination had to show the same determiner or specifier in the second NP as in the first. Thus, cases such as sein Kiaja und der Cherif 'his Kiaja and the Sherif' (GerManC/Narr/NoD2/Africa/1715) were excluded as precluding ellipsis. Moreover, cases of ellipsis affecting word internal morphemes (e.g., die Stall- und Reit-Knechte 'the stable- and riding grooms' (GerManC/Narr/ WMD2/Fleurie/1716) were excluded; they always had determiner ellipsis. Cases with ambiguous scope of the first determiner were also kept out of the sample, e.g., gewynnent sie groszen lon und mynne 'they win great gratification and love' (BonnC/Hess/Benediktinerregel/14th ct.) with an abstract second conjunct that could either be co-modified or not. This procedure yielded N = 996 overall tokens from the Bonn Corpus, and N = 846 overall tokens from the Manchester Corpus.⁷ All tokens were classified according to

- match or mismatch of formal and functional features,
- presence or absence of coordination ellipsis,
- kind of determiner, specifier, or modifier involved (definite and indefinite article, demonstrative, possessive, quantifier, adjective).

^{7.} I am thankful to Johanna Leicht for extracting the raw data from the Bonn Corpus for Swabian and for extracting all raw data from the Manchester Corpus.

Table 4 shows the overall ratio of coordination ellipsis versus double determination across the different (mis)match contexts. Tokens including pluralia tantum (e.g., leut 'people') were excluded here as not specified for gender. The table shows that coordination ellipsis clearly dominates in both the contexts with matching form (I, II), but sharply decreases in frequency in contexts with a form & feature mismatch (III). However, even in this constellation, coordination ellipsis still holds more than one third of the tokens in both corpora. Between the two contexts with matching forms (constellation II vs. I), only a slight decreasing effect (6%) of mismatching features (II) on the likelihood of coordination ellipsis can be noticed, and this is the case only in the younger corpus (GerManC). This decrease could carefully be interpreted as a sign of an incipient new conditioning system evolving towards MSG.

Table 4. NP coordination ellipsis in two corpora of (Early) New High German

	Form	Gram.	Bonn C (1	350-1700)	GerManC (1650-1850)		
		features	Double det	Ellipsis	Double det	Ellipsis	
I	match	match	97 (19%)	424 (81%)	50 (10%)	465 (90%)	
II	match	mismatch	46 (20%)	193 (80%)	26 (16%)	134 (84%)	
III	mismatch	mismatch	124 (55%)	101 (45%)	90 (54%)	77 (46%)	
overall			267 (27%)	718 (73%)	166 (20%)	676 (80%)	

Constellation III with mismatching forms and features (e.g., der Vater(M):sG und_ *Mutter* (F):SG, cf. (2a) above) is worth a closer look. Figures 3 & 4 show the overall results for coordination ellipsis (red bars) versus double determination (blue bars) for this crucial constellation (N = 225 tokens in the Bonn Corpus and N = 167 tokens in GerManC). The high ratio of coordination ellipsis has already been noted above: more than one third of the possible cases in both corpora show ellipsis. Another striking observation is that the ratio of coordination ellipsis changes over time and that the development observed is not a linear change, but a there-andback change. Coordination ellipsis increases within ENHG9 and reaches its highest frequency in the second half of the 16th century, outstripping double determination in this period. Afterwards, it holds a plateau and eventually declines during the second half of the 18th century. For both corpora, the variable time turned out significant in a chi-square test (BonnC p = 0, GerManC p < 0.01). This was not the case for the variables region and genre. As the Bonn Corpus is not satisfactorily structured for genre, this factor could only be tested for the period 1650-1800 in

^{8.} The difference was significant in a chi-square-test (p = 0).

^{9.} Supporting evidence comes from the Prose-Lancelot. This presumably Middle High German text lacks coordination ellipsis with diverging morphological features completely.

GerManC. Though conjoined NPs were considerably more frequent in sermons than in narration (ratio 3:1), no significant difference regarding coordination ellipsis could be found.

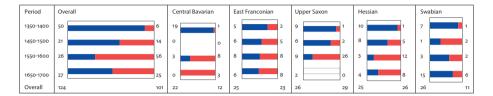


Figure 3. Coordination ellipsis with diverging feature combinations in the Bonn Corpus of ENHG (N = 225; red bars: double determination, blue bars: coordination ellipsis, white space: data too scarce)



Figure 4. Coordination ellipsis with diverging feature combinations in the Manchester Corpus (GerManC) – genres: narrative prose and sermons (N = 167; blue bars: double determination, red bars: coordination ellipsis)

Due to the yet small database, no further quantitative analyses were conducted. These would be interesting in several respects:

- the behaviour of coordination ellipsis with different kinds of determiners, specifiers and modifiers (definite and possessive articles seem to be more often involved in ellipsis than indefinite articles),
- possible combinations of determiners and modifiers in ellipsis: for instance, cases such as *der Raht und* ___ *gemeine Burgerschafft* (BonnC, Nürnberg 1668) with a determiner in the first NP and a single adjective in the second NP are interesting with respect to the (in)dependence of definiteness marking in adjectives;
- possible restrictions of ellipsis regarding case features (adnominal genitives seem to disfavour ellipsis), feature combinations and orders of the conjuncts with respect to gender and number. It can be stated so far that coordination ellipsis does occur with different orders and different combinations of genders and in different case constellations (cf. the examples in [2] above and in Table 5 below).

The most interesting quantitative finding is the development over time. It shows that the situation is more complicated than a straightforward decline from historically unrestricted coordination ellipsis (Type C) to morphological conditioning (Type B). The observed tendency towards coordination ellipsis with diverging features develops only during the (E)NHG period as an option of syntagmatic condensation within coordinative structures and is abandoned by writers and printers towards NHG. Any attempt at an explanation must consider this not exactly straightforward decline. Before possible explanations are discussed in Section 4, a qualitative discussion of coordination ellipsis in (E)NHG is necessary to learn more about its conditioning factors (Section 3).

Natural coordination as a conditioning factor of coordination ellipsis

If we oppose a random sample of tokens with coordination ellipsis to a random sample of tokens with double determination (Table 5), an interesting difference comes to the fore: In most of the examples with separate determination, the conjuncts more clearly refer to separate entities from a semantic or pragmatic perspective, for instance in von dem Erzbischoff und der Stadt 'of the archbishop and the town' or zwischen dem marck vnd der rynden 'between the marrow and the bark' where the distributive reading is lexically marked by zwischen 'between'. In contrast to that, in many of the examples with coordination ellipsis, the two conjuncts are closely linked through semantic or pragmatic relations. The coordinate structure constitutes more of an overarching unit than in the cases in the right-hand column.

Table 5. Examples with and without coordination ellipsis in (E)NHG (tokens from the Bonn Corpus, GerManC, and Luther's Biblia 1545)

Coordination ellipsis

- die Gnad und Schutz GOtt deß Vatters 'the:F.SG grace(F):SG and shelter(M):SG of god the father'
- in der gro^esten Forcht und Schrecken 'in the:F.SG greatest anxiety(F):SG and horror(M):sG'
- durch den geist vnd naturen 'through the: M.SG ghost (M): SG and nature (F): SG'
- der Raht und gemeine Burgerschafft 'the:м.sg council(м):sg and common citicenship(F):sg'
- der Vater und Mutter 'the:м.sg father(M):SG and mother(F):SG'
- einen Thurnier und Ritterspiel 'a:m.sg joust(M):sG and knightly game(N):sG'

Double determination

- daz sacrament vnd den ablas 'the:N. sg sacrament(N):sg and the:M.sg indulgence(M):sG'
- von vil anfechtungen der welt, des fleischß vnd der posen geist 'of lots of temptations of the:F.SG world(F):SG, the:N.SG flesh(N):SG and the: M.PL evil: M.PL ghost (M): PL'
- das leben vnd die lere vnsers herren Jesu Chr. 'the:N.SG life(N):SG and the:F.SG lesson(F):SG of our master Jesus Christ'
- die Lieb und der Wein 'the:F.SG love(F):SG and the: M.SG wine (M): SG'
- die Wahl und den Willen der [..] Fu^ersten 'the:F.SG choice(F):SG and the:M.SG will(M):sG of the [..] souvereigns'

(continued)

Table 5. (continued)

Coordination ellipsis

- den Eyd und Lehenpflicht 'the:M.SG oath(M):sg and duty(F):sg of fiefdom'
- unter dem Kleid und Ruestung 'under the: N.SG garment(N).SG and armour(F): SG'
- mit seiner Gemahlin und Kindern 'with POSS.F.SG wife(F):SG and child(N):PL'
- einen Heerzug und Meerfart ins H.Land 'a:M.SG crusade(M):SG and seafaring(F):SG to the holy land'
- Selbiger Vertrag und Ubergab 'the same:м. sG treaty(M):sG and handover(F):sG'
- dem samen vnd blettern 'the:M.SG seed(M):SG and leaf(N):PL'
- daz der schlyme vnd feuchtikeyt darvon komme 'that the: M.SG slime (M): SG and humidity(F):sG comes from this'
- eine grosse Quantitet vnd hauffen Golds 'a:F.SG great:F.SG quantity(F):SG and heap(м):sg of gold'

Double determination

- von dem Erzbischoff und der Stadt 'of the:M.SG archbishop(M):SG and the:F.SG town(F):sG'
- sowol von dem Bischoff und der Clerisey/ 'as.well of the: M.SG bishop (M): SG and the clergy(F):sG'
- Der monde vnnd die sonne in yr meisterschafft 'the: M.SG moon(M): SG and the:F.SG sun(F):SG in their excellence'
- Item die wuortzel vnd das krut gestossen 'thus the:F.SG root(F):SG and the:N.SG herb(N):sg pestled'
- als zwischen dem marck vnd der rynden 'as between the: N.SG marrow(N).SG and the: F. sg bark(F):sg'
- zwischen den Eltern vnd dem Sohn 'between the:PL parent:PL and the:M.SG son(M):SG'

The basis of this unity can be either semantic or pragmatic relations (Wälchli 2005: Chapter 3). One type of the former is partial synonymy, often due to an explicative second conjunct as in eine grosse Quantitet vnd hauffen Golds 'a great quantity and heap of gold' or in einen Thurnier und Ritterspiel 'a joust and knightly game'. In these instances, the first conjunct is often a loan word supplemented by a native term. Moreover, semantic unity can manifest itself as a strong overlap in semantic features as in in der groesten Forcht und Schrecken 'in the greatest anxiety and horror'. A third type is meronymic relations with a tacit hyperonym as in der Vater und Mutter 'the father and mother' (parents), mit seiner Gemahlin und Kindern 'with his wife and children' (family), or unter dem Kleid und Ruestung 'under the garment and armour' (attire).

Pragmatically conditioned unity can arise where the conjuncts stand in close relations of contiguity, presuming common action knowledge of the time. Instances are einen Heerzug und Meerfart ins H.Land 'a crusade and seafaring to the holy land', Selbiger Vertrag und Ubergab 'the same treaty and handover' or den Eyd und Lehenpflicht 'the oath and duty of fiefdom'. Unity can also be constituted in discourse, e.g., if referents forming a pair are introduced separately, but then act or undergo actions as a unit.

Wälchli (2005: Chapter 3) subsumes these semantically, pragmatically and discursively based close relations under the term natural coordination 10 which he distinguishes from accidental coordination. The decisive criterion of his definition is the expectability of co-occurrence (2005: 5 my emphasis):

> [...] coordination of items which are expected to co-occur, which are closely related in meaning, and which form conceptual units, such as father and mother, hands and feet, rather than toe and belly, the man and the snake [...]

Wälchli (2005: 13) assumes diagrammatic iconism (cf. Haiman 1983) between natural coordination on the semantic or pragmatic level and tightness of the coordination on the syntactic level. This relation is sketched in Table 6.

Table 6. Form-function mapping with natural coordination (Wälchli 2005: 13)

Semantic-pragmatic dimension	Formal dimension	
natural coordination	tight coordination	
accidental coordination	loose coordination	

A good exemplification of this interaction between function and form in natural versus accidental coordination is a quote from Heine's *Harzreise* given in (7) from Wälchli (2005: 67). The satirical effect is produced by the order of the conjuncts, but even more by the tight coordination of items from two spheres of life normally not conceptualized together.

(7) Die Stadt Göttingen ist berühmt für ihre Würste und Universität. The town of Göttingen is famous for its sausages and university.

In his typological survey, Wälchli identifies coordination ellipsis of determiners in coordinated NPs as a cross-linguistically frequent symptom of natural coordination (cf., e.g., Engl. the house and garden). Another formal symptom with an even higher degree of structural density is group inflection as in (8a) for Basque and (8b) for Modern German.

- (8) Group inflection
 - a. [helburu eta erizpide]en [purpose und principle]GEN.PL.DEF

'to the purposes and principles' (Basque; cited from Wälchli 2005: 4.2.1)

- b. [...] *durch* [Hoch und Tief]s eines Kabarettistendaseins DET.NOM.PL [up and down]PL
 - '[..] through the up-and-downs of a cabaret artist's life.' (Cosmas, Tagged C1, NON08)

^{10.} Cf. also Schrodt (2005) who has a similar concept in mind when he speaks of Term-Qualität in explaining singular verb agreement with coordinated NPs in a unified reading.

A related and extremely densified construction is possible in (E)NHG: coordination ellipsis of bound morphemes. Here, a bound morpheme in the preceding conjunct can be omitted as a kind of catalepsis accessing word-internal morphological structure and presupposing a high degree of morphological analysis on the part of the writer. This phenomenon is marked by a hyphen in Example (9) from Kempf (2010: 352, 355f).

```
(9) Catalepsis of bound morphemes
                                                              (cf. Kempf 2010)
                       und Henckers
    cf. [[Richt][er][s] und [Henk][er][s]]
    '[judge- and hangman]GEN.SG' (-er formative for agent nouns, genitive -s)
```

Conspiringly parallel to coordination ellipsis of determiners, this phenomenon has its peak in the 17th century and is subsequently abandoned again. The three types of densification illustrated in (7)–(9) show that tightness of coordination might well be regarded as a gradient with coordination ellipsis of determiners as a moderate type and with group inflection, ellipsis of bound morphemes and co-compounds as more extreme forms.

According to Wälchli, there are two ways to achieve tight coordination: by minimal distance or by symmetry. Asymmetric marking (i.e., coordination ellipsis) is cross-linguistically the most frequent solution when relations of natural coordination are expressed. It guarantees density and formal marking of morphosyntactic features at the same time - though at the expense of symmetry. ENHG is on a par with this tendency and uses asymmetric determination (coordination ellipsis) more freely with natural coordination. As discussed in Section 1 & 2.1, Modern Standard German constrains asymmetry to matching morphosyntactic features. It may also opt for symmetry without determiners, especially in binomials (wie Hund und *Katz* 'like dog and cat = always quarrelling') and as a makeshift solution in cases of mismatching features (Hund und Katzen geht es gut 'dog(M):SG and cat(F):PL are well'). Though it was not included in the present corpus analysis, symmetry without determiners is an option characterizing binomials in earlier periods of German, too (cf. Hüpper et al. 2002).

Although natural coordination is a concept not easy to operationalize, I follow the suggestion of an anonymous reviewer and combine the variable coordination ellipsis versus double determination quantitatively with the variable natural versus accidental coordination. In annotating natural versus accidental coordination, I closely followed Wälchli's semantic, pragmatic and discursive criteria introduced above. As coordination ellipsis dominates clearly in those constellations with matching forms (constellations I & II > 80%, see Table 4 above), I only consider the extreme constellation of mismatching forms and features (III). Table 7 shows the results for both corpora, the distributions differ significantly from chance (according to chi-square tests, Yates' p = 0). The assumption underlying my line of argument is that there should be a rather constant proportion of natural coordination vs. accidental coordination within similar text types over time. This is confirmed in Table 7 in a comparison of the two corpora, BonnC and GerManC. Moreover, cases classified as natural coordination on semantic or pragmatic grounds are more likely to occur with coordination ellipsis (tight coordination). Cases classified as accidental coordination on semantic or pragmatic grounds are clearly more likely to occur with separate determiners. Thus, the lack of natural coordination is a good predictor of double determination. In contrast, natural coordination tends to co-occur with ellipsis even in cases of a formal mismatch. While natural coordination shows the same percentage of ellipsis in both corpora (due to the rise within the Bonn Corpus and the decline within GerManC), there is a slight change of accidental coordination towards a higher portion of ellipsis in GerManC, beginning to blur the former semantic-pragmatic regularity.

Table 7. Correlation of functional and formal type of coordination in BonnC and GerManC

	Form	Function natural coordination	Accidental coordination
BonnC		146	79
	tight: ellipsis	96 (66%)	5 (6%)
	loose: double det	50 (44%)	74 (94%)
GerManC		102	65
	tight: ellipsis	67 (66%)	10 (15%)
	loose: double det	35 (44%)	55 (85%)

The examples and quantitative findings discussed in this section illustrate that coordination ellipsis with mismatching feature specifications is favoured by semantic, pragmatic and discursive factors in (E)NHG. These factors can be bundled under the term natural coordination. In this light, coordination ellipsis turns out as a means of densification and by this, a formal manifestation of natural coordination especially favoured in (E)NHG. Though natural coordination is prone to coordination ellipsis till today, its domain has become restricted; morphological constraints (no feature mismatch) are higher-ranked than natural coordination.

As the quantitative corpus analysis revealed, coordination ellipsis despite morphosyntactic feature mismatches applied quite freely in ENHG texts and increased and decreased within (E)NHG. In the next section, I discuss the implications of this there-and-back change regarding the grammaticalization of determiners.

Coordination ellipsis and grammaticalization of determiners

The there-and-back change of coordination ellipsis in (E)NHG noun phrases poses a problem to both potential explanative factors discussed here, the internal factor grammaticalization, and the external factor codification, because both assumptions presuppose a straightforward decline. Before addressing this problem, I present both ideas in more detail.

Internal factors: From semantic-pragmatic 4.1 to morphosyntactic conditioning

Demske (2001) also observes the greater degree of freedom of coordination ellipsis in ENHG and interprets the loss of this option in contexts with a feature mismatch in MSG as one symptom (among others) for the transition from semantic to morphological conditioning of determination and inflection within the noun phrase.¹¹ She states (2001: 103; my translation):

Whilst the relation between determiner and noun is exclusively semantically based, a single expression of the determiner suffices to mark the definiteness or indefiniteness of the noun phrase as a whole. [...]

Only as the relation between determiner and noun is reinterpreted as not only semantically but also morphologically grounded, each conjunct must have its own determiner. 12

Thus, a change is postulated from semantically based definiteness of the coordinative structure that allowed coordination ellipsis in contexts of natural coordination (constructio ad sensum) towards morphosyntactically based definiteness which exacts double determination in contexts of feature mismatch and overrules natural coordination (constructio ad formam). Hennig observes the same tendency in the conditioning of other types of ellipsis and embeds her findings in the more comprehensive concepts aggregation (i.e., pragmatic/semantic conditioning) versus integration (i.e., grammatical conditioning) (see Ágel and Hennig 2006: 28ff, Hennig 2009, and Czicza and Hennig 2013 for details).

^{11.} This is part of her argumentation for the rise of the DP in ENHG which I cannot discuss in detail here (see Haspelmath 1994 for a critical discussion of ascribing head status to determiners from a grammaticalization perspective).

^{12.} German original: "Solange die Relation zwischen Artikelwort und Nomen ausschließlich semantisch basiert ist, genügt in einer Koordinationsstruktur der einmalige Ausdruck des Artikelworts, um die Definitheit oder Indefinitheit der gesamten nominalen Phrase anzuzeigen." [...]

[&]quot;Erst als die Relation zwischen Artikelwort und Nomen als nicht nur semantisch, sondern auch als morphologisch begründet umgedeutet wird, muss [...] jedes Konjunkt ein eigenes Artikelwort aufweisen."

This change can be interpreted as a sign of the reanalysis of definiteness as morphologically grounded. The change is illustrated in (10) based on examples from above in (2a and c)

- (10) constructio ad sensum der Vater und Mutter 'the:м.sg father(м):sg and mother (F):sG' seinen Leib und Seele 'his:M.SG body(M):SG and soul(F):SG'
 - → constructio ad formam der Vater und die Mutter 'the:M.SG father(M):SG and the:F.SG mother(F):sG' seinen Leib und seine Seele 'his:M.SG body(M):SG and his:F.SG soul(F):sG'

The weakening of semantic-pragmatic conditioning of coordination ellipsis in favour of morphosyntactic conditioning can easily be integrated in a grammaticalization perspective (cf. Himmelmann 1997, Flick and Szczepaniak this volume). It involves three developments characteristic for increasing grammaticalization:

- formalization and automatization of determination: coordination ellipsis could be conditioned by semantic, pragmatic and discursive factors in (E)NHG and applied quite freely across morphosyntactic features. These semantic-pragmatic factors have become restricted by morphological factors in MSG. Separate determiners occur automatically where morphosyntactic features are in conflict.
- 2. Thus, the **obligatoriness** of determiners within coordinate structures increases as the domains decrease in which coordination ellipsis can apply freely.
- 3. The semantic and structural **scope** of definiteness decreases with the generalization of double determination within coordinate structures (coordinate structure as a whole [semantic] > conjuncts determined separately [morphological]).

Regarding the last point, however, and on the level of the global coordinate structure, one could also argue more ambivalently drawing on the parameter fusion: The degree of fusion in definiteness marking decreases for natural conjuncts as soon as the option to mark tight coordination by coordination ellipsis is lost for conjuncts with mismatching features.

Nevertheless, from a global perspective on the context generalization of definiteness marking from Old High German on (Szczepaniak 2011) or cross-linguistically (Himmelmann 1997, Flick and Szczepaniak this volume), it makes more sense to emphasise the increasing automatization, obligatorification and scope reduction that go along with the restriction of coordination ellipsis.

Another reason to do so is that there are further symptoms for changes in the function and expression of definiteness in (E)NHG on the constructional level. Firstly, the extensive syncretism and zero marking of feminine/neuter determiners in MHG and ENHG is reduced towards MSG; distinctive variants of articles and

strong adjectives are selected for the emerging standard variety. Thus, contexts with mismatching features but matching forms as in (11) (from [2d] above) with an indefinite article ein and an adjective jemerlich, both zero marked for 'f/n.sg.nom/ AKK', are reduced to a large extent. This produces more contexts of mismatching forms & features that demand separate determination.¹³

```
(11) ein
                   iemerlich
     a:F/N.SG(AKK) miserable:F/N.SG(AKK) lamentation(F):SG(AKK)
      und geschray
                                      (BonnC, East Franconian, Pillenreuth 1463)
                screaming(N):SG(AKK)
      > eine jämmerliche Klage und ein jämmerliches Geschrei
```

Secondly, the characteristic division of morphosyntactic labour in Modern Standard German NPs regarding the inflection of determiners and adjectives develops at the same time as coordination ellipsis becomes restricted to matching features (Demske 2001, Klein 2007). Different sets of adjective paradigms (more distinctive "strong" forms and less distinctive "weak" forms) are selected depending on the morphological distinctness of the determiner.14

Thus, constraining coordination ellipsis to matching features could be just another part in the overall development of determiner grammaticalization that results in an obligatory morphosyntactically conditioned slot for determiners within each NP (cf. Flick 2017). In this way, the obligatorification of determiners precisely in the condition of mismatching features could play a part in enforcing an overall development pervasive in the grammar of German: the framing principle that underlies not only NPs (see Ronneberger-Sibold, e.g., 1994, 2010 and this volume; Ágel 2000). With the rise of an obligatory slot for determiners, the framing principle is strengthened, because determiners provide the number, gender and case information necessary for the functioning of the nominal frame (Ronneberger-Sibold 1994). This observation corresponds nicely to Himmelmann's claim (1997: 33, see also Ágel 2007: 46 or Fried 2010: 191), that any grammaticalization process consists of a combined change on the level of individual grams (here the evolving determiner system) and on the level of constructions (here the emerging NP frame). To understand the emergence and development of determination as a functional category, an analysis that closely aligns both levels is the most promising.

^{13.} An interesting thread to follow would be a possible correlation between the degree of formal distinctness in determiners and modifiers and the restrictions on coordination ellipsis in a language. A good candidate would be Low German with extensive syncretism (see also footnote 3 above).

^{14.} If the determiner is unmarked for gender, number and case, the adjective is in the strong form: ein jämmerliches Geschrei 'a miserable screaming'. If the determiner is marked, the adjective takes up the less distinctive weak form: das jämmerliche Geschrei 'the miserable screaming'.

In a wider context, the development of determination in conjoined NPs implies increasing morphosyntactic explicitness, a feature Hotzenköcherle (1962) proposes as a leading characteristic of grammatical changes towards Modern German. Explicitness might be more useful from a recipient perspective – more specifically, from a reading perspective, as it allows to reliably recognize morphosyntactic constituent borders and relations.¹⁵

Changes from semantic/pragmatic towards morphosyntactic conditioning have also been observed for other agreement conflicts (cf. Fleischer 2012 and Birkenes et al. 2014 for hybrid nouns, Dammel 2015 for number agreement of verbs with conjoined NPs) as well as for other types of ellipsis on and above clause level (cf. Hennig 2009, Czicza and Hennig 2013). Example (12) from Hennig (2010: 953) shows coordination ellipsis above clause level. In the second clause, a subject pronoun is topic-dropped although there is a mismatch in its case features with the dative pronoun *Dier* in the preceding clause.

(12) und Gott geben das Dier bei der Entbindung and god give:INF may:PRS.SUBJ.3sG that you:DAT.SG at the delivery nichts weiter paßiert und ___ glücklich die sache verleben nothing serious happens and [you:NOM.SG] happily the affair survive:INF machst may:prs.2sg 'And god may give that nothing serious happens to you in childbirth and (that you) may happily survive the affair.'

This type is not infrequent in Hennig's sub-corpus of texts of closeness ("Nähetexte", i.e., texts written by less educated writers in informal social settings), while it is missing in her sub-corpus of texts by educated writers in formal social settings (texts of distancy, "Distanztexte"). Thus, Hennig interprets these types of coordination ellipsis as specifically orate structures ("nähesprachlich") obliterated by the explicitness requirements scripticism brings into Modern Standard German. It is interesting in this context that her orate corpus texts provide but few examples of coordination ellipsis in NP coordination. This construction might be less closely

^{15.} In a similar spirit, Giesecke (1992) interprets the increasing morphosyntactic explicitness of ENHG as a symptom of the increasing decontextualization of text production in a culture on its way to a literate culture. The observation can be linked to ideas such as Ong's (1982) concept of orality vs. literacy (see also Maas 2010), and Koch's and Oesterreicher's (1985) conceptual orality vs. conceptual literacy (see also Ágel's and Hennig's (2006) operationalization of the latter model). Related ideas from a cross-linguistic perspective are Givon's (1979: 222f, 228-231) opposition between pragmatic and syntactic mode and Bisang's (2014) distinction between overt (i.e. explicit grammatical) and hidden complexity (i.e. structural ambiguity that can only be dissolved by pragmatic inference).

connected to orate narration patterns than other types of coordination ellipsis, and rather linked to patterns of narration and explanation typical for more literate texts.

We could rely on explanations based on increasing grammaticalization and morphosyntactic explicitness with more comfort if a straightforward decrease of coordination ellipsis in NP coordination could be observed. But what to do with the there-and-back pattern the diachronic quantitative analysis (2.2) brought to the fore? It might be best to interpret the temporary increase in coordination ellipsis with mismatching features as an indicator of a transitional phase: In order to apply coordination ellipsis selectively, be it under semantic-pragmatic or morphosyntactic conditions, language users must have developed an awareness of the compositionality of the global coordinative structure. This awareness might come easier in literate than in orate mode (cf. Giesecke's 1992 "syntax for the eyes"). This is particularly plausible as (E)NHG is an experimental phase also regarding the densification of text structures and syntactic relief building (Betten 1987: 162f). Determiner coordination ellipsis as a marker of natural coordination groups in this line of argumentation with other temporary (E)NHG phenomena such as auxiliary drop (Breitbarth 2005) or coordination ellipsis of bound morphemes (Kempf 2010 and Section 3). All these phenomena of densification involve a high degree of syntactic and morphological analysis of constituents or constituent parts as internally structured on the part of the writers. But as these densification strategies do not go without costs on the recipient side, more explicit "syntax for the eyes" (Giesecke 1990) prevails on the long run towards written Modern Standard German.

Given the analysis as complex coordinative structures by writers and readers in the case of coordination ellipsis, morphosyntactic mismatches should stand out more easily in written texts than in speech. Thus, increasing reading and preparing texts for print are factors that lead to both, experimentation with densifying syntactic structures and an increasing awareness of morphosyntactic mismatches. These mismatches are quite salient at the short structural distance of NP coordination, which might have consequences for a third factor: Increasing teaching practice and codification, i.e., the attempts of experts to provide generalizable guidelines for students, might be added to the scenario.

Social factors: Obligatorifiation by codification and stigmatization?

The line of argumentation in the preceding and following section can be embedded in a more general discussion. ENHG and early NHG have been discussed as the period of "Verschriftlichung des Lebens", of becoming a literate culture with material effects of literacy on everyday life (Erben 1970, Besch 1980), e.g., the invention and spread of printing as well as increasing school education. This overall

cultural change has two kinds of consequences: one is increasing linguistic awareness (von Polenz 1995) which is visible, e.g., in codification and stigmatization; another comes in the shape of "Verschriftlichung des Sprechens" (Koch/Oesterreicher 1994), which means that language structure changes in itself by serving the newly developing literate purposes (cf. Czicza and Hennig 2013 for more extensive discussion). The following observations can be nicely placed in this overall picture.

As we have seen in the preceding sections, coordination ellipsis is subject to semantic and pragmatic factors and thus hard to codify. Engel (1922) must have had this problem in mind when he gave a tentative description of the influence of natural coordination on determiner ellipsis. Note that his mild verdict comprises only those cases with matching feature specifications.

Engel (1922: 91): Ob in Verbindungen wie der Vater und der Sohn das Geschlechtswort regelmäßig zu wiederholen oder allenfalls wegzulassen ist, ist mit einer durchgreifenden Regel nicht zu entscheiden. Je inniger die Verbindung, je vollständiger die innere Einheit, desto eher darf, ja muß die Wiederholung unterbleiben. Die Griechen und Römer hatten besondere Formen für den Ruffall ist nicht unrichtig, denn hier liegt eine begriffliche Gemeinschaft vor; in einem Satze wie Die Griechen und Römer haben Kriege miteinander geführt wird das Fehlen eines zweiten die als Härte empfunden. [...]

'Whether in connections such as **the father and the son** the article is regularly to be repeated or always to be omitted is not determinable with a general rule. The closer the connection, the more complete the internal unity, the more may, even must the repetition be avoided. The Greeks and Romans had special forms for the calling case [vocative] is not incorrect as here a conceptual union is present; in a sentence such as The Greeks and Romans were at war with each other the lack of a second die is felt as hardness.'

In contrast to this, there exists a rich corpus of metalinguistic comments regarding coordination ellipsis with mismatching features. The phenomenon is constantly commented on quite from the beginning of coeval grammar writing. The grammarians are remarkably in unison in discouraging their readers from applying coordination ellipsis to mismatching features. For exemplification, I give Aichinger's and Adelung's recommendations here at length:

> Aichinger (1754: 370) §.331. "Mehrere fubftantiua eines generis und numeri nehmen mit einem einzigen Artikel vorlieb, als: der Vatter, Sohn und heilige Geift. Sind fie aber im Geschlechte unterschieden: so muessen sie wenigstens in ungebundener Rede den Artikel wiederholen, als: der Bruder und die Schwefter"

> 'several nouns of the same gender and number are satisfied with one article, as the father, son and holy ghost. But if they diverge in gender, they must - at least in prose – repeat the article, as: the brother [m.] and the sister [f.]'

Adelung (1782: 305): "Sind die Substantiva verschiedenen Geschlechtes und verschiedener Zahl, so ist die Wiederhohlung nothwendig, der Tod, die Auferstehung und die Verdammniß."

'If the nouns are of different gender and different number, repetition is inevitable, the[m.] dead[m.], the[f.] resurrection[f.] and the[f.] damnation[f.].

A comprehensive analysis of a diachronic sample of grammars and guidebooks is summarized in Table 8. It shows that the above-cited two authors are exemplary for most of the other grammarians.

Table 8. Coordination ellipsis in grammars and guidebooks. (*refusal of coordination ellipsis, / silence on the topic, and ✓ approval)

prescription vs. use) Engel (1922: 91) ** with dissimilar grammatical features (even where forms an identical) Matthias (1929: § 147) * with dissimilar grammatical features; differentiates where forms are identical: *article, ✓ modifying adjective Wustmann (1903: 280) *** with dissimilar grammatical features (even if form is		
Bödiker (1746: 136) * where gender differs Gottsched (³1752: 372f.) * where gender differs (elsewhere coordination ellipsis recommended) Aichinger (1754: 370) (*) where gender and/or number differ (at least in prose) Adelung (1782: 305) ** where gender and/or number differ, even if forms are identical Bauer (1828: 158) / (recommends coordination ellipsis across the board) Blatz (1896: § 61f.) * "today" with dissimilar grammatical features (differentiates prescription vs. use) Engel (1922: 91) ** with dissimilar grammatical features (even where forms at identical) Matthias (1929: § 147) * with dissimilar grammatical features; differentiates where forms are identical: *article, ✓ modifying adjective Wustmann (1903: 280) *** with dissimilar grammatical features (even if form is identical); even with matching grammatical features, general recommends repetition Duden-Grammar (1959: 563) ** "today" with dissimilar grammatical features	Gueintz (1641)	/ not mentioned
* where gender differs (elsewhere coordination ellipsis recommended) Aichinger (1754: 370) (*) where gender and/or number differ (at least in prose) ** where gender and/or number differ, even if forms are identical * detail detai	Schottelius (1641: 693, 698f)	* where gender differs
recommended) Aichinger (1754: 370) (*) where gender and/or number differ (at least in prose) Adelung (1782: 305) ** where gender and/or number differ, even if forms are identical Bauer (1828: 158) / (recommends coordination ellipsis across the board) Blatz (1896: § 61f.) * "today" with dissimilar grammatical features (differentiates prescription vs. use) Engel (1922: 91) ** with dissimilar grammatical features (even where forms at identical) Matthias (1929: § 147) * with dissimilar grammatical features; differentiates where forms are identical: *article, ✓ modifying adjective Wustmann (1903: 280) *** with dissimilar grammatical features (even if form is identical); even with matching grammatical features, general recommends repetition Duden-Grammar (1959: 563) ** "today" with dissimilar grammatical features	Bödiker (1746: 136)	* where gender differs
Adelung (1782: 305) ** where gender and/or number differ, even if forms are identical Bauer (1828: 158) / (recommends coordination ellipsis across the board) Blatz (1896: § 61f.) * "today" with dissimilar grammatical features (differentiates prescription vs. use) Engel (1922: 91) ** with dissimilar grammatical features (even where forms at identical) * with dissimilar grammatical features; differentiates where forms are identical: *article, ✓ modifying adjective Wustmann (1903: 280) *** with dissimilar grammatical features (even if form is identical); even with matching grammatical features, general recommends repetition Duden-Grammar (1959: 563) ** "today" with dissimilar grammatical features	Gottsched (³ 1752: 372f.)	•
identical Bauer (1828: 158) / (recommends coordination ellipsis across the board) Blatz (1896: § 61f.) * "today" with dissimilar grammatical features (differentiates prescription vs. use) Engel (1922: 91) ** with dissimilar grammatical features (even where forms at identical) Matthias (1929: § 147) * with dissimilar grammatical features; differentiates where forms are identical: *article, ✓ modifying adjective Wustmann (1903: 280) *** with dissimilar grammatical features (even if form is identical); even with matching grammatical features, general recommends repetition Duden-Grammar (1959: 563) ** "today" with dissimilar grammatical features	Aichinger (1754: 370)	(*) where gender and/or number differ (at least in prose)
Blatz (1896: § 61f.) * "today" with dissimilar grammatical features (differentiates prescription vs. use) Engel (1922: 91) ** with dissimilar grammatical features (even where forms as identical) ** with dissimilar grammatical features; differentiates where forms are identical: *article, ✓ modifying adjective ** with dissimilar grammatical features (even if form is identical); even with matching grammatical features, general recommends repetition Duden-Grammar (1959: 563) ** "today" with dissimilar grammatical features	Adelung (1782: 305)	-
prescription vs. use) Engel (1922: 91) ** with dissimilar grammatical features (even where forms at identical) Matthias (1929: § 147) * with dissimilar grammatical features; differentiates where forms are identical: *article, ✓ modifying adjective Wustmann (1903: 280) *** with dissimilar grammatical features (even if form is identical); even with matching grammatical features, general recommends repetition Duden-Grammar (1959: 563) ** "today" with dissimilar grammatical features	Bauer (1828: 158)	/ (recommends coordination ellipsis across the board)
identical) Matthias (1929: § 147) * with dissimilar grammatical features; differentiates where forms are identical: *article, ✓ modifying adjective Wustmann (1903: 280) *** with dissimilar grammatical features (even if form is identical); even with matching grammatical features, general recommends repetition Duden-Grammar (1959: 563) ** "today" with dissimilar grammatical features	Blatz (1896: § 61f.)	* "today" with dissimilar grammatical features (differentiates prescription vs. use)
Wustmann (1903: 280) *** with dissimilar grammatical features (even if form is identical); even with matching grammatical features, general recommends repetition Duden-Grammar (1959: 563) ** "today" with dissimilar grammatical features	Engel (1922: 91)	** with dissimilar grammatical features (even where forms are identical)
identical); even with matching grammatical features, general recommends repetition Duden-Grammar (1959: 563) ** "today" with dissimilar grammatical features	Matthias (1929: § 147)	e e e e e e e e e e e e e e e e e e e
·	Wustmann (1903: 280)	identical); even with matching grammatical features, generally
Duden-Grammar (2016: 914) ** with dissimilar grammatical features; only exception:	Duden-Grammar (1959: 563)	** "today" with dissimilar grammatical features
✓adjectives with matching form in masculine & neuter gend	Duden-Grammar (2016: 914)	** with dissimilar grammatical features; only exception: √adjectives with matching form in masculine & neuter gender

Several observations can be drawn from these findings: Firstly, we can state with Elspaß (2005: 23 who refers to other stigmatized phenomena) that "[..] these features clearly were in use – otherwise nobody would have bothered to declare them 'incorrect'." Secondly, the timing of the first stigmatizations corresponds to the decline of coordination ellipsis with diverging features in the corpora. However, though the chronology fits nicely, we should not draw causal conclusions from it. It is well known from other changes such as sentence internal capitalization (Bergmann 1999) or *e*-epithesis in strong verbs (Imsiepen 1983) that grammarians often react to changes only when they are almost completed. Though there is no conclusive evidence for a crucial part played by the grammarians in the restriction of coordination ellipsis, we can observe their earlier awareness and stigmatization of coordination ellipsis in mismatching NPs compared to other agreement mismatches such as hybrid nouns (Birkenes et al. 2014) or verb number with coordinated NPs. As argued above, mismatches between coordinated NPs might be more salient than other types of agreement mismatch due to their parallelism and minimal structural distance. In the following quote from Bödiker (1746: 136) for instance, not only a comparison to Latin is drawn, which is described as Planks Type C and refused as a model, but it is also argued very decidedly in prescriptive terms against coordination ellipsis with mismatching features. In all the examples the author gives, he dissolves coordination ellipsis, but does not recognize or address the possible number mismatch in verb inflection (3sg instead of 3pl, cf. Findreng 1976, Dammel 2015).

Bödiker (1746: 136, bold print and feature specifications AD):

Denn es ift mit der teutschen Sprache nicht so, wie mit der lateinischen, daß Subftantiva, welche ein verschiedenes Genus haben, ein Adiectivum, das nur mit einem von den Substantivis in Genere uebereinkommt, bei sich haben koennen. Im Teutschen muß in solchem Falle der Artikel und das Adjectivum, oder was demfelben gleich ift, wiederholet und in das Genus des Nominis gestellet werden, als, der Haß[M.SG] und Feindschaft[F.SG] der Gottlosen ist[3.SG.PRS] kein großes Ungluekk; dafuer muß man fagen : Der Haß und die Feindschaft der Gottlosen ist kein groffes Ungluekk. Man muß nicht fprechen : meine Sele[F.SG] und Leib[M.SG] ift[3.sg.prs] krank; fondern, meine Sele und mein Leib ift krank. Es ift unrecht, wenn man fpricht: Die kurze Luft und Lachen bringt[3.sg.prs] ewigen Jammer. Es muß heißen Die kurze Luft, das kurze Lachen bringt ewigen Jammer.

Literally: Because it is with the German language not the same as with Latin that nouns that have a diverging gender can have with them an adjective that matches only with one of the nouns in gender. In German in such a case, the article or the adjective or what is similar to it must be repeated and adapted to the gender of the noun, as the hate and hostility of the godless is no great misfortune; instead one must say: The hate and the hostility of the godless is no great misfortune. One may not speak: my soul and body is ill; but my soul and my body is ill. It is wrong if one speaks: The short lust and laughter brings eternal misery. It must be said: The short lust, the short laughter brings eternal misery.

We lack direct evidence for the teaching practice at the time, but it seems to be an obvious strategy to rely on in teaching to absolutize regularities based on morphosyntactic relations - which are much easier to fathom in hard and fast rules - at the expense of regularities based on more complex and evasive semantic-pragmatic factors. Thus, codification and didactics can be regarded as supportive factors for accomplishing the restrictions on coordination ellipsis that developed towards Modern Standard German.

However, as already stated for grammaticalization, codification cannot explain the temporary increase of coordination ellipsis during (E)NHG, either. This increase might be explained with reference to an awareness for structural analysis arising stepwise in a speech community on its way to a literate culture. First, new text types and loan vocabulary favoured an increase in the frequency of NP coordination (e.g. explanative second conjuncts). Language users could observe more easily from stative written texts that there exist complex coordinate structures with markers of identical functions (definiteness) that could be spared. Only secondarily, these functions were perceived as not fully mapping (definiteness yes, but not gender and number) and as in need to be spelled out separately. Both steps are compatible with the advancing grammaticalization of definiteness from semantic-pragmatic towards morphosyntactic conditioning. This process may have been supported by social factors such as codification and language teaching, as today's formal constraints on coordination ellipsis may have been favoured by the attempt to formulate general rules in didactic contexts.

Conclusion: Mind the gap

Investigating asymmetric determination (coordination ellipsis) in conjoined NPs, and thus, taking absence as evidence for grammaticalization processes yielded some interesting results. In the conditioning of (E)NHG coordination ellipsis, semantic-pragmatic closeness and expectedness to co-occur (natural coordination) applied more freely. Towards Modern Standard German, it has become constrained by morphosyntactic restrictions. This change is not a straightforward one; coordination ellipsis with diverging grammatical features (as in der Vater und Mutter 'the father(M) and mother(F)') increased within (E)NHG as a means of syntactic densification and decreased again through the 18th century.

I explained this *there-and-back change* by a combination of different factors: (1) On their way from an orate to a literate language, the writers and printers of (E)NHG experimented with new constructions that allowed densification and required a high level of structural analysis - easiest to gain from something as static as written language. (2) In the advancing grammaticalization of definiteness, context generalization progressed first on a semantic-pragmatic level in OHG and MHG, but during the ENHG period, it encroached upon the morphosyntactic level. While before, one determiner was enough to mark a coordinate structure that formed a semantic unit as definite, today's morphosyntactic conditioning demands separate determination wherever mismatching grammatical features are involved. (3) Towards Modern Standard German, a tendency to mark syntactic constituency in explicit, non-ambiguous ways is favoured by codification and didactics and observable in other syntactic phenomena as well. (4) This morphosyntactically driven explicitness and obligatorification of determiners in conjoined NPs is a building block in the constructionalization of the nominal frame, strengthening its reliability in providing gender and number information on the left periphery of each NP differing in these features from its sister.

Given this comprehensive picture arising from the findings, it can be stated from a methodological perspective that it turned out useful to have a look at the gap in investigating grammaticalization phenomena. In advanced stages of grammaticalization, what can be left out is at least as interesting as what becomes obligatory.

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SECTION III

"From definite into onymic article – and finally onymic classifier"

The rise of the onymic article in Early New High German

Areal factors and the triggering effect of bynames

Mirjam Schmuck

The rise of the definite article in Old High German (750-1050) is well documented, but little is so far known about the emergence of the onymic article, i.e. the definite article in combination with proper names, which represents a later stage in grammaticalization. This paper focuses on early instances of the onymic article and seeks to define the driving factors for the gradual spread of the definite article to proper names on the basis of transcriptions of witch trial records from the late 15th – 17th centuries. The underlying data covers the entire German-speaking area, including present-day Switzerland and Austria and thus allows an investigation of areal variation in article use in late Early New High German (1350–1650). It will be demonstrated that the grammaticalization is most advanced in (East) Upper German. For this core area, some parts of the Municipal Registers of Vienna are taken into account (entries from 14th - early 15th c.) as an additional source. To explain the areal distribution, it is argued that: (1) language-internally, the spread of the newly emerging onymic article is strongly dependent on case (oblique cases) and compensates for the early loss of inflectional case marking on proper names; (2) the rise of the onymic article is triggered by individual bynames; as these can mainly be traced back to common nouns in Upper German (e.g. occupational names). They therefore provide an ideal bridging context in the transition from definite article to onymic article.

Keywords: definite article, grammaticalization, demonstrative, proper names, Upper German

1. Introduction

The grammaticalization path for articles derived from demonstratives, which is the most common source (Himmelmann 2001), has been addressed from a typological perspective in several works, building on Greenberg 1978's definiteness cycle (e.g. Lehmann 1995, Himmelmann 1997, 2001, Heine/Kuteva 2006; van Gelderen

2007). Most attention has been paid to the transition from demonstrative to definite article, whereas later steps, including the expansion to proper names (definite article > onymic article) and the spread to generic contexts, are rather unexplored (but see Lyons 1999 and Schmuck forthc. for Germanic languages). As proper names are monoreferential and thus inherently definite units, the article fulfils a different function and has to be interpreted as an expletive marker (Longobardi 1994, Gallmann 1997, Sturm 2005: 114-120; for arguments against this claim see Karnowski/Pafel 2005).

In German, the grammaticalization of the definite article goes back to Old High German (OHG) and is more or less complete for common nouns by the end of the period. With the exception of names combined with an attributive adjective, where the article is syntactically conditioned (see Section 2.1), the onymic article, however, emerges no earlier than in Middle High German (MHG) in combination with names of rivers (e.g. MHG diu Musel 'the Moselle') and not until later, by the end of the ENHG period, does it occur in combination with personal names. Unlike the situation in most German vernaculars, in the case of personal names, the grammaticalization of the preceding onymic article has so far remained uncompleted in the standard language.

The gradual spread within the domain of common nouns in OHG is well documented in corpus-based studies (cf. Oubouzar 1992, 1997, Szczepaniak 2011, Szczepaniak/Flick 2015, Flick 2017, and Schlachter, this volume; cf. also Leiss 2000 on definite articles and aspect in OHG, Petrova, this volume, on definite articles in generic use, and Demske, this volume, on the development of weak definite articles). Less attention has so far been paid to the situation in MHG and ENHG, when the expansion to proper names took place. A first corpus-based attempt by Schmuck/Szczepaniak (2014) identified the following crucial determinants in this process:

- pragmatic aspects (emphasis, focus, derogatory function);
- grammatical factors (case, feminine gender suffixes, attributive adjectives/syntactic article, attributive genitives)
- areal factors (Upper German as a core area) (cf. also Bellmann 1990: 273–293 and Eichhoff 2000, map 76 for NHG).

This paper focuses on the emergence of the definite article in combination with personal names and attempts to define the main triggering factors and the small individual steps that are necessary in the gradual extension of the article from common nouns to proper names. The primary focus, at least at first glance, is on the closer investigation of the regional aspects of this change, more specifically the differences in the use of the onymic article and its relationship with the loss of case marking (Section 2). In a second step, drawing on data from the Municipal Registers of Vienna (early 15th century), the earliest instances of (not syntactically conditioned) onymic articles that occur in the East Upper German core area are discussed. In order to define the driving factors in the expansion of the definite article from common nouns to proper names, the role of bynames is discussed (Section 3). The paper concludes with a short summary of the main findings (Section 4).

Areal variation in the late 15th-17th centuries

Transcripts of witch trials as a database 2.1

This study is based on transcripts of witch trials that span the later ENHG period (1485–1689). The historical, partially verbatim transcripts of court records constitute an ideal source with which to investigate early attestations of the onymic article, which is primarily a property of the spoken language. In addition, transcripts of witch trials represent a widespread and – in all their different levels of elaboration (written notes, copies, and fair copies, cf. Topalović 2003, Szczepaniak/Barteld 2016) – to a large extent, comparable text type. The German data is taken from the edition by Macha et al. 2005; the Swiss data¹ consist of selected transcripts of witch trials and other criminal trials from the online archive Sammlung Schweizerischer Rechtsquellen, SSRQ (Collection of Swiss legal sources); the Austrian data include editions of individual witch trials (Ammann 1890, 1914; Byloff 1929; Ignatieff 2009; Scheutz et al. 2008).

Regarding the use of the onymic article, the status of surnames has to be considered. German surnames evolved from individual bynames that emerged in the late Middle Ages and spread within the German speaking area from southwest to the northeast (e.g. Debus 2009). By the 16th century, the period under investigation for this study, bynames had already become more or less stable, and had evolved to heritable surnames (see Figure 1).

^{1.} It is understood that, in the period under investigation, the national states of Germany, Switzerland, and Austria did not exist within their present territorial boundaries and that, linguistically speaking, we are dealing with Upper German dialects in the latter cases. However, the nationality terms are used here for an unambiguous reference and to distinguish the data from the different areas (cf. Section 2.1).

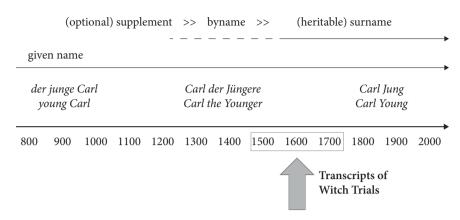


Figure 1. Transition from bynames to surnames (modified from Nübling et al. 2015: 145), with the temporal range of the witch trial transcripts shown on the timeline

Altogether, 2,869 personal names were collected from witch trial transcripts. Of these instances, the following had to be excluded before analysing the distribution of the onymic article (GN = given name, FN = family name):

- (a) listed, contextless names;
- (b) names occurring in a Latin context;
- (c) names combined with a determiner other than the definite article, e.g. diese Anna kockes 'this Anna Kockes'
- (d) names used as predicative noun in combination with heißen 'to be called' or genannt 'named', e.g. het Anna kockes geheißen 'would have been called Anna Kockes'.

To get a clearer picture, the following instances with high impact on article use were not considered in this study that focuses on case:

- (e) names modified by an attributive adjective that almost always exhibits the article in ENHG for syntactical reasons (and already did so in MHG), e.g. die alte Thymen [DEF + ADJ + FN] '(the) old Thymen';
- (f) names marked for feminine gender with the suffixes -sche or -in, which always (-sche) or quite often (-in) exhibit the onymic article, e.g. die Möllersche / die Müllerin [DEF-F + FN-gender suffix] 'Möller's/Müller's wife / daughter'.

Proper names combined with an attributive adjective behave differently in that attributive adjectives regularly exhibit the article for syntactical reasons (e.g. NHG die kleine Maria '(the) little Mary'). Contrary to English, where names modified by an attributive adjective remain mostly undetermined (compare little Mary, old Mrs Fletcher – but the inimitable Henry Higgins, cf. Quirk et al. 1985: 290, Huddleston/

Pullum 2002: 519f.), in German, the syntactically conditioned, so-called "secondary article" (DUDEN 2016: 301) is regularly used as of the MHG period, disregard name class (e.g. MHG diu edele Kriemhilt '(the) noble Kriemhild', in der grôzen Asîâ 'in (the) big Asia', cf. Paul 1919: 180). This claim is confirmed by the ENHG witch trials corpus, where the syntactically conditioned onymic article is rarely missing and if so, only in cases with anaphoric adjectives, mainly past participles in their origins such as bemelt 'abovementioned', obgenannt 'above stated' (e.g. gemelter Clas Hännsl'[the] abovementioned Clas Hännsl'). Non-anaphoric adjectives are hardly ever affected and the respective protocols are exclusively located in the Low German area (klein Tonnieß Jorgen 'little Tonnieß Jorgen' ALME 1630), which points to the fact that the syntactically conditioned article also spread from the south. However, further corpus-based research that, in particular takes into account earlier periods and Middle Low German sources is needed for clarification.

Names marked for feminine gender with the suffixes -sche or -in are typical for the 15th – 18th centuries (cf. Werth 2015a, Schmuck 2017). These gender suffixes have a high impact on the use of the onymic article, most notably the suffix -sche that is characteristic for the Low German area. In the witch trials corpus, -sche almost always exhibits the onymic article (92% = 234 of 255 instances), -in, by contrast, to a much lesser extent (44% = 68 of 156 occurrences). For the latter, however, the ratio of article usage is still much higher than for names without a feminine suffix (13% = 166 of 1,324 names). In the case of the suffix -sche, the regular use of the definite article can be explained by the fact that -sche (< Germanic *iska) is an adjectival suffix in its origins (e.g. NHG kindisch 'childish'). Thus, surnames derived from the suffix behave like an attributive adjective with the deleted head noun 'wife' or 'daughter' and therefore regularly use the article that is syntactically conditioned in those cases (e.g. die kiliansche (frau) [DEF-F FN-gender suffix ('wife')] 'Kilian's wife/daughter'). When combined with the gender suffix -sche, the onymic article is even retained in juxtaposition where it is usually absent (e.g. ihre mutter die Berndt bonesche [her mother DEF-F GN(M)+FN-gender suffix] 'her mother Berndt Bon's wife' vs. die gefangne dorothea dunckers [the captive GN(F)+FN] 'the captive Dorothea Dunkers'). (For further details and the distribution of the onymic article in combination with feminine gender suffixes in ENHG see Werth 2015a and Schmuck 2017).

Showing no or only little variation in the use of the onymic article, both names combined with attributive adjectives and names containing the gender suffixes -sche or -in were excluded in this study. After this (de)selection, the core sample contains 1,742 personal names in total, distributed fairly equally across the German-speaking area, including the Upper German areas of present-day Switzerland (High(est) Alemannic) and Austria (Central and Southern Bavarian) (see Figures 2 and 3).

Germany						
West Low German		East Low German				
total: 489	sample: 248	total: 311	sample: 179			
West Central German		East Central German				
total: 534	sample: 412	total: 250	sample: 110			
West Upper German		East Upper German				
total: 202	sample: 123	total: 202	sample: 128			
Switzerland		Austria				
total: 433	sample: 365	total: 448	sample: 177			

Figure 2. Dataset size and areal distribution of the examined transcripts



Figure 3. Location of witch trials in the data

Distribution of the onymic article 2.2

The data from the witch trials corpus underline the major impact of areal factors. The number of personal names combined with the definite article increases significantly as one moves from north to south through the German-speaking area. Whereas only 3% (East Low German) to 7% (West Low German) of personal names are determined in the Low German area during the ENHG period, in Central German this ratio increases to 6% and 14% (West and East Central German respectively), and in the Upper German regions it increases to as much as 26% (West Upper German) and 29% (East Upper German). Thus, the proportion of incidences of the onymic article doubles from Low to Central and again from Central to Upper German. The highest proportion of onymic articles is found in the High(est) Alemannic-speaking area (Switzerland) with 35% and, most notably, in Austrian transcripts (47%) where almost half of personal names take the onymic article (see Figure 4).

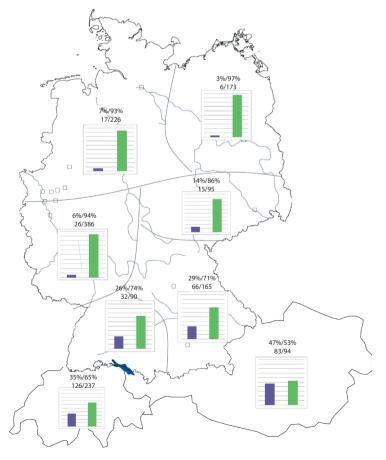


Figure 4. Areal distribution of the onymic article in the late 15th – 17th centuries (first bar: with onymic article, second bar: without onymic article)

Figure 5 provides a more detailed picture of the distribution of the onymic article by distinguishing between the locations of witch trials selected for investigation (only locations with ≥ 10 personal names that fulfil the criteria mentioned in 2.1 were taken into account).

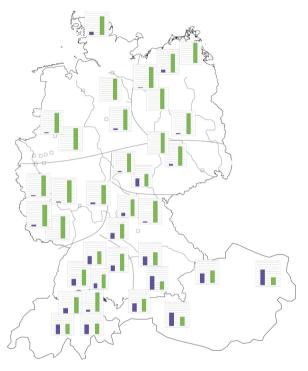


Figure 5. Detailed areal distribution of the onymic article in the late 15th – 17th centuries (first bar: with onymic article, second bar: without onymic article)

In the Low and West Central German data, where the definite article in combination with personal names is extremely rare, a noteworthy proportion can only be found in the transcripts from Flensburg 1608 and Güstrow 1615, both at 13%. Here, the onymic article is employed when referring to the accused persons (Anna Kockes and Trine Vielhueten) and their alleged accomplices. In these cases, the definite article alternates with the demonstrative (e.g. duße Anna kockes 'this Anna Kockes' [demonstrative + GN+FN]), which points to the fact that in northern transcripts, the definite article is primarily pragmatically conditioned and has a derogatory reading (on emphatic use cf. Schmuck in press); see (1).

(1) Hirvp is dorch Einhelligen Votis Des Erbarn Hereupon is by common consent the-M.GEN honourable-GEN Rades council-GEN

'Hereupon, by unanimous vote of the reputable council,

kockes condemnert vnd verordelt word[en] the-F.NOM [GN](F)-NOM [FN]-NOM condemned and convicted been Anna Kockes was condemned and convicted' (Flensburg 1608)

In the East Central German area, evidence of the onymic article is also rather scarce, with the exception of Georgenthal 1597, where the article occurs in 9 of 22 cases (41%) and is used to refer both to the accused (die Christina Thymen [DEF-F. NOM + GN(F) + FN) and to the alleged victims (dem henßle wehner [DEF-M.DAT + GN(M)+FN]), who are typically realized as dative or accusative objects.

A greater proportion of occurrences of the onymic article is found in the Upper German area, more specifically in East Upper German (particularly MUNICH 1600 [23 names out of 37, or 62%] and Ellingen 1590 [32 names out of 79, or 41%]), West Upper German (Leonberg 1641 [33%, or 8 names out of 24] and Rosenburg 1603 [29%, or 10 names out of 34]). The highest proportion of onymic articles is found in Austrian transcripts, more precisely in HAINBURG 1618 (10 names out of 15, or 67%) and Heinfels 1595 (10 names out of 17, or 59%). In the other Austrian locations, the onymic article also occurs frequently, accounting for 42% of names (39 of 92) in Kremsmünster 1657 and 38% (18 of 47) in Innsbruck 1485. In the West Upper German area (Swiss sources), personal names combined with the onymic article are mostly found in transcripts from the Cantons of Berne (OBERHASLI 1545: 48%, or 12 out of 25 names) and Grisons (Graubünden) (LAAX 1663 and Lumnezia 1659: 47%, or 82 out of 176 names when combined). The onymic article is less frequent in the Canton of Luzern (WILLISAU 1689: 23%, or 25 out of 107 names) and (at least in the underlying ENHG data) only rarely attested in the Canton of St. Gallen (SARGANSERLAND 1666 and WIL 1511: a combined total of 8%, or 4 out of 52 names). In Swiss sources, however, the use of the onymic article varies considerably. Thus, more widespread data is needed to get a more reliable picture of the situation in ENHG. Even today, the use of the definite article in combination with personal names differs from region to region. The onymic article is partly missing in Highest Alemannic, more precisely in a smaller area in the Canton of Grison and particularly in the southern part of the Canton of Berne (Bernese Oberland), where case inflection of personal names (accusative + dative ending -e(n), -un) as an archaic feature is partially retained (cf. Linguistic Atlas of German-speaking Switzerland [Sprachatlas der deutschen Schweiz, SDS] vol. 3, map 141, Bucheli Berger 2006).

In the Upper German transcripts in general, the use of the onymic article is no longer restricted to the accused and their alleged victims, but can also occur when referring to people involved in the proceedings but who are not parties to the case, or to members of the court; see (2).

(2) Aber <u>die</u> <u>Stainil</u> wolt daz nit duon und offenbart daz
But the-f.nom [fn] wanted that not do and reveals that
'But Stainil didn't want to do that and revealed that to

<u>der</u> <u>Magdalenen</u> und <u>dem</u> <u>Cristan</u> und auch dem
the-f.dat [gn](f)-dat and the-m.dat [gn](m) and also the-m.dat
Magdalena and Cristian and also to the

wirt Welfil Fasser.
publican [gn](m) [fn]

In short, this study, which builds on the results of Schmuck/Szczepaniak (2014) but also takes Swiss (High(est) Alemannic) and Austrian (Central and Southern Bavarian) sources into account, clearly reveals that Upper German areas, especially East Upper German (Austrian-Bavarian), are the core areas of grammaticalization, since their records contain the highest proportion of personal names combined with the onymic article, and that such occurrences are no longer restricted to certain pragmatic functions (emphasis, focus, denunciation).

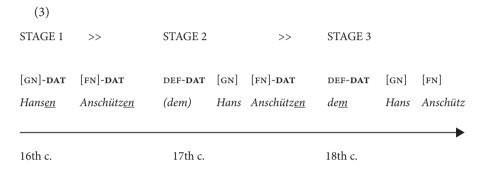
(Innsbruck 1485)

2.3 Triggering factors for accelerated grammaticalization in Upper German

Both language-internal and language-external factors have to be considered to account for the accelerated grammaticalization of the onymic article in (East) Upper German. The first factor to explore is the role of case and the *loss of case marking on* proper names as a language-internal determinant. Several grammarians have suggested case deflection as a driving factor (e.g. Behaghel 1923: 52-55, Paul 1919: 181f.). In OHG, before case marking was lost, proper names inflected like common nouns and – displaying an additional formal difference in nominative and accusative case (OHG Hartmuot – Hartmuotan) – proper names established even more case distinctions (Blatz 1900: 333–338, Nübling 2012, 2017, Ackermann 2018: 124–127). Loss of case marking starts with paradigmatic deflection as of the MHG period, i.e. the loss of case allomorphy and the implementation of dative/accusative-en (ENHG) and genitive-s (NHG) as "superstable markers" (Wurzel 1987, Dammel/Nübling 2006; Nübling 2012, Ackermann 2018: 126–131). Deflection culminates during the transition from ENHG to NHG, when syntagmatic deflection, i.e. the change from multiple (Hansen Anschützen) to single (Hans Anschützen / den Hans Anschütz) expression of case within the noun phrase, can be observed (cf. Ackermann 2014). The

publican Wölfel Fasser.'

data-based study conducted by Ackermann (2018: 114-189) reveals that deflection starts with the loss of the dative/accusative ending -en in mainly the 18th century, followed by the genitive-s that is omitted in proper names as of the 19th century. It is presumed that, in the long run, the loss of morphological case marking is compensated for by the inflection of the newly emerging onymic article, which evolves from an additional to an exclusive exponent; see (3).



The assumption that a correlation exists between case deflection on proper names and an expanded use of the onymic article is supported by Ackermann (2018: 153-154, 188-189) insofar as the article use factually increases when case inflection is lost, but only temporarily. In the long run, the expletive or onymic article is omitted as a result of standardization. In terms of Upper German dialects, where the onymic article is not stigmatized but retained, the underlying data equally reveal a high impact of case deflection on article use (see Figures 6 – 8). In the examined ENHG transcripts, case inflection is retained to the largest extent in the genitive (DE 89%, AT 77%, CH 36%)² but is frequently missing in the dative (DE 51%, AT 37%, CH 19%) and accusative (DE 44%, AT 20%, CH 11%) - a situation that is mirrored by the use of the onymic article. First, the article is in fact far more frequent in combination with direct (accusative) and indirect (dative) objects and (possessive) genitives than with items bearing the nominative case. Second, in the German transcripts, the onymic article is most common in the dative (30%) and the accusative (28%) followed by the genitive (21%), and by far scarcest in the nominative (10%). In the Swiss and Austrian transcripts, where not only the extent of case deflection but also the overall incidence of onymic articles is much higher, the (possessive) genitive stands out with a share of 69% (Swiss sources) and 68% (Austrian sources); it is followed by the dative (CH 41%, AT 58%) and accusative (CH 33%, AT 70%).³

^{2.} From now on, the following abbreviations will be used when referring to the data for these areas: CH=Switzerland, AT=Austria, and DE=Germany.

^{3.} Accusative objects (10 occurrences) and genitives (13) are quite rare in the investigated Austrian sources, and these figures are not highly informative.

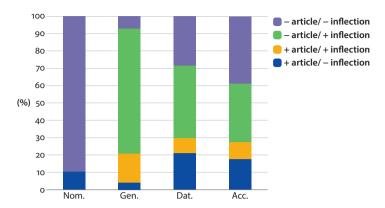


Figure 6. Inflectional case marking and use of the onymic article in transcripts from Central and Upper German (excluding Swiss and Austrian transcripts) n = 576

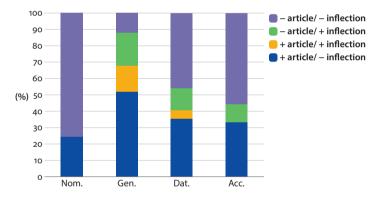


Figure 7. Inflectional case marking and use of the onymic article in transcripts from Upper German (Swiss sources) n = 364

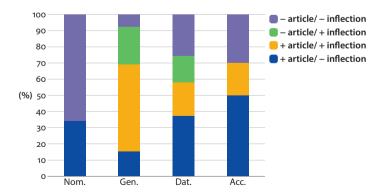


Figure 8. Inflectional case marking and use of the onymic article in transcripts from Upper German (Austrian transcripts) n = 148

Two main points about case marking can be deduced from Figures 6 – 8: first, that case deflection follows a certain hierarchy and second, that there are also observable areal differences in this deflection. The following case deflection hierarchy emerges:

(possessive) genitive << dative << accusative

Thus, genitive endings are retained much longer than dative and accusative case markers. 4 To explain this apparent deflection hierarchy, functional differences have to be considered. Other than accusatives and datives that mark grammatical relations (direct and indirect object), the genitive of personal names stands out as it is primarily a possessive marker and, as Ackermann (2014, 2018: 238–322) argues (cf. also Fuß 2011), the inflectional case marker -s is reanalysed as a clitic possessive marker. As for accusatives and datives, which are both syntactically conditioned, the prominence of dative case marking reflects the NP accessibility hierarchy of grammatical relations (cf. Primus 1993, Croft 2003: 142-155):

subject > direct object > indirect object > oblique

Thus, both, accusative and dative object markings are needed to specify participant roles, which is all the more relevant since we are dealing with animate referents that perfectly fit the roles of agent, patient, and recipient (cf. Croft 2003: 165–188, Krifka 2009). Subject and direct objects, however, can easily be distinguished by word order - a strategy well known from languages without morphological case marking such as English (e.g. John_[SBI] asks Sarah_[OBI] vs. Sarah_[SBI] asks John_[OBI]). This strategy is hardly applicable to indirect objects that occur in di-transitive constructions (e.g. $Sarah_{[SBJ]}gave\ the\ book_{[DIR_OBJ]}to\ John_{[INDIR_OBJ]};\ Sarah_{[SBJ]}\ intro-partial formula of the control of th$ duced John_[DIR OBI] to Peter_[INDIR OBI]), a fact which makes case inflection in the dative more valuable (cf. also Werth 2015b).

In terms of areal differences, it can be seen that case deflection is most advanced in the West Upper German transcripts from Switzerland (uninflected names in the accusative: CH 89%, AT 80%, DE 57%; in the dative: CH 81%, AT 67%, DE 49%; in the genitive: CH 64%, AT 23%, DE 11%). Thus, while case inflection of proper names continues to be retained in Austrian and especially in German

^{4.} A different picture of the deflection hierarchy arises from the data presented in Ackermann (2018: 133) according to which accusative endings are retained longer (late 17th c. accusative 58%, dative 48%). Obviously, this divergence can be ascribed to different ratios of verbal vs. prepositional cases: In contrast to Ackermann's sample where prepositional phrases prevail (57,6%, cf. Ackermann 2018: 157), verbal cases clearly dominate (72%) in the underlying data. In combination with prepositions case endings become redundant and are frequently dropped and, representing the predominant prepositional case in German, dative is primarily concerned (among the ten most frequent prepositions five govern the dative, three dative/accusative, two accusative, cf. Nübling 2005: 116).

transcripts, in transcripts from Switzerland, the onymic article has already taken over (Stage 3). Making use of both case inflection and the onymic article, proper names in Austrian transcripts represent a transitional state (Stages 2–3). Evidently, compensatory strategies are established before case endings are irretrievably lost (onymic article + inflectional ending: genitive: AT 54%, DE 17%, CH 16%; dative: AT 21%, DE 9%, CH 5%; accusative: AT 20%, DE 10%, CH 0%). If case deflection were considered the primary factor one would, however, expect loss of case marking to be most advanced in the East Upper German core area of article grammaticalization, which is clearly not the case (see Figure 9).

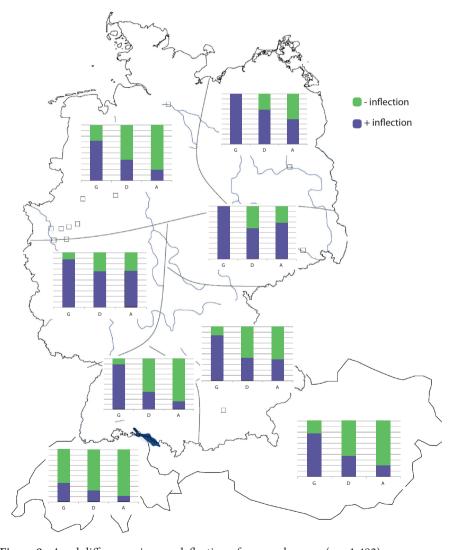


Figure 9. Areal differences in case deflection of personal names (n = 1,492)

As Figure 9 illustrates, case inflection is well-preserved in Central German whereas deflection prevails in Upper German. Loss of case inflection, however, is more advanced in West Upper German and typical for large parts of Low German (cf. also Shrier 1965), where, in addition, case marking on surnames is blurred by the fact that former case endings (-en/-s) have been refunctionalized as patronymic suffixes, cf. surnames such as Peters, Steffens, and Otten, Ottens (< Otto). This phenomenon is characteristic for large parts of the Low German area and West Low German in particular (cf. DFA, vol. 3: 4–79). This general picture points to the fact that case marking cannot be interpreted as a trigger but rather as a profiteer of the recently occurring onymic article. Additional factors, both language-external and language-internal, must therefore also be considered.

First, the onymic article has been discussed as a Central European phenomenon (Glaser 2008). It can therefore be assumed that early occurrences in the southern German-speaking area are possibly contact-induced and influenced by North Italian dialects (Swiss transcripts) or by Hungarian (Austrian transcripts), both of which use the definite article in combination with personal names. Given the fact that in Swiss German dialects the onymic article is less frequent in the south, areal influence can, however, hardly be conceived as a factor for High(est) Alemannic, especially as, in North Italian dialects, onymic articles are less grammaticalized and mainly restricted to feminine gender (Kubo 2016).

Second, it seems promising to examine the precise role of (more or less) stable bynames in fuelling the process of grammaticalization. This idea is not new but has already been posited by Behaghel (1923: 54). Bynames, which represent an intermediate stage between common nouns and proper names, are good candidates that might have triggered the appearance of the onymic article - an observation that most commonly affects bynames derived from appellatives, e.g. occupational bynames such as Schneider (< MHG snidære 'tailor'), bynames indicating place of residence, e.g. Gruber 'dweller in a pit' (< MHG gruobe 'pit'+-er) or bynames that are based on nicknames (e.g. Hans der Lange 'Hans the tall'). On a side note, this pathway for change, if accepted, would partly account for the areal distribution seen in ENHG inasmuch as occupational names are typical of the southern German-speaking area, gradually decreasing in frequency as one moves north, where the overwhelming majority of surnames are patronymic (e.g. Peters, *Petersen*). Therefore, the *predominant naming pattern(s)* must also be considered, particularly because diachronically speaking, the onymic article spread from surnames to full names and only then as a last step to given names (cf. Schmuck/ Szczepaniak 2014).⁵ Based on material extracted from the Municipal Registers of

^{5.} Behaghel (1923: 54) suggests the following diachronic expansion:

FN > GN > GN + FN.

Vienna (*Wiener Stadtbücher* ed. by Jaritz/Neschwara 2009) dating from the early 15th century, the following section will argue that (effectively unstable) bynames, situated as they were in between common nouns and proper names, played a crucial role in the transition from definite article to onymic article.

3. Early evidence for the onymic article and the role of bynames

3.1 Bynames in the Municipal Registers of Vienna (early 15th century)

Originating in 9th-century Italy, the custom of bearing bynames became a feature of the German-speaking area from the 12th century onwards, spreading from the south-west to the north-east (cf. Kunze 2003: 61–65). In Vienna, the transition from individual bynames to heritable surnames can be dated to the 14th–15th centuries. By the end of the 15th century, the overwhelming majority of bynames were supposedly heritable and considered more or less stable (cf. Linsberger 2012: 37f.). Bynames are of interest as they typically carry definite articles (and prepositions). In transition from bynames to surnames, however, the omission of definite articles and / or prepositions is one of the main indicators; see (4).

(4) Werner der Gärtner >> Werner Gärtner [GN](M) DEF [byname] [GN](M) [surname]

Between 1400–1409, only 8% of bynames occur without definite articles (or prepositions), but by the end of the 15th century the proportion of undetermined bynames increased to 95% (see Figure 10).

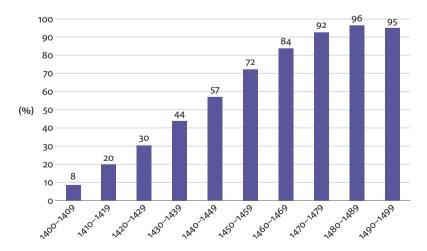


Figure 10. Proportion of bynames without a definite article and / or preposition in sources from Vienna (see Linsberger 2012: 37)

Given the fact that case is a crucial conditioning factor for the occurrence of the onymic article in an early stage of grammaticalization, as demonstrated in Section 2.3 above, it is easily conceivable that case is also decisive in the incremental disappearance of definite articles in front of bynames – a correlation not yet taken into account. The Municipal Registers of Vienna provide ideal material with which to investigate this possibility. The 4 volumes published so far cover the period 1395– 1417, a time span when, in the respective area, bynames were just about to develop from still motivated individual names into heritable surnames (see Figure 11).

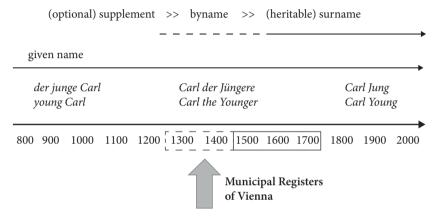


Figure 11. Historical transition from individual bynames to heritable surnames, with the date range of the Municipal Registers of Vienna shown on the timeline

In order to assess the influence of case on the retention or early loss of the article in the context of bynames, a random sample of the Municipal Registers of Vienna (vol. 4, entries number 2117-2194, dating from 1414-1415) was analysed. At that time, bynames without articles (and prepositions) accounted for 20% of the total (see Figure 10 above). A total of 314 personal names were collected from the registers; for this analysis, bynames with prepositions (e.g. Hans von Champp [GN + preposition + byname]) and given names without bynames had to be excluded. The latter mostly concerned names of women or children (e.g. seinen kinden Hansen und Lucein 'to his children Hans and Lucie'). Counting only bynames and full names, the sample includes 185 personal names.

Effectively, omission of the definite article affects primarily the nominative (81%) whereas articles are retained longer in the oblique cases, especially in the dative (only 11% without an article) and (possessive) genitive (13% without an article). Retention is less frequent in the accusative (43% without an article)⁶ (see Figure 12).

^{6.} Accusative case is taken into account in the figure, but as the data includes only 7 occurrences, the results are not highly informative.

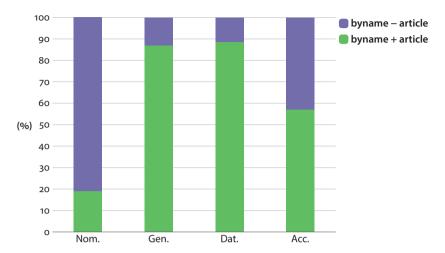


Figure 12. Bynames and retention of the definite article depending on case (data from the Municipal Registers of Vienna, 1414 / 15) n = 185

For inflectional case marking, the data reveals that in the early 15th century, case inflection of personal names was still prevalent in the genitive (83%), but infrequent in the accusative (43%) and in the dative (33%). Thus, while the definite article functions primarily as an additional marker in the genitive (70% of bynames carry both an inflectional suffix and the definite article), the article has become the sole case marker in the dative (64% of instances uninflected but with a definite article) (see Figure 13).

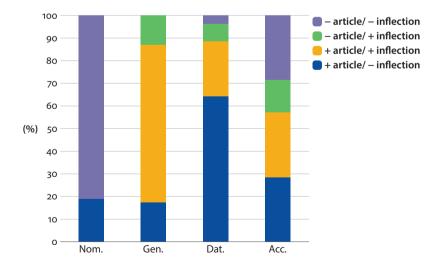


Figure 13. Bynames: Inflectional case marking and occurrences of the definite article

In summary, the data therefore highlights that case is in fact a major factor in determining when articles are retained or lost with bynames. The importance of case is illustrated in the following examples, where the presence or absence of the definite article varies within one and the same entry and in combination with the same name. To this end, see (5) and (6) (BN = more or less stable bynames).

(5) Nominative case:⁷

Als darumb die obgenannten erbern leut Hans As thereto the abovementioned reputable gentlemen [GN](M)-NOM 'As thereto the abovementioned reputable gentlemen Hans

Krewter und Andre Mueleich (...) und Paull and [GN](M)-NOM [BN]-NOM and [GN](M)-NOM [BN] [BN]-NOM Mueleich and Paul Krewter und Andre Ernreich

habent gesagt (...)

have said

declared (...)'

Oblique case (dative):

und hat beweist mit Hannsen dem Mueleich, and has proved (together) with [GN](M)-DAT the-M.DAT [BN] 'and together with Hanns Mueleich,

Mit Pawln dem Krewter und mit Andren dem With [GN](M)-DAT the-M.DAT [BN] and with [GN](M)-DAT the-M-DAT with Paul Krewter and with Andre Ernreich he gave witness

Ernreich das gescheft, so sein hawsfraw Anna getan hat. the business that his housewife [GN](F) done has of the business conducted by his housewife Anna' (VIENNA 1415, entry no. 2132)

(6) Possessive genitive

daz ir mueter fraw Kunigund, Dietreichs that her mother goodwife [GN](F)-NOM [GN](M)-GEN the-M.GEN [BN] 'that her mother goodwife Kunigund, Dietreich Ircher

tochter von Newnburg in Beyrn und Chunrad selig Der daughter from [city name] in Bavaria and [GN](M)-NOM late the-M.NOM Suechentrunck

[BN]

from Newnburg in Bavaria's daughter, and the late Chunrad Suechentrunck

^{7.} Under (5), personal names in the nominative case occur in juxtaposition which may favour the omission of the definite article. In the same syntactical context, however, the definite article is partly retained in oblique cases (e.g. den obgenanten erbern leuten Hansen den Scharffenberger und Pangreczen Hederstorffer 'to the abovementioned reputable gentlemen, Hans (the) Scharffenberger and Pankratz Hederstorffer' (VIENNA 1415, entry no. 2143).

Zway rechte geswistreid gewesen sind vaterhalben und der siblings been have paternal_side and the obgenant

abovementioned

were two full paternal siblings and (that) the abovementioned

Dietreich Ircher derselben Barbaren rechter en gewesen ist. [GN](M)-NOM [BN] the same [GN](F)-GEN of true matrimony been Dietreich Ircher was in true matrimony with the same [abovementioned] Barbara? (VIENNA 1415, entry no. 2146)

The examination of bynames in the Municipal Registers of Vienna dating from 1414/15 supports the assumption that the gradual decline of the definite article with bynames is strongly dependent on case. Omission of the definite article mainly affects the nominative (81%). Only rarely does it extend to the dative (11%) or genitive (13%); in these contexts, the article is mostly retained, serving either as the sole case marker (dative) or as an additional marker (genitive).

The investigated entries of the Municipal Registers not only document the article in combination with bynames, they also contain instances where the article has to be interpreted as an onymic article – a striking point that will be explored in the next section.

Early evidence of the onymic article in the Municipal Registers 3.2 of Vienna (early 15th century)

In combination with bynames, the definite article is typically positioned in between the given name and the byname (e.g. Werner der Gärtner [GN(M) + DEF-M]. NOM + BN] 'Werner the Gardener'). However, the investigated entries also contain instances of the article preceding the given name (e.g. der Werner Gärtner [DEF-M. NOM + GN(M) + BN), which must consequently be assessed as early manifestations of the onymic article. The onymic status of an article in this material is certain where it modifies either full names or given names (see (7)), but ambiguous in combination with bare bynames or surnames (see (8)).

(7) Onymic article:

Item so schaff ich der *Maretlein*, des Stephanns Item so leave I the-f.dat [GN](f)-dim the-m.gen [GN](M)-gen 'Item so I leave to little Maret Stephan

Pluemenstingel tochter, mein pests pett. daughter my best bed

Plumenstingel's daughter my best bed' (VIENNA 1415, entry no. 2152)

```
(8) Ambiguous:
```

und meld ich mein geltschuld, die ich So offen So announce and declare I my money_debt that I 'So I announce and declare my money debt that I schuldig bin von Stainpekchen geschefts wegen, des at fault am because of the-M.GEN [BN]-GEN affair-GEN postpos. owe in the sake of Stainbeck's affair [that is]

Wienner phenning 18 thalers Wiener pfennigs

18 thalers Wiener pfennigs [historical currency in use during the 13th and early 15th c.]' (VIENNA 1415, entry no. 2155)

It is also striking that the position of definite articles alternates, even in the same entry and when referring to one and the same person and, in this transitional state, the analysis varies depending on the position of the definite article, see (9).

(9) Und ob die chinder abgingen, so sol das haus ledichleich and if the children passed_away then shall the house entirely 'And if the children pass away, the house shall belong entirely meins vettern sein Stephanns des Pluemenstingels. my-gen cousin's be [GN](M)-gen the-M.gen [BN]-gen to my cousin Stephan Pluemenstingel.' Item so schaff ich <u>Des</u> Stephanns Plumenstingel hawsfrawn Item so leave I the-m.gen [GN](M)-GEN [BN] housewife-DAT Klaren [GN](F)-DAT Item so I leave to Stephan Pluemenstingel's housewife Klara mein silbreine paternoster. (...) Item so schaff ich des Plumenstingels my silver paternoster Item so leave I the-m.gen [BN]-gen my silver paternoster (rosary). Item so I leave to Plumenstingel's diern Dorothen ain tl. dn. daughter [GN](F)-DAT one thaler denarius daughter Dorothea one thaler denarius [historical currency]'

In the first case (Stephanns des Plumenstingels), the article has to be analyzed as a definite article (byname), but it is to be interpreted as an onymic article in the second (des Stephanns Plumenstingel), whereas its status is ambiguous in the last case (des Plumenstingels). In total, the investigated material comprises 30 occurrences of the onymic article (names modified by an attributive adjective were again excluded). It is striking that these are mostly datives (16 instances) or possessive genitives (10), and rarely nominatives (2) or accusatives (1).

(VIENNA 1415, entry no. 2152)

In summary, these data exemplify two phenomena: first, in the Austrian sources investigated here, the transition from individual bynames to heritable surnames coincides with the early manifestations of the onymic article, and second, the definite article + byname pattern can be seen as another determinant in the development of the onymic article.

The occurrence of the definite article in combination with bynames, however, is restricted to certain naming patterns that are based on appellatives (see Figure 14) (cf. also Kunze 2003: 68).

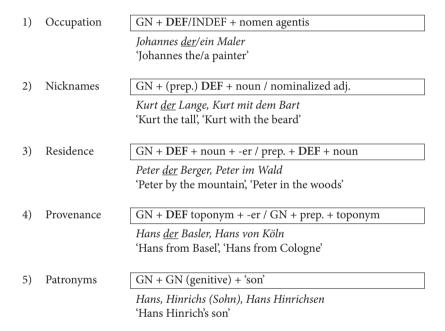


Figure 14. Naming patterns: Use of bynames combined with the definite article

Among the naming patterns listed in 1–5, those patterns that contain a common noun combined with a definite article but no preposition are obviously good "triggers", which means that occupational names in particular are prime candidates. Similarly, nicknames and topographic names (names indicating the place of residence) meet all requirements when derived with the suffix -er (type Berger 'person living by the mountain', *Moser* 'person living near a peat bog'). Patronyms by contrast hardly ever occur with a definite article and have to be excluded as triggers. As topographic names ending in -er and occupational names in particular are far more widespread in the southern part of the German-speaking area than in the north, where patronymics dominate, naming patterns motivate the areal distribution of the onymic article and help explain the north-south grammaticalization divide.

It can thus be argued that the high number of bynames derived from appellatives (and which were at that time hard to distinguish from common nouns) is probably one factor that triggered the rise of the onymic article in the Upper German core area. Due to their ambiguous status, impermanent bynames co-occurring with definite articles therefore provide an ideal bridging context for the definite article to cross over from patterning with common nouns to colligating with proper names. See Figure 15 for one possible scenario.

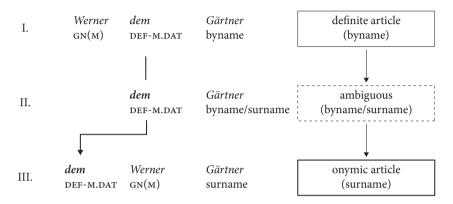


Figure 15. From definite article of byname to onymic article – a possible scenario

However, the rise of the onymic article in (East) Upper German can only be conceived as a combined effect of various factors including pragmatic aspects. It is striking that, in the underlying data, the onymic article is hardly ever missing with full names in "inverted order" (FN+GN). Thus, the practise to place the surname in front of the given name may represent another factor. In those cases, the surname equals an attributive adjective with the given name functioning as the syntactical head and, accordingly, the onymic article is required (e.g. dem schwitzer Jörglein [DEF-M.DAT FN+GN] vs. hannß Schmidtlein [GN+FN] (dative)). Surnames placed in front of the given name are rather infrequent in the investigated ENHG sources, which may be due to the fact that this pattern typically occurs in the spoken language. In any case, for recent Upper and Middle German dialects, the pattern FN+GN is characteristic, but it competes with the GN+FN order in the north (cf. Kunze 2003: 180-181). Showing both a well-established onymic article and the FN+GN naming pattern even in standard language, Hungarian, at least at first glance, supports the correlation posited here. However, further research is needed to emphasise the influence of the FN+GN type on the rise of the definite article.

Summary

On the basis of ENHG data extracted from transcripts of witch trials (late 15th – 17th centuries), the present analysis supports the importance of both areal factors and case in the emergence and spread of the onymic article. The data, which were collected from the whole German-speaking area, identified Upper German regions, especially East Upper German (Austrian-Bavarian) as a central locus of grammaticalization. The importance of case can be deduced from the observation that the onymic article mainly occurs in the oblique cases, where it compensates for the loss of morphological case inflection (dative + accusative) in proper names. The importance of case (and of bynames) has additionally been supported by the fact that bynames retain the article in oblique cases for a longer time. As a direct linkage between the extent of case deflection and the first occurrences of the onymic article is not apparent from the underlying data, case functions rather as a promoter than a trigger and has to be interpreted as a secondary factor. In order to reveal the driving factors behind accelerated grammaticalization in the Upper German core area, special attention was therefore paid to the role of bynames and naming patterns (i.e. appellative vs. onymic bases). As the examination was able to demonstrate, bynames, which represent a transitional stage between common nouns and proper names, play an important role in the grammaticalization process leading to the emergence of the onymic article. Bynames derived from appellatives represent ideal triggers for this process; as they are characteristic of the southern German-speaking area. This helps explain the decreasing frequency of the onymic article towards the north, where patronyms dominate. When combined with inherently definite proper names, the article functions as an expletive marker, which makes it a good candidate for, among others, a new case marking function (on onymic articles as exponents of gender or classifiers cf. Nübling 2015 and Nübling, this volume). To conclude, Figure 16 provides an overview of the different stages in article grammaticalization and the suggested cline.

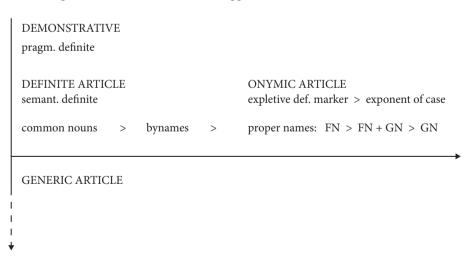


Figure 16. Grammaticalization cline: From definite article to onymic article

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Die Capital – der Astra – das Adler

The emergence of a classifier system for proper names in German

Damaris Nübling

German proper names can be divided into two large classes, i.e. one with and one without an obligatory definite article. It will be shown that this article is part of a classifier system, which provides semantic information about the referent. Furthermore, the inherited three-gender system in combination with the presence or absence of the article is used to create a new system of six proper name classes. This paper deals with a diachronic change where so-called junk is transferred into a new classifier system arguing for a case of exaptation with respect to the article and for a case of degrammaticalization with respect to gender. This development towards a classifier system has occurred rather recently. Its consolidation can be observed in Present-Day German and creates a high amount of variation.

Keywords: proper names, classifiers, definite article, onymic article, exaptation, degrammaticalization, language change, typological change, German

Introduction

German proper names show a special behavior with regard to gender and the definite article. *Luxemburg* denotes a country and its capital, *die Luxemburg* probably a ship, *der Luxemburg* a car, and *das Luxemburg* a hotel or a restaurant. The combination of definite article and gender provides specific information about the denoted object. This does not apply to common nouns. Contrary to proper names, the definite article in front of common nouns marks definiteness and is opposed to other determiners. This does not hold for proper names which are inherently definite. The article adopted another function which is the topic of this paper. It describes the recent development of an onymic classification system and first presents a survey of the situation in Present-Day German (Section 1). Section 2 describes the origin

and function of onymic gender and of the originally definite article in front of proper names, which will be called "onymic article". Here, a distinction will be made between names without onymic articles (2.1), personal names, which currently are on their way to adopt onymic articles (2.2), and names, which obligatorily take onymic articles (2.3). Section 3 argues for the currently developing classifier system as a result of reanalysis. Gender and the former definite article are collaborating closely and cannot be separated (Section 3.1). With respect to the article, it will be argued to classify this historical change as a kind of exaptation (Section 3.2) and with respect to gender as a case of degrammaticalization (Section 3.3). A summary draws some conclusions (Section 4).

The system of German proper name classes

In May 2013 the German newspaper "Frankfurter Rundschau" published an article about a newly founded journal called *die Capital* starting with:

Schön sieht sie aus, die neue Capital, man kann es nicht anders sagen. Und, ja, es heißt 'die' Capital, nicht 'das' – behauptet Gruner + Jahr.

[It looks really nice, the $_{\rm fem.}$ new Capital, you cannot express it differently. And, yes, it is 'the_{fem}' Capital, not 'the_{neut}' – states Gruner + Jahr (the publisher)].

In this case, the feminine gender of the journal differs from the neuter of the homophonous common German noun (das) Kapital 'capital'. The publishers feel the gender change needs a special comment. As a group, the proper names of journals and newspapers are currently developing a name class of their own.

The vast majority of names are former common nouns. When those start to be used as names, they often preserve their old, inherent lexical gender. This still holds for the journal der Spiegel (m.), derived from Spiegel (m.) 'mirror', as well as der Focus (m.). As both examples show these names also adopt a fixed definite article. In the case of die BILD (f.), however, Germany's most famous yellow press newspaper derived from das Bild (n.) 'picture', a gender shift from neuter to feminine has already occurred. This new onymic feminine gender can be explained by the feminine noun die Zeitschrift 'journal' or die Zeitung 'newspaper', which often, at least in the beginning, co-occur with the name and can later be omitted: die Frankfurter Allgemeine Zeitung (f.) > die Frankfurter Allgemeine (f.). The name of the newspaper retains its feminine gender although die Frankfurter Allgemeine has lost its former head noun. In the case of die Capital (f.) onymic feminine gender was

^{1.} At present, the same phenomenon occurs with desert names, e.g. die Wüste Gobi > die Gobi (f.) (see Nübling 2015: 313).

applied from the beginning without the help of the overt noun base Zeitschrift (f.) as part of its name. The former neuter of the noun Kapital was immediately overridden during its transfer to a name for a newspaper. Until this day, in Present-Day German not every member of this name class has adopted the feminine (see der Spiegel, der Focus, der Playboy, das Handelsblatt with masculine or neuter gender). Among these exceptions, there is some variation:

"Die Focus ist ja schon längere Zeit für unwahre [...] Berichterstattung bekannt" (www.focus.de; 11.12.15) [The $_{\rm fem.}$ Focus is for some time famous for its untrue [...] reporting];

"Die Playboy ist wirklich gut mit den heißen Mädels!" (www.presseplus.de/ Playboy-Abo; 11.12.15) [The Fem. Playboy is really good with its hot girls!]

Names of journals, which are not derived from common nouns immediately take the feminine: die Hörzu (lit. < 'listen up'), die Bravo ('bravo'), die Für Sie ('for you').

This paper deals with name classes, which functionalized gender in combination with the presence or absence of the definite (henceforth onymic) article as a noun classifier. If we combine +/- article with three genders we get six different name classes. To put the rule to the test: One and the same invented name, e.g. Sponz, can be related to specific name classes although Sponz does not have any denotation in German. Table 1 illustrates how this cross classification works. Every cell constitutes a linguistic proper name class, which is usually filled with different objects, i.e. there is no one-to-one relation between linguistic class and object.

Table 1. The invented name Sponz and its associations with different objects depending on +/- article and gender

	Neuter	Feminine	Masculine
+ article	das Sponz:	die Sponz:	der Sponz:
	→ restaurant	\rightarrow river	→ mountain
	\rightarrow hotel	→ ship, airplane	→ car
	→ beer	→ journal	
	→ further objects	→ further objects	→ further objects
		→ woman	→ man
– article	Ø Sponz:	Ø Sponz:	Ø Sponz:
	→ town	[→ woman] ↑	[→ man] ↑
	→ country		
	→ continent		

[&]quot;1": these members are shifting to the class above

The context helps the language user to determine whether the expression in the first cell, das Sponz, will be perceived as a restaurant, a hotel or a beer. The same holds for the other expressions. The name classes unaccompanied by an article in the second row are more complicated: in these cases, gender hardly becomes visible due to the absence of the most important gender target, the article. This could be the reason why they often tend to be neuter. Due to this ambiguity, names of women and men, which clearly belong to the feminine or masculine class respectively, are moving to the article cells above (therefore in brackets): First names as well as family names tend to be used with article presumably because gender, which in these cases directly correlates with the sex of the name bearer is made visible on the article. If we know that Merkel mostly refers to a female chancellor the article can be omitted. However, if the person that is being named is unfamiliar, in German it is impossible to deduce gender from family names only. To avoid these kinds of ambiguities, many cultures have two different name inventories, one designated for females and another one designated for males, e.g. Mary etc. vs. William etc. We will come back to this issue later.

Most important is the fact that these genders of names are referential genders, as gender can only be assigned if we know the object (or person), which the name denotes. If the language user does not know the referent, the name is genderless. This separates proper names from common nouns. Their gender usually is assigned lexically (we have to learn it by heart) or semantically, i.e. the meaning of the word leads to a fixed gender: nouns for females are feminine (die Mutter, Tochter, Frau, Nonne 'mother, daughter, woman, nun' (f.)), nouns for males are masculine (der Vater, Sohn, Mann, Mönch 'father, son, man, monk' (m.)). Nouns for fruit are feminine: die Banane, Mango, Ananas etc. 'banana, mango, pineapple etc.' (f.) (exceptions: der Apfel 'apple', der Pfirsich 'peach'). Aside from the animate nouns, the semantic principle is not very strong in German. If a noun is morphologically complex, the last morpheme determines the gender (morphological gender assignment): diminutives ending in -chen or -lein are always neuter, (agent) nouns ending in -er and ling are masculine, and nouns ending in -heit, -ung, or -schaft are feminine. In these cases, gender can be deduced from the form. It is highly debated to which amount gender is based on semantics and form and to which degree it is purely arbitrary (Köpcke/Zubin 1984, 1996, 2009).

As can be seen by the various cases of variation the onymic classification system seems to be emerging and developing in Present-Day German. This has been shown by the example of the journal respectively newspaper name class turning into the onymic [+article & feminine]-class.

2. Origin and function of onymic gender and the onymic article

Most German grammars take it for granted that names usually do not take a definite article and therefore perceive names with article as exceptions. However, a closer look at the broad variety of name classes reveals the contrary: Most names are preceded by a fixed article. As names are always inherently definite, the function of this article cannot be to mark definiteness. We therefore speak of an onymic article, which occurs obligatorily, i.e. which can be considered to be a part of the name. Only if the name of an object is asked for, this article can be omitted: Wie heißt dieser Fluss? - Ø Rhein 'What's the name of this river? - Ø Rhein'. Proper names with onymic articles do not share all grammatical properties of articles in combination with common nouns. For instance, the onymic article is not integrated in the common article paradigm. Different articles such as the indefinite article or demonstratives usually do not occur with names but if they do they show different, mostly pragmatic functions. Thus, the statement Ein William hat vorhin angerufen 'A William called a short while ago', signals that the speaker (and/or the hearer) does not know William (for further functions see Kolde 1995). These onymic articles essentially are noun classifiers.

Names without onymic articles 2.1

In the following section, only few name classes occurring without an article will be enumerated. Additionally, explanation about their grammatical gender and some diachronic information is provided.

Names of towns

Names of towns are always neuter and do not take an article: Mainz, Paris, Amsterdam, New York. Germans often are not able to tell their gender because it is mostly invisible: As gender usually cannot be deduced from the form of a noun (or a name), we rely on gender targets such as articles, adjectives and pronouns. Proper names, at least names not referring to people, are less pronominalized than common nouns (see Dahl 2008). As proper names are inherently definite they are usually unaccompanied by adjectives; there is no need for further determination by restrictive attributes. It is exclusively nonrestrictive adjectives that can precede them, and when they occur, a so-called syntactic article has to be added as the left part of a framing construction: das mittelalterliche Mainz 'the medieval Mainz'. The same holds for postponed entities: das Mainz des Mittelalters 'the neut Mainz of the Middle Ages'. Only in these instances gender becomes visible, however this syntactic article is obligatory and cannot be considered a real onymic article.

Therefore it will not be discussed any further. Common nouns, which develop to names of towns lose their original lexical gender and adopt the neuter, e.g. $die_{\rm fem}$ Burg'the_{fem.} castle', but das_{neut.} schöne Freiburg'the_{neut.} beautiful Freiburg (a town)'; der Berg 'the mountain', but das neut schöne Heidelberg 'the beautiful Heidelberg (a town)'. Thus, the head right principle valid for other German compounds is overruled.

Names of countries

The same holds for the names of countries (Dänemark_{neut.} 'Denmark', Polen_{neut.} 'Poland') and names of continents (Asien_{neut.} 'Asia', Europa_{neut.} 'Europe'): They do not take an article and are always neuter.

In earlier stages of German, country names took an article and different genders as the German linguist Hermann Paul states:

> Früher sagte man auch das Deutschland. Jetzt haben die Bezeichnungen mit -land wie die mit -reich ganz den Charakter von Eigennamen angenommen, so auch Dänemark, nachdem es zur Bezeichnung eines Staats geworden ist [...].

> > (Paul 1917 [1968], Vol. 2, Part III, p. 162)

[In the past Germany was referred to as the neut. Germany. Now, the designations with $land_{\rm neut.}$ 'country' as well as with $reich_{\rm neut.}$ 'empire' completely adopted the function of proper names; the same holds for Denmark after having developed to a denomination of a state.]

Formerly, *Denmark* had feminine gender (*die Dänemark*) due to the German head noun -mark (f.) 'march'.

Today, there are only few exceptions from the principle of zero article: *die* Schweiz (f.), 'Switzerland', die Mongolei (f.) 'Mongolia', die Türkei (f.) 'Turkey', der Sudan (m.) 'Sudan', der Irak (m.) 'Iraq'. These names originate from names of geographical areas or regions, which differ grammatically from country names by usually taking the article and belonging to one of three genders (see the last row No. 18 in Table 2 in Section 2.3). Names of geographical areas do not form a linguistic proper name class of their own although individual expressions such as die Uckermark (f.), das Allgäu (n.), der Sundgau (m.) are names; the difference is that they are not organized in a proper name class with one fixed referential gender (see Figure 2 in Section 2.3). This is due to the fact that geographical areas constitute objects with fuzzy boundaries and those cannot be identified easily. When geographical areas become countries or states they get highly relevant political frontiers, which can even be guarded. Objects with sharp contours often are assigned names belonging to a specific linguistic proper name class. This correlation between properties of objects and the probability of their names to be organized in linguistic name classes corresponds to the principle of onymic iconism described in Fahlbusch/Nübling (2014: 258).

Thus, we can conclude that if a country name is non-neuter, it takes the onymic article, possibly because otherwise gender would not be visible. Over time, names of countries (or states) tend to drop their former article and they enter the neuter gender class. Currently state names such as Sudan, Kosovo, Iran, Irak are undergoing this change (more details in Fahlbusch/Nübling 2014, Nübling 2015). Neuter gender and not placing an article in front of them is already official recommended by the Federal Foreign Office.

Interestingly, some country names occur in the plural because they originally denoted a union of smaller parts (provinces or states): die USA 'USA', die Niederlande 'the Netherlands'. Here, the article prevents an indefinite reading. In German (as well as in English), plural nouns without article are indefinite (c.f. die Kinder [definite] 'the children' vs. Ø Kinder [indefinite] 'children'). However, as these former collective entities are perceived as common countries nowadays, die USA as well as die Niederlande often occur in the singular, which can be observed looking at the inflection of the verb (Die $USA_{\rm fem.}$ ist $_{\rm sg.}$ ein beliebtes Reiseziel 'The ${\rm USA}_{\rm fem.}$ is $_{\rm sg.}$ a popular destination') or on the adjective (d- $ie_{\rm fem.sg.}$ reich- $e_{\rm fem.sg.}$ USA' the $_{\rm fem.sg.}$ ${\rm USA}$; see Fahlbusch/Nübling 2014 for more details). Here, the former plural enters the feminine class because the onymic feminine article die has the same form as the plural article.

Personal names on their way to adopt onymic articles 2.2

As already mentioned, the occurrence of an article in front of personal names is rather instable. In Standard German, personal first names occur without article (Maria, Martin), and similarly in newspapers family names can occur without articles as well (Merkel ist Bundeskanzlerin 'Merkel is chancellor', Kohl ist im Ruhestand 'Kohl is retired'). If the person behind the name is known, articles are not necessary. Otherwise, the sex indicating first name or address forms such as Frau 'Mrs', Herr 'Mr' are added. With respect to first names, there is however a strong tendency in spoken German to use them with article while there are considerable differences between southern and northern areas (Nübling et al. 2015: 123–128, Schmuck/ Szczepaniak 2014, Werth 2014, Schmuck in this volume). In southern dialects (Austria, Switzerland, South and Central Germany), the article is obligatory, even if people is introducing themselves: Hallo, ich bin die Sabine 'Hello, I am the fem Sabine'. In the northern part of Germany, the article is not completely absent but quite rare. Here it fulfills pragmatic functions. The development of the onymic article is the result of a long grammaticalization process, which is described in Schmuck/Szczepaniak (2014) and Schmuck in this volume.

Names with onymic articles (and their history) 2.3

Table 2. Proper name classes, their gender and article behavior (according to Fahlbusch/Nübling 2014: 252)

	Names of		Fem.	Masc.	Neut.	obligatory article?
1	Deserts		++	,		yes
2	Motorbikes		++			yes
3	Airplanes	der	++			yes
4	Ships	fixed gender	++			yes
5	Towns	pa			++	no
6	Countries	fix			++	no
7	Continents				++	no
8	Banks and insurances		++			yes
9	Rivers	ਚ	++	+(+)		yes
10	Islands	îxe	(+)	(+)	++	partly
11	Mountains	ng 1	+	>++	+	yes
12	Cars	etti	(+)	++	(+)	yes
13	Hotels	gender getting fixed	+	+	>++	yes
14	Restaurants	pu		+	>++	yes
15	Companies	ge	++	(+)	(+)	predominantly
16	Buildings	le	+	+	+	yes
17	Streets	variable	+	+	+	yes
18	Geographical areas	vaı	+	+	+	partly

[&]quot;++": one stable gender; "> ++": shifting to one stable gender; "+(+)": one stable gender with some exceptions; "+": names of this class may occur in this gender; "(+)": names of this class rarely occur in this gender

In this section, the German name system will be explained except that of personal names. Table 2 provides 18 name classes and describes their morpho-syntactic behavior. The groups 1 to 8 comprise classes with fixed gender, i.e. these names are fully proprialized. This means that they have exclusively one stable gender (indicated by "++") and that they show referential gender assignment. The second group comprising the items no. 9 to 15 is on its way to becoming prototypical proper names (indicated by ">"). In this group, some names still preserve their inherited gender of the former common noun they originated from. The third group 16 to 18 continues the old inherited morpho-lexical gender and represents the first stage of proper names. These three sections can be interpreted as different diachronic stages, which are illustrated in Figure 1 and later in Figure 2. Figure 1 is based on Fraurud (2000) who investigates the gender of Swedish proper names.

Mountain names are a good example for the proprialization process. They are on their way to develop a fixed gender, the masculine. The first diachronic layer (No. 3) constitutes names, which still are transparent, i.e. are obviously based on

1) Referential gender Named object determines gender: SHIPS diachronic development → masculine CARS (Mountains → masculine) 2) Gender of the corresponding common noun The gender of the corresponding common noun determines onymic gender: \underline{das} Adler (n.) $\leftarrow \underline{das}$ Bier (n.) $\underline{der} \ K2 (m.) \leftarrow \underline{der} \ Berg (m.)$ 3) Morpho-lexical gender The gender of the name is inherited from the former common noun: <u>der</u> Schön<u>berg</u> (m.), <u>die</u> Zug<u>spitze</u> (f.), <u>das</u> Matter<u>horn</u> (n.)

Figure 1. The diachronic path to referential proper name gender

common nouns and retain the gender of their original head. Many names even contain berg 'mountain' as last constituent (der Feldberg, der Silberberg, der Schönberg) or similar expressions such as <u>die</u> Zug<u>spitze</u>_{fem.} (< Spitze_{fem.} 'top'), <u>das</u> Matter<u>horn</u>_{neut.} (< Horn_{neut} 'horn'). The gender assignment of this group historically corresponds to the first stage (Principle No. 3 in Figure 1 and Figure 2) and they constitute the overwhelming majority. Although clearly being names, they initially inherit the old common noun gender.

At a later stage, this original gender can be overruled by the gender of the corresponding common noun, in this case: der Berg (m.) 'mountain' (Principle No. 2). This becomes evident even when looking at foreign and opaque mountain names such as der Kilimandscharo, der Belchen, der K2 where the masculine is the productive default gender. Most likely this gender has been derived from the common noun gender of Berg (m.). Former feminine names turning into masculine names and temporarily producing gender variants provide additional evidence: die Annapurna_{fem.} > der Annapurna_{masc.}, die Rigi_{fem.} > der Rigi_{masc.}. Even syntagmatic names such as der Schauinsland (m.) (Land is neuter) take masculine gender. If transparent and opaque names without the component -berg productively adopt masculine gender, it must be assumed that they follow referential gender assignment (Principle No. 1 in Figure 1 and 2). However, as mountain names and the common noun Berg do not differ in gender the status cannot ultimately be decided (hence the brackets in Figure 1). The referential gender of a proper name class does not necessarily need to diverge from the gender of the corresponding common noun to be regarded as fully proprialized. As mountain names still cover the whole

range from morpho-lexical to referential gender (see also the first box in Figure 2), as yet they do not constitute a clear-cut name class, i.e. they are not yet fully proprialized. The arrows in Figure 1 and Figure 2 indicate the direction of change: Names usually start at stage No. 3 and – if they are in the process of integration into a name class - undergo proprialization resulting in one fixed gender which may follow Principle No. 2 or No. 1.

Sometimes, however, name classes adopt a gender, which corresponds neither to a common noun for the respective class of objects (Principle No. 2) nor to the morpho-lexical gender of the former common noun (Principle No. 3). In these cases, a purely referential gender is at work, which is exclusively determined by the named object (Principle No. 1). This holds for German ship names, which always take feminine gender (die Bismarck, die Kaiser Wilhelm, die Albatros) in contrast to the common noun das Schiff (n.) or das Boot (n.), both with neuter gender (the feminine onymic gender was apparently borrowed from Greek and transferred to German via English).²

The same holds for car names, which take always masculine gender (der Arena, der Mercedes, der Astra, der TT) in opposition to the neuter of the common noun das Auto (n.) 'car' (Köpcke/Zubin 2005). As Fahlbusch/Nübling (2016) demonstrate, the former common noun for 'car' was der Wagen (m.) (at the end of the 19th and in the beginning of the 20th century). Later, Auto (n.) (a French loan word) replaced Wagen (m.) as the unmarked common noun. However, by that time Wagen's masculine gender had already evolved as the default gender for car names. Today, the masculine gender clearly constitutes a referential gender.

Referring again to Table 2 with the group of names (No. 9–15) in the process of a fixated referential gender assignment, the plus signs in brackets indicate the gender that is overridden: In the long term, names of rivers and companies tend to take feminine gender, names of mountains and cars masculine gender, and names of islands, hotels and restaurants shift to neuter gender. The last group in Table 2, No. 16–18, which in reality is much bigger, consists of the most recent layer of names, i.e. those which still preserve the gender of their common noun source. These are names of buildings, streets and geographical areas. Examples for names of geographical areas were provided in Section 2.1. As already mentioned their names lose the article and adopt neuter gender if these geographical areas become political units (countries, states). This is indicated by the boxes at the very bottom of Figure 2.

^{2.} In many languages (English, Dutch, Swedish) the feminine singular pronoun is used to refer to ships, as in she (i.e. the ship) set sail.

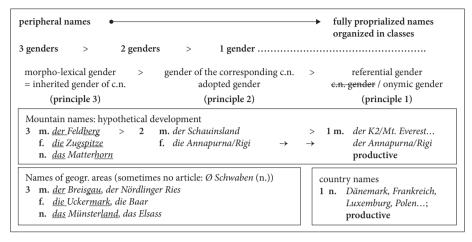


Figure 2. The development of onymic gender: Increasing referentiality of gender assignment and reduction to one specific gender "c.n.": common noun; ">" shift to/ develops into; " \rightarrow " analogical transition to

Das Adler: Genesis of a beer brand's name via a gender shift 2.4



Figure 3. The genesis of a neuter beer gender: Das Adler³

^{3.} I am very grateful to Claudia Geisler from the Binding Brauerei AG in Frankfurt for the permission to use this picture of the advertisement in the present paper.

Finally, we take a look at the emergence of a fixed gender associated with a certain beer brand. The advertisement in Figure 3 for the beer brand Adler, lit. 'eagle' shows an interesting gender shift from the old masculine common noun der Adler (m.) to the new neuter proper name das Adler (n.). It depicts a landing eagle with a bottle of beer named "Binding - Adler" (Binding is the company name of the brewery) in its claws. This depiction is headed by "Das_{neut.} Adler ist gelandet" [The_{neut.} Eagle has landed]. Thus the advertisement is a pun relating to the opposition of the original common noun's gender ($der\ Adler_{\mathrm{masc.}}$) and the proper name's referential gender commonly used for beer brands (das Bier_{neut}). Other beer brand's names take neuter gender as well, e.g. das Paulaner, das König, das Licher. As the common noun beer is still in the mind of the speaker, the beer brand name adopts the gender of the original noun. This represents stage 2 in Figure 1.

The current classifier system as a result of exaptation

+/- Article & gender as noun classifiers 3.1

Some onomasts, e.g. Leys (1967), Kalverkämper (1978), Van Langendonck (2007) and Van Langendonck/Van de Velde (2009) discovered that onymic articles must have a classificatory function. Thus, Leys (1967: 23) writes:

Im Deutschen kann Steinbach nicht der Name eines Gewässers sein, wohl aber der Name einer Person oder Siedlung; umgekehrt kann der Steinbach nicht der Name einer Siedlung sein, wohl aber der Name eines Gewässers oder einer Person.

[In German, Steinbach [used without an article - DN] cannot be the name of a water body but it can well be the name of a person or a settlement; on the other hand, der Steinbach cannot be the name of a settlement, but it can well be one for a water body or that of a person.]

Kalverkämper (1978) describes this more explicitly by emphasizing that the onymic article keeps apart different classes of names. He therefore refuses to speak of a weak deictic element and rather argues for a so-called "automatisierten prädeterminierenden Namenklassen-Index" (189), i.e. for an 'automated pre-determinative name class index', including the zero index. He establishes the following dichotomy:

- definite article + proper name \rightarrow element of name class A
- zero article + proper name \rightarrow element of name class B.

However, these investigations missed out on the relevance of gender in combination with the presence or absence of the article. They therefore only arrived at a simple two-class system. But if we bring together the grammatical behavior of highly developed proper names, this results in a six-class system, illustrated in Table 3, which is an abstraction of Table 1 (in Section 1).

Table 3. The six-class system of German proper names

	Neuter	Feminine	Masculine
+ article	1	2	3
– article	4	5	6

As already mentioned, the definite article is the most relevant gender marker. In Section 2 we enumerated the most important name classes without article and came to the conclusion that all of them are neuter and thus belong to class 4. Class 5 and class 6 pose the problem of how to mark feminine and masculine gender without the presence of an article. As the only members of these two classes, we identified first names of women (class 5) and men (class 6). Since there is a rather strict correlation of sex and gender, female and male names are subject to an inherent system of self-classification: They mark sex and at the same time gender on the name body itself. In German, there are some thousand names for women and men, respectively. The German Lexikon der Vornamen 'Lexicon of first names' of KOHLHEIM/ Концнеім (2013) lists 8.000 different first names. 4 Nearly 100% are used exclusively for one of the sexes (unisex names are very rare in Germany) meaning that every first name is sex and gender definite. Many names mark these categories explicitly for instance by using specific endings such as *a* and *e* for females (*Martin-a*, *Christian-e*) and final o or consonants for males (Heik-o, Christian). The inherent sex of other names has to be learned by rote, e.g. Doris and Almut for females and Boris and Helmut for males. This inherent classification system (indicated by the thick borders in Table 4) allows for omitting the article. As mentioned in Section 2.2, there is an isogloss dividing the North and the South of Germany concerning the use of a definite article in front of first names. All in all, there is a long diachronic development to use the onymic article with personal names (see Bellmann 1990, Glaser 2008, Schmuck/Szczepaniak 2014 and Schmuck in this volume). Thus, classes 5 and 6 are gradually turning into classes 2 and 3 (indicated by the arrows in Table 4): \emptyset Doris (f.) > die (f.) Doris (class 5 > class 2), Ø Boris (m.) > der (m.) Boris (class 6 > class 3). Furthermore, unusualness of anaphoric pronouns following proper names mentioned above does not hold for personal names: As they denote animate objects, personal names are often pronominalized by possessive, relative and anaphoric pronouns, which make their inherent gender highly visible.

^{4.} Earlier, these name lexicons spatially separated female from male names. Now, they appear together in alphabetic lists whereby the male names are printed in black and the female names in red.

	Neuter	Feminine	Masculine
+ article	Class 1 das-class	Class 2 die-class	Class 3 der-class
– article	Class 4 Ø-class (n.)	Class 5 ↑ Ø-class (f.) marking of the class "self-class applies to fe/ma	ification"

Table 4. Class 5 and 6 containing first names without overt classifiers but with inherent (covert) class membership

Exaptation of the article to a classifier: A side road 3.2

Before analyzing the grammatical status of the onymic article and onymic gender, the notion of exaptation will shortly be defined providing once again the well-known definitions of Roger Lass (1990, 1997) and those of other linguists (Norde/Trousdale 2016). Exaptation is a sort of reanalysis based on linguistic material, which already has been or is in the process of becoming defunctionalized. Roger Lass calls this material "junk": "This morphology is now, functionally speaking, junk" (Lass 1990:81); in this context, Norde/Trousdale (2016: 164) criticize the inadequateness of the term "junk morphology" as a morpheme defined as the smallest meaningful unit implies a functional load. Later, the notion of junk was given up because it is difficult to decide whether some material has a function or not (perhaps, it is a function which as yet we are unaware of) and because it is simply unnecessary to insist on the condition that it needs to have a function (see Simon 2010). Even in evolutionary biology, from which the term exaptation has been borrowed, the former function may be still co-present as the example of the feathers show: Originally exclusively protecting the bird from the cold, feathers were first re-utilized for catching insects (van de Velde/Norde 2016: 4) and later for flying. Nevertheless, until this day, feathers serve thermo-regulation. Therefore, Simon (2010) and Szczepaniak (2016) distinguish between junk and non-junk exaptation. The crucial point is that this allegedly useless material is reused and reinterpreted: a new function arises from an old form. Thus, exaptation implies a functional renovation or innovation. Lass (1997) calls it "conceptual invention"

[&]quot;\tag{"}: female and male first names tend to adopt the article and shift to Class 2 and 3

(319) although the examples he provides do not meet this claim (Simon 2010:48). Nevertheless, the fact that the new function is not present in the linguistic system of that language yet should be decisive. A good example is the emergence of the German honorific pronoun as a formal address Sie 'you (polite form)' from the personal pronoun 3rd ps.pl. sie 'they'. We therefore follow the short formula in Simon (2010:52): ALTE FORM > NEUE FUNKTION 'OLD FORM > NEW FUNCTION'. It is argued that the definite article in combination with gender is becoming a classifier. This is a case of exaptation.

With respect to the article, it is a well-known fact that it originated from a demonstrative, which underwent semantic weakening and eventually developed to a definite article (Himmelmann 1997, 2001, Lehmann 1995, Heine/Kuteva 2002, Szczepaniak 2011, Schmuck in this volume). During this grammaticalization process, pragmatic definiteness was reinterpreted as semantic definiteness. Later the article in front of unique expressions such as die Sonne 'the sun', der Mond 'the moon', der Himmel 'the heaven' even lost definiteness by turning into an expletive article. Unique expressions are similar to proper names because these also exclusively refer to one entity, whereas the expletive article still precedes nouns (and names) for singular objects. It is therefore redundant. The generic article is non-referential and does not refer to objects anymore. In these cases, characteristics of the whole class are referred to (Der Hund stammt vom Wolf ab 'Dogs stem from wolves'). It will be therefore followed Szczepaniak (2011: 78) and her sequence of steps in the development. The final stage before complete loss is the article used purely as a noun marker (this stage is described for German dialects, see Eroms 1989 for Bavarian). However, the development to a classifier, which provides specific information about the named object ('beer', 'river', 'country', 'ship') constitutes a side road of the unidirectional grammaticalization path illustrated in Figure 4.

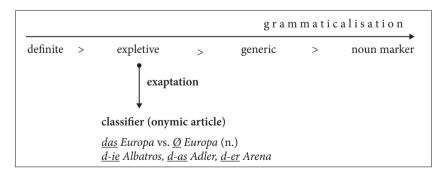


Figure 4. The onymic article as a classifier: Exaptation

Whether the onymic article really developed from the expletive article has not been proven yet. Nevertheless, Schmuck/Szczepaniak (2014: 134) who investigate the diachronic emergence of the onymic article in front of personal names assume the same: the expletive article is the predecessor of the generic article. However, as they exclusively focus on personal names, they have not considered the classificatory function of these articles as such.

Most important is the fact that both, the presence and the absence of the article, have a classifying function. One and the same word with one and the same gender may exclusively be distinguished by the occurrence or non-occurrence of the onymic article: das Europa (n.) denotes a hotel, a restaurant or a beer, whereas Ø Europa (n.) always denotes a continent.

The combination of \pm article with three genders leads to the system of six classes. As already mentioned, German gender is most in need of the use of the article in order to become visible (other gender markers such as adjectives are less reliable due to many syncretisms and their optional status). Thus, there are oppositions such as <u>d-ie</u> Albatros (\rightarrow ship, river etc.), <u>d-as</u> Adler (\rightarrow beer, restaurant, hotel etc.) and $\underline{d-er}$ *Arena* (\rightarrow car, mountain etc.). Therefore, the onymic article d- is able to mark three classes. As these options show, there are many more than only six different proper name classes.

Strengthening of gender to a classifier: A case of degrammaticalization 3.3

Only focusing on grammatical gender, we are confronted with a case of degrammaticalization in the sense of a refunctionalization. The gender of common nouns follows complex assignment principles. It does not classify semantically in a systematic way except for common nouns referring to humans and higher animals, which exhibit a clear correlation between sex and gender. In most cases, however, the person's sex is inherent in the lexeme, i.e. gender is not necessary to distinguish between females and males (this is also true for English without nominal gender: expressions like queen, king, sister, father already contain the information of the referent's sex, gender is not needed). Thus, gender in German agrees with the sex of the referent but it is not necessary to mark sex.⁵ The most important function of gender is a syntactic one: Gender is needed to form the framing constructions of German NPs (see RONNEBERGER-SIBOLD 2010a, 2010b, in this volume). In sum, nominal gender does not have a strong connection to semantic classification.

This is in opposition to onymic gender: Here, gender (in combination with +/- article) provides important and specific information about the denoted object,

^{5.} Only nominalized participles and adjectives express sex via gender: die/der Angestellte 'the employee' (f./m.), die/der Behinderte 'the disabled' (f./m.), die/der Arbeitslose 'the jobless' (f./m.).

grammaticalization

which usually is the task of classifiers. Noun classifiers as another type of nominal classification usually consist of meaningful and mostly independent items, which developed from lexical elements and occur next to the noun without showing agreement. They are "selected largely according to semantic criteria" (Corbett 1991: 137). So, one and the same noun may be accompanied by different classifiers.

Unfortunately, we do not know the original function of gender when it was a full grammatical category and could be used to form real paradigms. Different accounts have been put forward which are summarized in Nübling (2015). There is evidence that gender had a quantifying or a classifying function, connected to animacy. Today, it represents the last stage of an originally grammatical category, which is now completely bleached out. It has arrived at the stage of form without (semantic) function, representing the final stage of a long grammaticalization process (see the first arrow in Figure 5). In the case of the proper name gender, this form (which can be called "junk") was restrengthened, refunctionalized and refilled with information probably similar to the original one (in Figure 5 the second arrow to the left). As Grinevald (2002) shows, gender systems may be the residues of older classifier systems. She presents a simplified list of criteria (p. 260) to distinguish between gender and classifiers. If we mirror the most important differences between classifiers and gender, we may arrive at an abstraction such as shown in Figure 5.

	•		>
	degrammaticalisation		•
	classifiers (and onymic gender)		gender/noun classes
1	semantically classifying	←	not semantically classifying (empty, arbitrary)
2	do not classify all nouns	←	classify all nouns
3	larger number of classes	←	small number of classes
4	open systems	?	closed systems
5	not fused with other grammatical categories	←	fused with other grammatical categories
6	not marked on N itself	←	can be marked on N
7	no agreement	?	agreement
8	N can be assigned to several classes	+	N is assigned to one class
9	speaker variation	←	no speaker variation

Figure 5. (De-)Grammaticalization of gender and classifiers (according to Grinevald 2002: 260)

Usually, the grammaticalization perspective from left to right is investigated: Lexical units such as measure terms or class-terms (Engl. a piece of information, a loaf of bread) may grammaticalize into nominal classifiers by undergoing some typical processes characterized by phenomena such as loss of phonological and semantic weight. This can lead to a generalized use of the classifier (more nouns are classified than in the beginning, and nouns may belong to different classes) and eventually result in an arbitrary classification system such as the category of gender (more information in Aikhenvald 2000, Bisang 2002, Grinevald 2000, 2002, Kilarski 2013, 2014, Senft 2000).

In the following, classifiers and onymic gender are compared. It will be investigated in which respect we are dealing with a case of degrammaticalization.

- The first and most important criterion for classifiers fully applies in that onymic gender allows for a semantic (more precisely a referential) classification (der $Corona \rightarrow car vs. die Corona \rightarrow ship vs. das Corona \rightarrow beer) in contrast to the$ gender of common nouns; in the case of inanimate nouns, gender does not provide much information about the concept of the noun (e.g. der Löffel (m.) 'spoon' - das Messer (n.) 'knife' - die Gabel (f.) 'fork'). In the case of animate nouns gender is associated with sex. However, there are only few nouns marking sex solely by a certain gender: der (m.) Kranke versus die (f.) Kranke 'the (m.) sick (man) versus the (f.) sick (woman)'. A referent's sex is mostly lexically expressed and does hardly rely on gender alone.
- Indeed, obligatorily all common nouns have a gender. However, the case of onymic gender is different in that not every name has a referential gender. As we saw in Section 2.3, many names inherit the morpho-lexical gender of their former common noun and therefore are not integrated in the classifier system.
- 3. In combination with the article, names fall into six different classes whereas common nouns only distinguish between three genders. Thus, we have twice as much proper name classes than common noun genders.
- Open classifier systems are usually young systems that are still 'under construction'. They are evolving via grammaticalization from lexical units. From a degrammaticalization perspective it cannot be expected that new lexical sources will arise. Therefore, the onymic classifier system is not open or productive anymore. Nevertheless, due to the interaction with the article, it is bigger than the three gender system of common nouns (see No. 3).
- Usually, gender is fused with other grammatical categories such as case, number and (in)definiteness (German does not have any mono-functional gender marker). In contrast, the overt onymic classifiers der/die/das are only fused with case but not with number (proper names usually only occur in the singular) and not with (in)definiteness because names are inherently definite (and do not take a real article). Therefore, the onymic article is not an ordinary article, it is a

- classifier. Even originally collective names, which took the plural article, are reanalysed as feminine singular forms: $die_{pl.}$ USA > $die_{sg.fem.}$ USA (see Section 2.1).
- 6. Only when nominal gender is assigned morphologically (or phonologically), it is marked on the noun itself (for instance, the suffixes -ung, -heit, -schaft or -in denote feminine gender). By contrast, classifiers usually do not fuse with the name itself:

These classifiers [noun classifiers] are realized as free morphemes standing in a noun phrase, next to the noun or within the boundaries of the noun phrase with other determiners of the noun. (Grinevald (2000: 64)

They are preposed and other syntactic elements such as adjectives may be placed between the article and the noun (which is rather rare). Only the gender of the members of classes 5 and 6 (female and male first names) can be marked on the name itself.

- 7. Nominal gender is usually tightly connected to agreement; agreement is even a condition for gender. If classifiers degrammaticalize from gender, we cannot expect that agreement is completely given up. Thus, onymic gender is marked on adjectives and pronouns as well. However, as proper names (aside from personal names) are rarely pronominalized, there are not many opportunities for marking agreement. For example, the neuter \emptyset Köln (a German town) is usually replaced by local adverbs (*da*, *dort* 'here, there') or by renominalizations (die Stadt 'the city' or even by Köln). The pronoun es 'it' is hardly used to refer to Köln (see Dahl 2008). As proper names are rarely modified by adjectives either, there are not many opportunities for a name to agree with other gender markers - in contrast to common nouns.
- 8. It was repeatedly shown that one and the same name (e.g. Corona) can belong to different classes. This is impossible for common nouns: Every noun has a fixed gender.6
- 9. Due to (8), speakers can vary the onymic gender (with functional consequences). This is not possible in the case of common nouns. Thus, the onymic gender of name classes constitutes a true paradigm in contrast to the gender of common nouns.

If we summarize the right-to-left movements in Figure 5, it is justified to state that onymic gender constitutes a case of degrammaticalization. In the framework of Norde (2009) who differentiates between (a) degrammation, (b) deinflectionalization and (c) debonding, the processes described above belong to case (a). The development from gender to classifiers is a case of degrammation (or primary

^{6.} Only new loan words may temporarily have two genders. In the long run the speech community choses one gender.

degrammaticalization), "whereby a gram in a specific context gains in autonomy or substance on more than one linguistic level (semantics, morphology, syntax, or phonology)" (Norde 2009: 120). Here, several linguistic levels are affected. First of all, the onymic classifier has gained semantic substance by indicating special classes of objects. An originally empty category has been refilled (resemanticized). Furthermore, the classifier, which developed from the former definite article, constitutes a full morpheme with considerable phonological substance (aside from zero classifiers). The classifier cannot be replaced by the indefinite article and occurs obligatorily. Thus, a new paradigm also including zero morphemes has arisen. Possibly, this even marks the emergence of a new word class. To date no classifier system has been described for German.

Summary

A closer look at the thus far rather neglected nominal class of proper names reveals that their apparent articles actually form a complex system of classifiers. In these cases, the former definite article including the zero article in combination with gender leads to a six class system providing referential information about the classes of objects the named entities belong to. This is an on-going process, i.e. a typological innovation is currently emerging in German. This explains the high amount of variation and ambiguous cases: Some proper name classes are already fully established (names of towns, ships, countries), others are still on the way (names of rivers, mountains, cars). The linguistic features of a proper name class are a fixed gender and the presence or absence of a fixed preposed onymic "article". Probably, this classifier system will be further strengthened in the future. Regarding the former definite article, an exaptation has taken place whereas regarding gender, a case of degrammaticalization has occurred.

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This volume focuses on the grammaticalization of the definite article in German. It contains eight empirically-based papers which examine individual stages of the grammaticalization path from its beginnings as a demonstrative to the definite article and beyond. Focusing on cognitive, pragmatic, semantic and syntactic factors, the contributions not only address the development from pragmatic to semantic definiteness, but also deal with functional and formal changes starting as soon as the linguistic unit has acquired the function of marking semantic definiteness. Based on corpora spanning the entire history of the German language, from Old High German (750–1050) to present-day German, the analyses challenge the traditional linear model of grammaticalization and provide alternative pathways. What all the contributions have in common is the idea that the main grammaticalization path is accompanied or crossed by several side roads which lead to different destinations such as preposition-articleclitics, generic usages or onymic articles.



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