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Project Description - Project Proposals

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Partition and individuation in Germanic

Project Description

Sections 1-4 must not exceed 15 pages in total.

1 Starting Point

The starting point for this project is the observation that in Bavarian and some variants of Alemannic, the indefinite article (IA) occurs with a mass noun as in I brauch a geld (I need a cash), see Zehetner (1985), yielding a pseudo-partitivity reading. This comes close to the situation found in Middle High German, cf. dô was ein snê gevallen (there was a snow fallen), see Presslich (2000). In this case, the IA lexicalizes pseudo-partitivity as well, realized via genitive case in earlier stages of Germanic, cf. ich han ein wening öl-s (I have a bit oil-gen; from DWB:BD 29.1). Thus the IA here is comparable to the Romance partitive determiner, consisting of the preposition de + the (amalgamated) definite article. In other variants of Alemannic and in Standard German, an IA may also show up with mass nouns – but only in a construction of the type so/such-a-NP, cf. so ein Wein/such a wine. In this reading, the IA with a mass noun invokes a sub-kind reading rather than a subset kind of partition, see Carlson (1977); sub-kinds are closer to individuals in interpretation. Things are getting more complicated as soon as an adjective accompanies the mass noun: here the IA in Standard German may occur before or after the so-element whereas in many dialects, the IA may even be doubled, Plank (2003) which is also the case in the simple so/such-a-NP construction. In all these variants, the IA of course shows its well-known function to introduce a new individual into the discourse. The challenge is to identify the minimal meaning components the IA lexicalizes in order to account for its compatibility with these different interpretations. Assuming with Borer (2005) that it is the functional structure above the nominal root that is responsible to the interpretation, in a framework like Nanosyntax, the functional sequence (fseq) must involve (at least) the following lavers:

(1)	Individual	so-IA-NP	Partition	Mass	
	IA	IA	IA	Ø	Bavarian; Alemannic, MHG
	IA	IA	Ø	Ø	New High German
	IA	(IA)	genitive	Ø	MHG, Early NHG
	IA		de+art	Ø	Modern French

Looking more closely at further variants within Germanic, dialectal and diachronic, even more variation can be detected: for instance, some Swedish dialects use the (cliticized) weak definite determiner to induce the partitioning reading, Vangsnes (2001). On the other hand, Icelandic does not seem to show an IA with these functions at all, but see below. Given this range of meanings the IA can express and the variation for the exponence of these semantic notions, a theoretically informed and contrastive examination of this part of the grammar is called for. The project will approach this by:

- giving a systematic survey (in form of a database) about the variational space of the morpho-syntactic realizations of partitioning and individuation – with special reference to contemporary Germanic dialects/spoken variants, as well as diachronic data
- identifying the meaning contributions of the single items and their relation to partition and individuation and tracing back the diachronic development in Germanic to work out an appropriate grammaticalization path that led to the current situation.



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1.1 State of the art and preliminary work

The phenomenon: The area of interest within the functional layers of the DP (for an early justification of the D-Projection in German(ic), see e.g. Bhatt 1990, Haider 1988), is the 'low' area below referential closure and (strong) quantification. Following the general assumption that nominal expressions have a functional layer parallel to those of clauses (Alexiadou et al 2007), it is the area which, according to Wiltschko's (2014) Universal Spine Hypothesis, corresponds to the classification and aspectual system in the clausal structure. It is also the area, Borer (2005) calls 'division' (DivP) and for which it has been shown in recent years that more fine-grained distinctions are necessary (Zhang 2013 for the Chinese classifier system; Mathieu's 2012 suggestion of 'flavors of division', based mainly on data from Algonquian languages). For other languages, inflectional morphology has come into focus, especially the role of gender (Fehri 2016, 2018 on Arabic; also the various contributions in Mathieu et al 2018). Furthermore, number neutrality in Turkish (Görgülü 2012), and what is called the singulative are more and more integrated into this picture, as are the gender-divisions in Slavic (specifically Polish, e.g. Wagiel 2018). From the conceptual-semantic side, Grimm (2012) has suggested a very finegrained hierarchy that constitutes the basis for much of the work in this area. As for Germanic, relevant works to be mentioned here are de Belder (2011) on the individualizing effect of the diminutive, also Ott (2011), Grestenberger (2015) on the two types of partitive and their respective structural realization (arguing that pseudo-partitives only involve one nominal projection), and especially Hachem (2015:129ff), who proposes splitting up Borer's DivP into the functional heads in (2) and furthermore claims that these distinctions were lexicalized by the gender system in Proto-Indo-European (see Leiss 1999; Lehmann 1958).

It is much debated in the literature whether such a direct one-to-one correspondence between

(2) Division Collective Individual Mass feminine feminine masculine neuter (PIE?)

gender and the interpretation indeed holds, see Lundquist & Yates (2018) for an overview: however the more recent work on gender from rather distant languages, mentioned above, gives it a certain credibility. Whatever turns out to be the correct analysis for these very old stages, it is clear that the gender system in modern Germanic does not involve this sort of correspondence, but merely shows reflexes within in the agreement system (e.g. Alexiadou 2004) or has 'migrated' to the derivational system, see Leiss (1999), Werner (2012). Standard German gives the impression that there is essentially no marking of these distinctions at all - with the exception of the "IA" for the individual reading. But the above brief illustration of the different readings of the IA in the dialects shows that distinctions of this kind are indeed lexicalized in the current languages, and there may be even more fine grained distinctions. Nevertheless, a schema like in (2) will be taken as the starting point for a close examination of the use(s) of the IA in current dialects as well as earlier stages of Germanic with the goal to provide a systematic survey of the alternative means to lexicalize these functions. The framework: In recent years, Nanosyntax has gained a high reputation in this area of research (e.g. Caha 2009, Starke 2010, Baunaz & Lander 2018). Nanosyntax is based on radical Cartography (one feature-one head, e.g. Cinque & Rizzi 2010) in conjunction with a very precise spellout/lexicalization algorithm: any one lexical item associated with several nodes must involve an uninterrupted fseq in the tree (Superset Principle, *ABA principle; see Caha 2009). Nanosyntax therefore provides some central components of the methodology to be used in this project. In particular, the nanosyntactic view allows us to take syncretism and morphological containment as a diagnostic for the finer-grained, underlying structure. To illustrate briefly, it has long been recognized that the definite article systematically encodes (at least) two distinct readings: a situational-unique and an anaphoric interpretation (Ebert 1971). Schwarz (2009) was among the first to explicitly connect the interpretation and morphological shape; he distinguishes a weak article (situational-unique + contractible: zu-m Bäcker = to-the baker), and a strong article (anaphoric + non-contractible: zu dem Bäcker = to the baker). Pfaff (2019b) treats this as morphological containment (=partial syncretism) and recasts the distinction in a nanosyntactic framework where the weak article spells out one functional head: uni⁰ (encoding uniqueness), while the strong article lexicalizes uni⁰ plus an additional head ana⁰ (contributing an index). This way, both the semantic and the morphological differences can be modelled in the syntax (the strong article is morphologically more complex in

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that it involves two heads, and semantically more complex because its denotation is composed of two semantic features). The nanosyntactic spellout algorithm allows us to systematically capture morphological containment (German: -m vs. d+em), but also cases where the two articles are lexicalized by two distinct items (Fering: a vs. di) or by the same item (English: the). This strategy will be applied to the different readings found with the IA. We will treat the IA as a (partially) syncretic form that spells out a contiguous sequence of functional heads associated with different, albeit related, readings. As a novum, the project intends to explore the possible application of Nanosyntax to model grammaticalization and diachronic change. It will be tested to what extent the acquisition/loss of readings of the IA (and related items) can be modelled as a path along the fseq established on the basis of synchronic data.

The indefinite article (IA)

The IA is one of those functional elements whose ambiguity or multi-functionality has been recognized for a long time in the semantic literature (Heim 1982; esp. Partee 1986; also Kamp 1981). Partee (1986) lists (at least) the predicative, referential and quantificational use. Many questions and analyses are concerned with the specific/non-specific distinction (e.g. Enc 1991, von Heusinger 2011). These concern the 'higher' regions in the fseq where the relation to discourse becomes relevant. Cohen (2001) and Krifka (2013) deal with a special variant of the IA in its generic use, also Brandner (2013). Finally, IAs can also act as bound variables as in every man loves a woman. To deal with these ambiguities, several lines of analyses have been proposed: Partee (1986) suggests a set of type shifting operations. Kratzer (2005) assumes that IAs (and indefinites in general) do not have quantificational force of their own, but are dependent on an (existential) operator with which they are in concord. However, she remains silent on the exact contribution of the IA (besides being a variable) and in light of the phenomena to be discussed shortly, a more fine-grained characterization of its variability and semantic contribution(s) is warranted. Furthermore, in most of these semantically oriented treatments of the IA, the internal syntax of the DP (i.e. possible correlations between the various readings and different syntactic layers) only plays a little role – a gap to be filled by this project. Discussions in the syntactic literature are mostly found in the context of what is dubbed 'indefinite determiner doubling' and what was introduced above as the so-IA-NP-construction, cf. Bavarian a so a großer Bub (= a such a big boy), see Plank (2003), Kalluli & Rothmayer (2008), Alexiadou (2014, ch. 5); Steiner (2005) for Alemannic

For a similar type of construction in the Dutch dialects, the term 'spurious 'n' is used, as in *wat vor 'n boeken* (= what for books), see Bennis et al. (1989), Corver (2003), and Haegeman (2010). 'Spurious' because it occurs in an uninflected form even with a plural nominal. The English 'inverted construction' of the type *so nice a girl* is extensively discussed in Wood (2002) and Wood & Vikner (2013) and brought together with the doubling of the IA in Danish DPs, containing an adjective. Apart from the often unusual morphological marking also in spoken German, cf. *so-nen* or *so'n*, see Hole & Klumpp (2000), Vogel (2006), it is its unusual syntactic position in English as well as the possibility of doubling in Danish and in Bavarian that indicates that it must be situated in a different position than the usual left peripheral D-position. Kalluli & Rothmayer (2008) suggest a recursive DP and assume that the lower IA is involved in a projection that hosts the lexicalization of a choice function. The higher IA is assumed to act as a cardinal – an assumption that can easily be falsified, since e.g. in Alemannic, the cardinal has a different shape and is clearly distinct from the IA. However, precisely the cardinal form can never occur in an IA doubling construction, see Brandner (2013), see also Zimmermann (2011) for a critical discussion of this approach.

For the Dutch construction, this type of IA has been analyzed not as belonging to the nominal functional extension proper, but rather as the head of a predication configuration, involving a small clause. It reaches the D-position via movement, see Bennis et al (1989) and subsequent work by Corver (2003). also Alexiadou (2014). But note that in this analysis, the IA ends up in the 'general' D-position, i.e. there is no commitment as to whether this movement leads to a difference in interpretation.

Wood & Vikner (2013) posit the IA in this construction in the Num-head, Ritter (1992). The surface order is derived by movement of the predicate into the SpecNumP position, thus preceding the lower IA. This positioning allows doubling since the D-position itself is still free and therefore can host another type of determiner or a 'meaningless' doubled version of the IA.

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The additional functional layers, argued for in the literature, are thus essentially used in order to have enough landing (resp. insertion) sites for the IA. As the goal of this project is to provide a theory of the functional layers above NP that does justice to the syntax <u>and</u> the semantics, the analyses just sketched are in need of improvement. However, the rich amount of data and generalizations already gained from these treatments will build one of the pillars of the planned research.

N-suffixation, adjectival inflection, and weak quantifiers

Related to the issue of **individuation** is the Germanic nominal n-declension (henceforth n-suffixation). N-suffixation has been claimed to be responsible for individuation (Osthoff 1876; Curme 1910; Behaghel 1923; Krahe & Meid 1967). N-suffixation is clearly a **nominal stem-building** device, but whose exact position within the fseq along with its semantic contribution/function has yet to be determined by reconsidering the available diachronic evidence. Thus, nominal stem-building processes in the predecessor languages of Germanic are surely worth to be looked at under the perspective of the (yet to be established) fseq and how it relates to the issues raised above concerning the IA.

N-suffixation also plays a role in the Germanic **adjectival inflection**, which cannot therefore be neglected here. As is well known, Germanic shows two types of adjectival inflection, the *strong inflection* (based on PIE *pronominal/nominal inflection*), and the *weak inflection* (based on *n-suffixation*). These two types of adjectival inflection already show that the syntactic integration of adjectives into the DP requires rather sophisticated morpho-syntactic operations in Germanic and a satisfying analysis is still lacking, but see Rehn (2018), Pfaff, (2019a, 2020), for some recent proposals. Both follow a relatively old idea, viz. that PIE did not have a separate morphosyntactic class "adjective", but only one category "nominal" comprising adjectives and nouns (e.g. Osthoff 1876; Törnqvist 1974); instead of attribution, PIE employed close apposition of nominals as the mode of modification. A separate adjective category is a Germanic innovation, with the concomitant innovation of introducing a dual adjectival inflection.

It is a relatively widespread idea that n-suffixation primarily triggered a **definite** interpretation, (see Ratkus 2011 for recent discussion), which is reflected in many contemporary Germanic (notably Scandinavian) variants by the fact that weak adjectives occur in definite contexts. However, "definite" is a complex term (see Schwarz 2009), and diachronic data do not as unambiguously support the definiteness hypothesis as is traditionally assumed (see Pfaff 2020). Another view on the weak inflection emphasizes the aspects individuation/nominalization associated with the original n-suffix (see above) suggesting that weak "adjectives" are categorially nominals in (Proto-)Germanic (Osthoff 1876; Rehn 2018; Pfaff 2020). Insofar as a definite interpretation of weak adjectives can be seen as a (later) reflex of individuation, the two views are not necessarily mutually exclusive, but either way, the -nseems to have started out as a categorizing suffix, low in the fseq. The strong inflection, meanwhile, is not restricted to adjectives, but is also found on (definite) determiners: rot-er (redstr); dies-er (this-str). Moreover, according to Wiltschko (1998), it is itself based on a weak pronoun. As such it might be located in the anchoring domain, or at any rate, in a higher position in the nominal fseq. Taken at face value, this would mean that n-suffixation and strong inflection do not compete for the same position in the fseq, contrary to what is usually assumed. Related to the issue of adjectival inflection is the (non-)inflection of weak quantifiers (Milsark 1974), e.g. viel (many/much) in German. The observation is that viel inflects optionally, which, however, is accompanied by different readings (see Ruys 2017; also Sapp & Roehrs 2016), see (3A). Notice that the non-inflected form can occur with the preposition an, (3B-a), which is in contrast sharply ungrammatical with the inflected form, (3B-b):

(3) A-a. viel	Bücher	subset reading	B-a.	?Er hat viel an Büchern
A-b. viel-e	Bücher	individual reading	B-b.	*Er hat viel-e an Büchern
many(-II	NFL) books			he has many(-INFL) of books

It is not the inflection alone that triggers the individual reading, cf. *viel-e Wein is not possible, in contrast to viel Wein (which gives a vague quantity) and viel-e Wein-e (where the mass noun is divided via the plural marking, rendering a sub-kind reading). On the other hand, the inflected form is possible (and necessary) if the whole DP is headed by a definite article, cf. der viel-e Wein, i.e. in this configuration, the optionality disappears. Ruys (2017) accounts for this contrast

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by assuming that uninflected *viel* is a gradable adjective that does not combine with quantized objects whereas the inflected one is a vague numeral that combines with quantized objects only. This fits very well with the above considerations that inflection may also be involved in individuation – a precondition for being quantized. His analysis certainly warrants some more consideration, but some further aspects remain to be addressed. Judging from derivational morphology (-ig) some elements are clearly adjectival: wen-ig-e (few), ein-ig-e (some), but they display the same contrast: wen-ig (little) vs. wen-ig-e (few). The main question is in which sense these quantifiers can be unified with the morpho-syntax of adjectives, especially under the perspective that many of them evolved out of complex nominal expressions, as can be witnessed from the fact that they are accompanied by a 'frozen' IA, cf. a-lot-of, a few, ein-wenig. Thus, the impact of the (non-)inflection of the weak quantifiers must be considered under the perspective whether they indeed should be categorized as adjectives (with an explicit quantifying lexical content) – or whether these lexical items occupy yet another position in the fseq, leading to this irregular behavior.

Finally, inflection aside, note that (restrictive) **adjectival modification** always leads to **partitioning**: an A+N combination will inevitably denote a subset of the bare N denotation. Thus *adjectives themselves* can be taken as 'exponents' of partition. Together with the assumption that the n-suffix originally realizes individuation, the following simplified picture emerges:

(4)	Collective	Individual	Partition	Mass
	Ø	n-suff	adiective	Ø

All these considerations, at the very least, call for a careful (re-)examination of

- the function/semantics, development of adjectival inflection and its position in the fseq,
- the status of weak quantifiers and their position in the fseq,
- the role of adjectives in the partitioning of the N denotation and their position in the fseq, as well as the various interactions and overlaps between these elements discussed above. The project will address these issues as such, but crucially also in regard to the IA.

Grammaticalization – diachronic development

The common grammaticalization path of the IA assumes that the starting point is the numeral one and that its current state is reached via successive semantic bleaching (Givón 1981; Wright & Givón 1987; Heine 1997; Crisma 2015; also Geist 2013). Although there is no denial that the numeral and the IA are closely related in Germanic, it is not so obvious that the numeral is indeed its source: first, Barbiers (2005) discusses the fact that the numeral one shows irregular behavior in many languages, e.g. when used as a cardinal, we systematically find suppletive forms. This implies that it is not a 'usual numeral' but has a special status. This finding is much in line with what will be established below in more detail, namely that the function of the IA is 'singling out' – be it a set or an individual - rather than counting. Secondly, many languages do not have the numeral 'one' as the basis for their IA, cf. the WALS-map¹ for the IA where out of the 238 languages that have an IA, 102 use a different source (in contrast to 112 where the IA corresponds in some way to the numeral). Finally, there is a suggestion by Bopp (1833) that the numeral is related to the skrt. demonstrative êna (and to the Old Norse 'weak' demonstrative hinn, see Pfaff 2019a, 2020). Bopp himself (1833:429) calls it a defective pronoun. He analyzes it as consisting of the demonstrative morpheme ê- and the stem -na, analogous to ê-ka, which has the interrogative pronoun in it. What -na indeed means, remains to be shown. But under this perspective, a possible scenario is that both elements, the numeral and the IA, have one common source but independent (further) developments. Supporting evidence for this comes from an investigation of the IA in Petrova (2015) who shows that the admittedly sparse use of the IA in OHG nevertheless shows all the usages found in the modern language. In addition, Grimm (1873) notes that in earlier stages, we find an even broader distribution of IAs than nowadays as they may build plural forms - again in the context of partition. And these still occur in Bavarian dialects, see Donhauser (1995) for discussion. Donhauser suggests that they denote "an actual or a virtual discrete entity which is divided from other entities of the same type" Donhauser (1995:70, my translation). With these findings, Donhauser doubts the 'standard' view that the IA developed in a successive way from the numeral one.

¹ https://wals.info/chapter/38

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An – admittedly very speculative – idea in this context that should nevertheless be considered is that the Germanic n-suffixation is equally directly related to this predecessor. Recently, van de Velde (2019) has argued that the IA in the qualifier construction, is the (re- or) mis-analyzation of the common Germanic n-inflection on the adjective, but see Norde (2019) for a different view. If it is true that the IA and the numeral have a predecessor found in the *êna* forms that Bopp discusses, there are then not only two elements descending from this item – there are even three: the numeral, the IA, and the n-suffix. And as discussed, all seem to overlap semantically to a certain extent. The task is thus to sort out the overlaps from the differences. And this in turn can only be done with a broad and systematically gathered empirical basis.

Preliminary work: 'Low' indefinite articles in contemporary dialects

In the DFG-funded Project SynAlm, the occurrence of determiners, especially with mass and abstract nouns, was systematically investigated by using judgment tasks (5 point scale), translation tasks, and questions concerning the interpretation of various nominal expressions. Bavarian has been known to regularly use the IA with mass nouns of the type *Ich brauch a geld*, see e.g. Zehetner (1985). In SynAlm this usage was investigated and as the map reveals, Alemannic speakers, situated in the region next to Bavaria, use the IA in this context as well:



Map 1: active production (translation task) of IA with a mass noun; SynAlm **FB3 / 3-5-1**, n=757, 8% with IA, orange dots Map 2: passive acceptance (judgment (1-5) task), of IA with mass noun; SynAlm **FB5-12a2**, n= 517, 46% acceptance (1-2). green: acceptance; red: rejection

For both maps: Habt ihr noch (ein Mehl) im Haus? (Do you have still flour in the house?)

The sub-dialect that produces/accepts the IA with mass nouns is henceforth called ALM A and the other ALM B. Further comparable syntactic environments for the IA, e.g. with weak quantifiers etc. patterned alike. A further interesting confirmation for this split between ALM A and ALM B are the results of an interpretational question in SynAlm FB5:

- (5) Ich hätt gern mol wieder en Fisch zum Mittagesse
 - I had prt prt again a fish for lunch

ALM A speakers allow an interpretation where the dish only contains some fish ('stuff' reading) whereas ALM B speakers insist on a complete fish (individual reading). Thus, there is a clear parametric difference between these two variants of Alemannic. The following example shows that the IA is licensed only in episodic sentences, as the acceptance rate for this generic statement with the IA was below 1% (Ø / the definite article were both accepted); for an analysis of the generic definite article compared to the Romance languages, see Stegmann (2015).

- (6) (Ø/ein/das) Gold ist ein sehr teures Metall (sligthly adapted, SynAlm FB5_2-2-1)
 - a the Gold is a very expensive metal

In Brandner (2018), this difference is tentatively captured by the absence/presence of the event argument in whose scope the IA for partition is licensed, much in the spirit of Kratzer's (2005) proposal that IAs are always bound by an operator. But the crucial data that support the idea of a structural distinction between the partition and the individuation reading, is given in (7):

(7) So ein Weinwie dieser hier... such a wine like this one

In this qualifier construction, the IA shows up with a mass noun in Standard German as well, even obligatorily so; the same is true for English and Dutch, crucially, also in ALM B. To account for this difference, the proposal is that so induces a sub-kind reading. Sub-kinds are — in

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contrast to subsets – conceived of as individuals as they can be referred to with a pronoun, cf. (8b):

(8) a. Hast du mir noch (ein) Mehl? *Ich hab es auch nicht/Ich habe keines/welches have you me still (a) flour? b. So ein Wein!

Such a wine

I have it not/I have none/some Wo kann ich den kaufen? Where can I buy it?

An anaphoric reference with a pronoun is not possible in (8a): instead a partitive pronoun/ quantifier has to be used, see Strobel (2017) for an investigation of these items in the modern dialects, also Glaser (1993). The picture² from this small area of the uses of the IA is thus the following, given in the form of a table:

	D?		[specIndP [IndP]	[specPart [Part]	[NP]]] =mass	
a.				(ein wenig) ø	Mehl	St.Ger./ALM B
b.				(ein wenig) ein	Mehl	Bav./ALM A
c.				guter	Wein	all variants
d.	(ein)	so	ein		Wein	Bav./ALM
e.	(ein)	so	guter	guter	Wein	St. Ger.
f.		so	ein	guter	Wein	St. Ger.
g.			ein		Fisch	St. Germ./ALM B
h.				ein	Fisch	Bav./ALM A
i.	(a)	so	nice a		girl	English

The so/such elements are not taken to be part of the functional extension of the DP – instead they project an 'Equative Phrase', being part of a correlative construction, e.g. Jäger (2019), Brandner (2015a). This structure is also the basis of exclamatives – which equally show an 'unexpected' IA with mass nouns, even in Standard German as in Hat der ein Glück! ('has he a luck'), implying that there exist several 'sub-types' of luck), see Brandner (2010). Turning briefly to the role of adjectives, note first that there is a certain optionality concerning the relative positioning of the determiner if the adjective is present - but not otherwise:

a. * (9) a. (ein) so guter Wein ein so Wein b. so ein guter Wein b. so ein Wein

As already mentioned, an adjective has a partitioning effect, (c.) in the above table. However, the presence of an adjective moreover implies that there are further subsets with members that do not have the respective property (if there is good wine, there is also not good wine). In this sense, it induces a sub-kind reading as well. With the above reasoning, this means that the individual head is realized, giving rise to the two possibilities. Finally, the English inverted structure can be derived by assuming that only in this variant can the specifier and the head be filled simultaneously, whereas in Standard German, a constraint akin to the *Doubly filled Comp* filter appears to be operative. Note that this version was possible in older stages of German as well: in DWB (vol 3. 135), some examples are mentioned, (wie süesse ein arebeit = how sweet a labor; Walth. 119,24). A further indication that English behaves differently in this respect are expressions like many a man suggesting an analysis where the quantifier is situated in spec-IndP and the IA in the respective head position. Interestingly, in Low German dialects, the IA may occur co-occur with certain quantifiers, as in *jeder-een* (each a), see Zimmermann (2011). Finally, there is evidence that in the Icelandic 'qualifier construction', something akin to the IA article shows up. Pfaff (2011) discusses the element svo-na (so+suff), which is usually used deictically with a pointing gesture. However, in spoken language, it appears in an unstressed form and seems to take over the function of a (presentational) IA, but crucially only with a nonspecific meaning – whereas a bare nominal can be either specific or non-specific:

(10)María ætlar að giftast ríkum manni Mary wants to marry rich man

² It is tentatively assumed that the 'pure mass' reading is indeed not marked and that the lexical noun itself occupies this position. In Germanic, it may occur as such also with a generic reading.

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- a. M. wants to marry a specific person (who happens to be rich) = specific
- b. M.'s prospective husband must be a member of the set of rich men = non-specific (= kind)
- (11) María ætlar að giftast svona ríkum manni

Mary wants to marry SVONA rich man

only: M.'s prospective husband must be a member of the set of rich men = non-specific (= kind)

In sum, the results from this preliminary work on the function and distribution of the IA in Southern German and Scandinavian dialects as well as spoken Icelandic are a good starting point for a systematic investigation into the usage of the IA in other Germanic dialects and diachronic stages. Due to the quite fine-grained semantic distinctions detected already here, a targeted search for different morpho-syntactic means in other Germanic languages, is possible.

1.2 Project-related publications

Sections 1.2.1 and 1.2.2 together must not exceed 10 publications; please number them consecutively.

1.2.1 Articles published by outlets with scientific quality assurance, book publications, and works accepted for publication but not yet published.

- 1. Brandner, E. 2020. A borderline case of syntactic variation. *Glossa*. Special collection: Formal Approaches to Dialectal Syntax
- 2. Brandner, E. 2015. Syntax des Alemannischen (SynAlm). Tiefenbohrungen in einer Dialektlandschaft. In: Kehrein, Roland/Lameli, Alfred/Rabanus, Stefan (Hrsg.): *Regionale Variation des Deutschen*. Projekte und Perspektiven. Berlin/Boston: De Gruyter Mouton, pp. 289–322.
- 3. Brandner, E. 2012. Syntactic Microvariation. Language and Linguistic Compass 6.1:113-130
- 4. Brandner, E. 2010. On the syntax of verb-initial exclamatives. Studia linguistica, 64(1), 81-115.
- 5. Brandner, E. & A. Rehn acc.a. Dialectal Variation, Standardization, and Models of Language Change. *Zeitschrift für Dialektologie und Linguistik*, special issue, edited by Augustin Speyer & Julia Hertel
- 6. Brandner, E & A. Rehn acc. b. Bad data can be good data the significance of different methods for syntactic theorizing. to appear in: Featherston, S. et al (eds). Proceedings of Linguistic evidence, University of Tübingen.

1.2.2 Other publications, both peer-reviewed and non-peer-reviewed

1.2.3 Patents

n.a.

1.2.3.1 **Pending**

n.a.

1.2.3.2 Issued

n.a.

2 Objectives and work programme

2.1 Anticipated total duration of the project

36 months

2.2 Objectives

The general objective is to contribute to the discussion about the functional structure within the DP and specifically to get a deeper understanding of the role and function of the IA in Germanic. The empirical goals are to

- identify the morpho-syntactic environments where the IA occurs
- identify its (varying) semantic contribution (partition individuation)
- compare it to other linguistics means used to express these meanings: N-suffixation/ adjectival inflection and adjectives/weak quantifiers/numerals.

These goals will be achieved by building an **annotated database**, see WP1, which will allow us to detect overlaps of these items in form and/or meaning in a systematic way. The theoretical goals are to

- establish a fine grained fseq, in accordance with the empirical findings
- explicate the meaning components of the fseq

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- recast grammaticalization processes within the nano-syntactic framework

As empirical and theoretical work go hand in hand in this kind of research, the following will first present the initial hypothesis including a preliminary structure, followed by the working packages that are organized around the theoretical goals

2.3 Work programme including proposed research methods

The meaning components and formal aspects

The basic semantic component that the IA can lexicalize is best characterized as 'discrimination'. 'Discrimination' captures the characterization of the partitive in Barker (1998), see also Zamparelli (2008), in that partitive always implies that there 'must be something left', i.e. a true subset relation. The individual reading is achieved when one member of a set is singled out. The sub-kind reading can be characterized with the same notions as this is singling out a subset with the only difference that a certain amount of properties must be shared among the members – with at least one differing property. Thus, the following characterizations will guide the research for the various morpho-syntactic realizations in other Germanic languages than Bayarian and Alemannic:

- I. partitioning (building of a subset of 'stuff')
 (e.g. mass noun with IA in Bavarian, but def. article in Northern Swedish)
 If the result of the partitioning forms a unit that can be contrastively interpreted, cf. so/such a NP, we can talk about individuals:
- II. partitioning + contrast: individual (so/such-a-NP construction) If the individual is anchored in a situation, we can talk about existential interpretation:
- III. individual + anchoring: existential (*I have a cat*)

 If the existential is quantified, we get the numeral reading of the IA and if this is linked to a 'reference in mind', we get the specific reading:
 - IVa. existential + quantification: numeral (*I have one cat*) (other quantifiers that operate on individuals, *many/much*)
 IVb. existential + referential: specific (*I read a (certain) book*)

As these distinctions are assumed to be universal, a guided and thus systematic search in other variants (and former stages) of Germanic for lexical items possibly overlooked until now is possible. Important in this context is the concrete morpho-phonological realization of the items. E.g. in Alemannic, there is a clear distinction between the IA realizing I.-III., realized by a weak version (schwa or –n) and the numeral resp. specific reading with a nasalized diphthong, see also the discussion about spurious –n in Dutch in section 1.1.

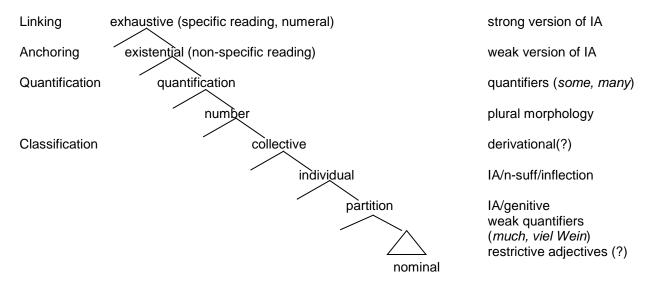
What must be integrated into this picture are the so-called -*ein*-words, like the indefinite negator *k-ein*- as well as the possessives *s-/m-/d-ein*- in which the IA builds a constitutive part, see Leu (2012), also Brandner (2014a,b, 2015a) on possessives. An initial observation for Alemannic, based on translation data from SynAlm, is that the Neg-indefinite comes with the strong version of the IA, i.e. the numeral reading, whereas the possessives show a reduced form – although not identical to the weak form. Whether such differences hold in other dialects/spoken variants as well and whether they have an impact on the interpretation of these words, remains to be seen.

The syntactic structure

Although the project will concentrate on the classification area, the interaction with the other parts of the fseq within the DP will be needed to identify the relevant readings by way of dividing them from those that are relevant for reference. Wiltschko's (2014) Universal Spine Hypothesis promises to be useful for this task. Every clausal and nominal projection consists of the following (abstract) functional layers: *Linking* >> *Anchoring* >> *Quantification* >> *Classification*.

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The following tree structure gives a first sketch about the assumed structure, On the right hand side, some realizations (either from older stages or from contemporary dialects) are mentioned by way of illustrating:



The layer called here 'existential' in the Anchoring region is meant to account for the characterization of an indefinite noun phrase with the existential reading as not being linked via anaphoric reference to discourse, but rather introducing it with an existential presupposition, (Heim 1982; Kamp 1981). In contrast, specific indefinites are indeed situated in the linking domain, as the referent is present – either in 'the mind of the speaker' or already in the common ground. That these two layers are so closely neighbored leads one to expect that there are further interactions/overlaps (e.g. with definite determiners). Indeed, as discussed in detail in Heusinger (2011), the demonstrative *dies*- in German can (in certain contexts) also be used to introduce a new discourse referent as in *da war dieser Typ* (there was this guy...), also Kamp & Bende-Farkas (2018). Considerations of this kind will be used to make the picture complete.

Working packages

WP0

WP0 is dedicated to the overarching theoretical questions. It will be fed by the results of the other WPs and will deal with the following issues:

- stepwise development/refinement of the fseq, based on the empirical findings
- isolate of the meaning components and their respective position within the fseq
- provide a survey about the variational space in this area of the grammar within Germanic
- offer an alternative to the common grammaticalization scenarios by re-considering the notion of 'semantic bleaching' in terms of syncretism/multifunctionality in accordance with the nanosyntactic postulates

WP1 Database

The database to be constructed will be a **compilation** of the already existing one from SynAlm³, relevant parts of SyHD, SAND, and ScanDiaSyn, as well as NPEGL⁴. In addition, historical data available from earlier discussions of n-suffixation, will be included and annotated accordingly as well as data gained from corpus research, e.g. DDD⁵. Jürg Fleischer (Marburg) has agreed to give us access to the audio files from the Wenker-Atlas and further material. In parallel we will develop an **annotation scheme** that allows us to encode morphosyntactic, phonological and

³ https://ilg-server.ling.uni-stuttgart.de/synalm/html/datasheets/

⁴ https://www.hf.uio.no/ilos/english/research/projects/noun-phrases-in-early-germanic/index.html

⁵ https://www.deutschdiachrondigital.de/

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semantic properties for each item and – as far as possible – its etymological origin. Every database entry is a complex nominal expression (DP) with all the individual items contributing to the grammatical meaning specified separately.

With a sufficiently large database, we will be able, for any annotated item, to extract information for instance about:

- the possible range of interpretations it allows
- in what sort of syntactic contexts it occurs ('outer syntax')
- whether it has phonological variants (e.g. stressed vs. unstressed, change in vowel quality, clitic-status) and/or has morphological (inflected vs. uninflected) alternations

With the expertise on data annotation brought in with Alexander Pfaff, see 7.1.1 and the experiences from SynAlm concerning the adequate representation of highly variational data, more useful and adequate tools will be developed. With these tools, hypothesis about a common semantic core of the items, their position within the semantico-syntactic structure as well as their interaction with other lexical items can be tested.

WP2 Diachronic considerations, grammaticalization

As mentioned, the common grammaticalization scenario where the IA develops out of the numeral via semantic bleaching has its empirical problems. Thus, the task in this WP is to develop a more adequate scenario how the IA and the n-suffixation entered the grammar of Germanic and connected to this: when and how did they replace formerly existing morphosyntactic devices? Or should they be seen as the lexicalization of certain interpretations that used to be mere implicatures, cf. the work by Traugott (1988, and subsequent work)? In addition, it is known that the sentence-internal position has/had an influence on the interpretational status of the respective DP, i.e. the 'outer syntax' of the DPs will become relevant. Based on the results in WPO, a thorough examination of existing descriptions and texts will be done, thereby concentrating on:

- replacement of morpho-syntactic devices by the IA/n-suffixation (e.g. partitive genitive)
- lexicalization of semantic notions/implicatures via IA/n-suffixation
- word order, 'outer syntax' of the respective DPs
- the interaction with the grammaticalization of the definite article (s. e.g. Crisma 2015)

Traditional grammaticalization theory has established that usually there is a stepwise development in terms of semantic bleaching, accompanied by the respective morpho-syntactic weakening (function word \rightarrow clitic \rightarrow affix). Note that as soon as an fseq is independently established, it is possible to formulate testable predictions concerning the development, as syncretisms may occur only with adjacent functional heads. "Weakening" then describes the situation that a given lexical item may lexicalize one (or more) additional adjacent functional heads over time. Due to the *ABA theorem, a development resulting in the spellout of F1, F2 and F4 – to the exclusion of an intervening F3 being spelled out by a different lexical item – should not be possible. Whether this is true or not is an empirical matter. The way the database is planned, it will be possible to get substantial answers.

WP3 The comparative perspective

Romance The issue of partition and its morpho-syntactic realization is discussed in the literature on Romance to a much larger extent, which is of course due to the distinct partitive determiner in many of these languages. While not explicitly discussed above, the hypotheses and results from the literature were considered as well, see e.g. Ihsane (2009) for a cartographic approach, and especially the still running project⁶ lead by Elisabeth Stark that investigates the partitive articles under a micro-variational perspective. Concerning e.g. plural

⁶ https://www.rose.uzh.ch/de/seminar/wersindwir/mitarbeitende/stark/DiFuPaRo.html

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forms of the IA, see Storto (2003), Zamparelli (2008, 2014), de Bruyn (2010) and also Cardinaletti & Giusti (2016) to mention only a few. Thus, a comparison with Romance will complement our investigation into Germanic.

Slavic The Slavic languages are interesting since their determination system, including the marking of partition and individuation differs from Germanic considerably. Ljudmila Geist (University of Stuttgart) will tackle similar issues in her DFG-funded project "On the fine structure of the Russian noun phrase: a comparative perspective". Since there is a relevant overlap in terms of the research object and the questions asked (functional layers within the DP and interpretational aspects), a close cooperation for exchange on the theoretical questions is planned.

N-suffixation, especially in adjectival inflection, is a typical Germanic property and since we will explore the idea that it plays a crucial role in partition and individuation, a comparison with these languages will be helpful to localize further the areas in the grammar that n-suffixation covers in Germanic.

Time line

	Year 1	Year 2	Year 3
WP0	Establishing the semantic primitives	Refinement of the structure,	Final model of the fseq
Theory	Sorting the different readings and	based on the additional	Integrating the k-ein-
	their hierarchical organization	empirical data	word(s) and other
	First model of fseq	Addressing the question of	derivational issues
	Overview over adjectival inflection	multifunctionality of the IA	Integrating the non-
		and the n-declension	Germanic languages
WP1	Development of annotation system	Testing and implementation	Refining the database
Database	Sorting/systematization of the	of the database	Implementing
	already available data	Finalizing the annotation	convenient search
	Collecting and annotating new data	system	functions
	from dialects (Wenker, Orts-	Populating the database	
	grammatiken, diachronic sources, corpora)	(diachronic and comparative material)	
WP2	Thorough consultation of the existing	Browsing the historical	Work on an alternative
Diachrony	literature (incl traditional accounts	material for items that	scenario of the
Diadrilony	such as Bopp, Behaghel, Grimm)	realize the readings	development of the
	The "biography" of ein, -n-	identified in WP0	IA and n-suffixation
		Identify syncretisms and	n t and n cannan
		'replacements'	
WP3		Consulting the literature:	Integrating comparative
Compar.		data and analyses	data into the fseq
Coop-	Workshop with cooperation partners	Visit: Martina Wiltschko	Visit: Roberto Zamparelli
eration	Visit: Tom Leu		

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4 Relevance of sex, gender and/or diversity

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5 Supplementary information on the research context

Section 5 et seq. must not exceed 10 pages.

- 5.1 Ethical and/or legal aspects of the project
- 5.1.1 General ethical aspects

n.a.

5.1.2 Descriptions of proposed investigations involving experiments on humans or human materials

n.a.

5.1.3 Descriptions of proposed investigations involving experiments on animals

n.a.

5.1.4 Descriptions of projects involving genetic resources (or associated traditional knowledge) from a foreign country

n.a.

5.1.5 Descriptions of investigations involving dual use research of concern, foreign trade regulations

n.a.

5.2 Data handling

Besides the common way to make the data and (preliminary) results public to the scientific audience via conference talks and papers in the relevant journals, it is planned to publish the database on the internet. Based on the experience gained in SynAlm, similar techniques (XML-based with a convenient GUI) will be used such that the data are easily accessible. The University of Stuttgart (TIK with the library together) has developed DaRUS⁷, a platform for publishing (DOI) and sharing research data. We will use this opportunity for the publication of the database, as in addition, DaRUS guarantees hosting after the project has ended.

5.3 Other information

Please use this section for any additional information you feel is relevant which has not been provided elsewhere.

This proposal is a revised version of the proposal handed in under the number BR 4089/3-1. The relevant changes according to the suggestions of the reviewers and Fachkollegium are listed in the accompanying letter.

DFG

⁷ https://www.izus.uni-stuttgart.de/fokus/darus/

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6 People/collaborations/funding

6.1 Employment status information

For each applicant, state the last name, first name, and employment status (including duration of contract and funding body, if on a fixed-term contract).

PD Dr. Eleonore Brandner, permanent employment at University of Stuttgart as wissenschaftliche Mitarbeiterin

6.2 First-time proposal data

Only if applicable: Last name, first name of first-time applicant

n.a.

6.3 Composition of the project group

List only those individuals who will work on the project but will not be paid out of the project funds. State each person's name, academic title, employment status, and type of funding.

[Text]

6.4 Researchers in Germany with whom you have agreed to cooperate on this project

Alexandra Rehn	University of Konstanz	adjectival agreement, n-declension, diachrony
Jürg Fleischer	University of Marburg	dialectal data and syntax, Wenker audio-files
Hans Kamp	University of Stuttgart	semantics and pragmatics of the IA
Daniel Hole	University of Stuttgart	general issues wrt. syntactic and semantic theory
Ljudmila Geist	University of Stuttgart	comparison with Slavic

6.5 Researchers abroad with whom you have agreed to cooperate on this project

Oystein Vangsnes	University Tromsø,	Scandinavian dialectal data, functional
	Norway	architecture of the DP
Sten Vikner,	University Aarhus,	Danish and Old English, discussion of their
Johanna Wood	Denmark	explicit proposal of the low IA
Tom Leu	University Montreal,	decomposition of k-ein, s-ein, morpho-syntactic
	Quebec, Canada	representation, semantic contribution of the IA
Roberto Zamparelli	University of Trento	comparative work on the partitive in Romance
Martina Wiltschko	ICREA, Barcelona	Universal spine hypothesis

6.6 Researchers with whom you have collaborated scientifically within the past three years

This information will help avoid potential conflicts of interest.

Katrin Axel-Tober – University of Tübingen; Ljudmila Geist – University of Stuttgart; Alexandra Rehn, University of Konstanz; Daniel Hole – University of Stuttgart, Claudia Bucheli-Berger, University of Graz

6.7 Project-relevant cooperation with commercial enterprises

If applicable, please note the EU guidelines on state aid or contact your research institution in this regard.

n.a.]

6.8 Project-relevant participation in commercial enterprises

Information on connections between the project and the production branch of the enterprise

n.a.

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6.9 Scientific equipment

List larger instruments that will be available to you for the project. These may include large computer facilities if computing capacity will be needed.

n.a.

6.10 Other submissions

List any funding proposals for this project and/or major instrumentation previously submitted to a third party.

n.a.

7 Requested modules/funds

Explain each item for each applicant (stating last name, first name).

7.1 Basic Module

7.1.1 Funding for Staff TV-L 13 for 3 years (\approx 220.000) + 13.764 (student assistance)

Funding for Dr. Alexander Pfaff for a three year period as a post-doc, TV-L (Tarifgebiet West)

Dr. Alexander Pfaff: He will conduct the research in particular for WP1 and WP2. Due to his expertise in Icelandic and North Germanic more generally as well as his previous theoretical work (especially his nanosyntactic analysis of articles), he is uniquely qualified for this position. He has worked extensively on the (morpho-) syntax and semantics of noun phrases in Germanic – covering topics like definite articles, genitival and adjectival modification, partitivity, (strong vs. weak) adjectival inflection, and the diachrony of the North Germanic article system. Several of his results will form the basis for working on the research questions raised above. He worked as a postdoc at the University of Oslo and he was involved in the creation of a database for Germanic DPs (NPEGL) developing the annotation scheme. He will therefore be also responsible for the digital representation of the results of our research in form of a database.

Funding for student assistance

1 position for the whole runtime (general assistance) (36x) 20 h per month = 7.754,40 (ungeprüfte Hilskraft = 10.77 valid from 1.4.2021 on)
1 position for an advanced student (24x) 20h per month = 6.009.60 (Hilfskraft mit BA-Abschluss = 12.52, valid from 1.4.2021 on)

Tasks: extract relevant information from dialect/historical grammars; check and transcribe the available sound files from Wenker-Atlas (cooperation with Jürg Fleischer, Marburg); help with the database; general assistance.

7.1.2 Direct Project Costs

7.1.3 16.570 (500+7800+2570+5700)

7.1.3.1 Equipment up to € 10,000, Software and Consumables 500

1x work place for Alexander Pfaff, Baden-Württemberg PC, appr. 500

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7.1.3.2 Travel Expenses

<u>7800</u>

Conferences potentially: CGSW, GLOW, DGfS, DiGS, – as some of these alternate between Europe and the US, application for funding for:

6 x Europe, à 800 (average)	4800
2 x international (à 1500)	3000

7.1.3.3 Visiting Researchers (excluding Mercator Fellows)

2570

Tom Leu (Montréal)

Accomodation (1 week)

(visit during workshop, travel expenses listed there) 560

Martina Wiltschko (Barcelona)

1 x flight (200) **200** 1 x accommodation (3 nights) **240**

Sten Vikner & Johanna Wood (Aarhus)

2 x flight 600 2 x accommodation (3 nights) 480

Roberto Zamparelli (Trento)

1 x train (250) 250 1 x accommodation (3 nights) 240

7.1.3.4 Expenses for Laboratory Animals

n.a.

7.1.3.5 Other Costs

n.a.

7.1.3.6 Project-related Publication Expenses

n.a.

7.1.4 Instrumentation

7.1.4.1 Equipment exceeding € 10,000

n.a.

7.1.4.2 Major Instrumentation exceeding € 50,000

n.a.

7.2 Module Temporary Position for Principal Investigator

n.a.

7.3 Module Replacements

n.a.

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7.4 Module Temporary Substitute for Clinicians

n.a.

7.5 Module Mercator Fellows

n.a.

7.6 Module Project-Specific Workshops

<u>5700</u>

It is planned to organize a kick-off workshop with the cooperation partners to be held in Stuttgart in the first year. Tom Leu will stay longer to work with us on the topics mentioned.

Flight(s) 1x overseas (Tom Leu), 4 Europe	3500
accommodation (ca. 8 x 3 x 80 (-240, s. 4.1.2.3)	1680
general costs	520

7.7 Module Public Relations

[Text]

7.8 Module Standard Allowance for Gender Equality Measures

Please detail what measures are planned to promote diversity and equal opportunities. If you are submitting your proposal for an individual research grant within a **network**, note that this standard allowance may only be applied for within the coordination project. The coordination project must combine all such requests in its calculation.

[Text]