On some problem areas in grammaticalization studies[*][†]

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Abstract

In the past, three central problems were discussed in grammaticalization studies. First, the discrimination and isolation of distinctive features of the process of grammaticalization, second, the question of distinct formal expression, i.e. what counts as an explicitly expressed grammatical function in a language, and third, what is a distinct set of meanings and functions of grammatical items. The paper suggests that these problems, which have in common that they are characterized by non-distinctness in various areas, originate in the fact that grammaticalization studies have not yet proposed a substantial definition of grammar. Assuming that grammatical meaning is based in a deictic relational structure and its modifications, the paper proposes features that a substantial definition of grammar for grammaticalization studies should contain.

On some problem areas in grammaticalization studies

1   Introduction

Theoretical models on grammaticalization have reached a level of critical assessment and metacritical reply which calls for a reconsideration of some basic concepts and tenets. In particular, this paper focuses on three issues – three problem areas – which, in a somewhat generalizing manner, may be described as follows:

- Problem area 1 has to do with the discrimination and isolation of distinctive features of the process of grammaticalization.

- Problem area 2 concerns the question of distinct formal expression, i.e. the question of what counts as an explicitly expressed grammatical function in a language.

- Problem area 3 takes up the debate about a distinct set of meanings and functions of grammatical items.

As can be deduced even from this brief and preliminary description, all of the three problem areas are characterized by a lack of criteria for distinctness on different levels of linguistic structure and different processes of linguistic change. It is argued here that these problem areas are closely linked to each other and, moreover, that they originate in the absence of a clear and explicit definition of the target area of grammaticalization, e.g. the notion of "grammar" or "grammatical" by substantial criteria. Accordingly, the main purpose of this discussion is working towards a

clarification of the notion of "grammar" or "grammatical" as we need it for a solution of the problem areas in grammaticalization studies.

Section 2 presents a closer inspection of each of the problem areas. Section 3 starts with a brief look at the practice of insufficient definitions of the term "grammatical" and goes on to offer some still speculative thoughts on what might constitute a set of essential features for defining the notion of "grammatical". While the first part of the paper concerns issues that have been discussed for quite some time now and therefore may be taken as a summary of the state of the art, its final part confronts the reader with an initial outline of how the notion of grammar could be conceived in order to solve the problems addressed here.

2   A closer look at the problem areas

Before starting with the problem areas, it is appropriate to call into the reader's mind two central tenets, which are generally agreed upon in grammaticalization studies and may be treated as common linguistic knowledge. First, the process of grammaticalization is a process whereby linguistic items gain grammatical function while reducing their lexical-descriptive function. In other words, grammaticalization is concerned with "items becoming a part of grammar". This statement rests on the second tenet, namely the notion that there is a clear formal and functional distinction between lexical signs on the one hand and grammatical signs on the other, not-withstanding the gradience between the two classes.

Usually, there are additional assumptions tied to these two tenets, in particular, assumptions on the irreversible directionality of the whole process, about the semantic and structural changes involved and the cognitive and pragmatic forces motivating them. Although these additional assumptions are vastly accepted as common scientific ground on a general level, dispute arises as soon as one turns to the details, which leads directly into the problem areas.

2.1 Problem area 1

As already mentioned, the first problem area concerns the discrimination and isolation of distinctive features of the process of grammaticalization. As this has been a major topic of dispute during the last decades, it is worthwhile rendering its central arguments, which crystallize in the following two questions:

1.) Are there unique processes or combinations of processes that qualify as essential features of grammaticalization?

2.) Is the overall process of grammaticalization a distinct type of linguistic change, or, more specifically, what is the distinction between grammaticalization and lexicalization?

As to the first question, the question concerning grammaticalization-specific subprocesses, it is worthwhile to remember that it has been common knowledge from the very beginning of modern work on grammaticalization that grammaticalization processes are of a composite nature, which is to say that there is no single process constituting a necessary and sufficient condition for talking about grammaticalization. Instead, we have to deal with a bunch of processes which interact in grammaticalization. This has been stated as early as in 1982 by Christian Lehmann, as is documented in the following quotation:

Grammaticalization is a process leading from lexemes to grammatical formatives. A number of semantic, syntactic and phonological processes interact in the grammaticalization of morphemes and of whole constructions. (Lehmann 1995 [1982]: V]).

Similar observations have been made by many others, for example by Bybee (1985), Haspelmath (1999), Heine (2003:579ff.), Himmelmann (2004:31), Diewald & Wischer (2005).[3] In short, irrespective of the fact that the exact descriptions and classifications of the subprocesses vary among individual authors, grammaticalization scholars have acknowledged the multi-factorial nature of grammaticalization from the very beginning. Consequently, the distinctive and unique feature of grammaticalization is generally seen in its particular combination and serialization of several processes and stages, which – among other things – find their repercussion in grammaticalization scales and paths, and complex scenarios of successive contexts and constructions.[4]

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[3] Cf. also Lehmann (1985) where six parameters of grammaticalization are correlated in order to form a complex instrument for measuring degrees of grammaticalization. Bybee (1985), in an empirical-typological study on the degrees of grammaticalization in markers for verbal categories, also uses a bundle of interdependent factors (addressing semantic, structural, morphological features as well as frequency). Heine (2003: 579) lists the following four mechanisms: "*i. desemanticization (or "bleaching", semantic reduction): loss in meaning content; ii. extension (or context generalization): use in new contexts; iii decategorialization: loss in morphosyntactic properties characteristic of the source forms, including the loss of independent word status (cliticization, affixation); iv erosion (or "phonetic reduction"), that is, loss in phonetic substance.*" Some pages later, Heine (2003: 583) clarifies that these four mechanisms "*and the way they are interrelated*" account for the process of grammaticalization, "*irrespective of how one wishes to define a 'distinct process'.*" Traugott (2003: 644) states that "*early grammaticalization can therefore be seen as a complex set of correlated changes*", which she specifies as follows: "*i. structural decategorialization; ii. shift from membership in a relatively open set to membership in a relatively closed one (i.e., from lexical category to syntactic operator category) in the context of a specific construction; iii. bonding (erasure of morphological boundaries) within a construction; iv. semantic and pragmatic shift form more to less referential meaning via invited inferencing*" and "*phonological attrition, which may result in the development of paradigmatic zero (Bybee 1994)*". A different view is expressed by Himmelmann (2005 also 1992: 2204), who treats phenomena like reduction and paradigmaticisation, which others regard as crucial, as peripheral (see later for comment).

[4] Thus the allegation put forward by Newmeyer (1998) and taken up by Campbell (2001) and others in *Language Science* 23 that it was the critics of grammaticalization theory who, for the first time, discovered the composite nature of grammaticalization as well as the claim that this very nature constituted a counter argument against treating

Moreover, in the last years, it has become obvious that the micro-processes grammaticalization is composed of are **not** unique to grammaticalization. This non-exclusiveness pertains to "reductive processes", namely semantic reduction and formal fusion, which are involved both in grammaticalization and in lexicalization, as well as to motivating factors like expressiveness and economy, which too are both relevant to grammaticalization and lexicalization, though at different stages and with different force. This latter point has been elaborated on, for example, by Traugott and König (1991) and Traugott and Hopper (1993/2003) under the heading of pragmatic strengthening (i.e. the result of conversational implicature) in grammaticalization, and by Harnisch (2004) and Diewald [to appear] with a focus on expressive processes in lexicalization and grammaticalization.

A prototypical example of semantic and morphonological reductive processes in grammaticalization is the development of *'ll* as a future marker from *will* and *shall* in English. Examples of the same processes, i.e. semantic and morphonological reductive processes in lexicalization are found in lexical entities like *Drittel* ('third') or *Eimer* ('bucket'), the originally composite nature of which is no longer obvious in the present-day German.[5]

Examples of increased expressiveness and pragmatic strengthening, on the other hand, are found in the early phases of grammaticalization processes when lexical material is creatively used to fulfill a function which is usually expressed by already existing grammatical markers (like

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grammaticalization as a relevant linguistic phenomenon, lack factual substance. For an enlightening discussion and metacriticism see Lehmann 2004.

[5]An illustration of the combined effect of lexicalization and grammaticalization on the same structure is given by Lehmann (2004: 169): "*Given a construction X-Y Z, in which X-Y is befallen by reduction, then grammaticalization and lexicalization may operate at the same time. Take German aufgrund 'on the basis of' as an example: X = auf, Y = Grund, Z = the genitive complement of Y. Univerbation of auf + Grund is lexicalization, because it goes against the syntactic structure and destroys it. It transforms the complex into a lexical item of the category 'preposition'. Desemanticization of the result by loss of concrete local features, accompanied by the loss of a couple of nominal properties […], is grammaticalization of the fresh lexical item.*"

expressing future time reference by a construction of a modal verb & infinitive instead of a simple present tense).

In short, a large number of studies confirm that there is nothing unique or distinctive in the single mechanisms and processes themselves: There is no single sub-process of linguistic change (e.g. a specific type of fusion, a specific type of semantic change) that can be claimed to be exclusive to grammaticalization. However – and this is extremely important – a specific clustering of particular formal, semantic and pragmatic processes together with a specific directionality of change are highly indicative of an ongoing grammaticalization process. This statement directly leads to the second question of this problem area: the distinction between grammaticalization and lexicalization.

As the intense debate in the past years has shown (see e.g. Wischer 2000; Lehmann 2002; Himmelmann 2004), there is a fundamental difference between grammaticalization and lexicalization, a difference which is not constituted by the ingredients of the processes, but by their respective directionality, i.e. by their target areas. Summarizing the position taken by Lehmann, it may be stated that, while lexicalization is a process pushing an item into the direction of the lexicon, grammaticalization pushes it into the direction of grammar. The two processes, although having the fact that they are reductive processes in common, move towards diverging target areas. This is nicely illustrated by the arrows in Lehmann's diagram, which is given here as figure (1):

(INSERT FIGURE 1)

As can be seen from the diagram, the distinction between lexicon and grammar is most prominent on the lowest hierarchical level of linguistic organization. While the maximal degree of lexicality, which is represented by free, referential morphemes, is found in the left lower corner, the prototype of grammatical items, i.e. inflectional morphology, is located in the right lower corner. On the more complex, syntactic levels – this is the upper part of the diagram – the distinction between lexicon and grammar is blurred.

Lehmann's diagram is quite obviously based on a semasiological approach to language, which, moreover, presupposes that the prototypical appearance of grammar is the shape of inflectional (or agglutinative) morphology and, of course, since Bybee (1985) most recently who showed that for central verbal categories like tense or mood cross-linguistically there is a preference for inflectional realization, there is no denying that fact. Therefore, in a slightly simplifying manner, it may be stated that "good grammar" is prototypically realized by formally bound and semantically reduced items, i.e. by affixal morphology, which are arranged in grammatical categories and belong to a variable but closed set of possible grammatical categories on a cross-linguistic scale.

However, on the other hand, it has also been known for a long time that grammar is not restricted to that prototypical way of representation. A large amount of grammaticalization studies is concerned with exactly those items not matching the inflectional prototype, e.g. the rise of grammatical (periphrastic) constructions from free syntagmatic strings. As is well-known, classical examples of this can be found in the tense, mood and aspect systems of many Germanic and Romance languages of today (cf. the rise of perfects, futures, periphrastic moods etc.).

Morphological boundedness, therefore, is not a sufficient criterion to decide whether an item is a grammatical marker or not. Fortunately, there are other criteria beyond morphology that can be used for discerning grammatical signs: Criteria which do not concern isolated items or constructions, but rather the structural organization of language and its patterns of usage. Among the most important ones are the paradigmaticity and obligatoriness of grammatical signs, which are two sides of the same coin. Most scholars – with more or fewer reservations – would subscribe to the credo that grammatical meaning is organized in closed class paradigms and that its expression is obligatory (see e.g. Lehmann 1985; Bybee 1985: 27; Bybee, Perkins/ & Pagliuca 1994: 2; Haspelmath 1998: 318; Dahl 2000, 2001; Plungian 1998; Mel'čuk 1976: 84; Radtke 1998: 10).

Lehmann's definition formulates this by focussing on the notion of "*loss of autonomy*" and "*subjection to constraints*".

Grammaticalization of a linguistic sign is a process in which it loses in autonomy by becoming subject to constraints of the linguistic system. (Lehmann 2004: 155).

Still, there have always been voices warning against taking this statement as an absolute truth. Some, like Wiemer& Bisang (2004) or Himmelmann (2004 and 1992), relativize the centrality of the notion of paradigm and obligatoriness. Wiemer & Bisang (2004: 5) discuss "*the problematic relevance of obligatoriness and paradigm formation as a definitorial criterion for grammaticalization*" and, with reference to languages of East and mainland Southeast Asia and the heavy influence of pragmatic factors on the interpretation of utterances in those languages, they conclude that "*[f]rom a more general perspective one may say that obligatoriness and paradigm formation are grammatical parameters which are almost inevitable in a large number of languages, first of all Indo-European, but they are not absolute or universal criteria for measuring grammaticalization*" (Wiemer & Bisang 2004: 9).

Himmelmann (2004: 33) takes the position of the relevant criterion for analyzing an observed change being "*an instance of grammaticization presupposes that it is possible to show that the semantic-pragmatic usage contexts of the construction at hand have been expanded*", whereas "*changes on the element-level (in particular erosion and fusion but also paradigm formation) are here considered epiphenomena which, among other things, depend on basic typological features of a given language*". There is no doubt about the relevance of what Himmelmann calls "*context expansion*", although it should be noted that the phenomena referred to by this term have been captured with precision in Lehmann's grammaticalization parameters before. When it comes to Himmelmann's evaluation of paradigmatic restructuring as peripheral, however, this view is not shared here, as it is based on an unnecessarily narrow definition of "paradigm". Himmelmann (1992: 24) proposes a radical view on the redundancy of paradigmatic organization in gramma-ticalization, culminating in the statement that "*[t]here is no evidence for viewing paradigmatization*

as a necessary factor [of grammaticalization] at all".[6] At the bottom of this attitude, there seems to lie a misinterpretation of "paradigm" and "opposition" together with an unclear notion of "grammatical category". As has been known since Jakobson, a grammatical category per definition requires a paradigmatic opposition of at least two elements. One of them (typically the newly grammaticalizing one) constitutes the formally and notionally marked element which is cast in opposition to the formally and notionally unmarked zero-element (which, in addition constitutes the neutralisation stage of the opposition). Therefore, if any form/construction is grammaticalized then, by definition, it builds an oppositional pair with another item and is thus a member of a paradigm.

Beside authors relativizing the importance of obligatoriness and paradigmatic organization in the way indicated above, there are others, like Lehmann (1995 [1982]: 12) and Plungian (1998), who state that both criteria refer to phenomena which are matters of degree, i.e. grammatical categories can form more or less clear-cut paradigms and the choice among their members can be more or less obligatory.

Thus Lehmann (1995 [1982]: 12) shows that obligatoriness is a useful criterion although it is not "*an absolute one*", as "*[s]omething is obligatory relative to the context; i.e. it may be obligatory in one context, optional in another and impossible in a third context*". Lehmann illustrated this by a comparison of the different degrees of obligatoriness of the category of number in nouns in Latin and Turkish. As this is an important, though seemingly trivial issue in the context of this paper, it is appropriate to adduce some German examples to illustrate the existence of different degrees of obligatoriness in grammatical paradigms. On one end of the scale, there are paradigms whose membership choices are 100 percent obligatory and subject to grammatical rules. These are

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[6] This opinion is repeated in later papers, like in the following quote: "*Apart from host class formation, grammaticisation processes may lead to class formation in another way: Sometimes (but clearly not necessarily) grammaticising elements which are similar in terms of function and degree of grammaticisation tend to form small classes of function words in complementary distribution, the result being well-known minor lexical categories such as auxiliaries, determiners, adpositions etc. This aspect of the grammaticisation process has been termed paradigmatisation (Lehmann 1982) or simply paradigm formation (Bybee & Dahl)*" Himmelmann (2005: 89).

morphological paradigms like case marking in noun phrases (Det & N) in German, as is illustrated here by the example *Tag* 'day' in (1) for nouns of the "strong masculine declension type":

(1)   Case marking in NPs with strong masculine nouns

        Nom   der Tag

        Gen   des Tages

        Dat: dem Tag(e)

        Akk.   den Tag

A similar case is gender concord in adjectives as in (2) with the nouns *Löffel* 'spoon' (masculine), *Messer* 'knife' (neuter) and *Gabel* 'fork' (feminine):

(2)   Gender concord of attributive adjectives

        masculine   ein   silberner Löffel   * eine silberne Löffel / * ein silbernes Löffel

                     'a   silver   spoon'

        neuter   ein   silbernes Messer   * ein silberner Messer / * eine silberne Messer

                     'a   silver   knife'

        femine   eine silberne Gabel   * ein silberner Gabel / * ein silbernes Gabel

                     'a   silver   fork'

Usually, the grammatical items subject to this sort of obligatoriness are members of inflectional paradigmatic oppositions, i.e., notwithstanding periphrastic forms, at the core of such paradigms there is bound morphology in the form of inflection, such as old grams with heavy semantic and formal reduction. The selection of one element in paradigms of this sort is obligatory and governed by

language internal rules, which means that it is subject to higher level decisions. In (2), the choice of a particular nominal lexeme, which in German has a fixed gender, automatically determines the choice of gender concord in the attributive adjective and the determiner. Any deviant realization would produce incorrect utterances. While this concord rule depends on the co-present head noun, the choice of the right case – another nominal category in German – may be determined by a variety of factors. This is illustrated in (3) where the respective choices of cases are dependent on the syntactic role like the predicative position requiring the nominative in (3a), the valency of the adjective *wert* requiring the accusative in (3b), the valence of the verb *verglich* requiring the preposition *mit* 'with' which in turn takes the dative in (3c), and the "frozen" adverbial genitive *eines Tages* in (3d)

(3a)   Heute ist **ein schöner Tag**.

'It is a lovely day today.'

(3b)   Diese Arbeit ist mir **keinen Tag** wert.

'This job is not worth wasting a day on it.'

(3c)   Sie verglich jeden Tag mit **dem Tag**, an dem sie zum ersten Mal in die Stadt gekommen war.

'She compared each day to that day when she had first come to this town.'

(3d)   **Eines Tages** kam er nicht mehr zum Futterplatz.

'One day, he stopped coming to the feedyard.'

This type of obligatoriness is called here **language internal obligatoriness**. As it is steered language internally and thus subject to formal triggers, its mechanism of choice can be represented by the following conditional formula:

(4)   Rule for language internal obligatoriness

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(INSERT FIGURE 4)

Language internal obligatoriness is contrasted with a second type of obligatoriness, for which the term **communicative obligatoriness** is chosen. Communicative obligatoriness concerns the behavior of those linguistic items, which do function as grammatical closed-class items, but which are still not obligatory in the sense illustrated above. The term is intended to capture the fact that many categories are obligatory in the sense that they have to be realized in the relevant position. The speaker cannot leave them unspecified if s/he does not want to produce incorrect utterances, but the choice among the paradigmatic members of the category is not determined by language internal features but by the communicative intentions of the speaker.[7]

A good example of this is the voice distinctions in German, i.e. the choice between the active and the two passive constructions, the *werden*-passive and the so-called dative-passive or *bekommen*-passive.[8] Both passives are realized as periphrastic constructions which can be grouped into a paradigm together with the active verb form as the unmarked member. The three voice constructions of German are given in (5), examples with the verb *überweisen* 'transfer' are given in (6):

    (5)   The voice constructions in German:

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[7] See also Radtke (1998: 10) who, with reference to the verbal categories of German, states: "*Zwar hat der Sprecher keinerlei Freiheit bezüglich der Frage, ob eine Verbalkategorie gewählt werden soll oder nicht. Er muß sich hier für jeweils eine Verbalkategorie entscheiden, und zwar für genau eine. Bezüglich der Frage, welche Verbalkategorie er dabei realisieren möchte, besteht jedoch Wahlfreiheit. An dieser Stelle beginnt die Semantik!*" In the approach taken here the notion of communicative obligatoriness is not restricted to verbal categories but is used to cover any grammatical category displaying the combination of obligatory realisation and freedom of choice between several paradigmatic options according to intention.

[8] There has been a lively discussion about the question of the degree of grammaticalization of the dative-passive in the past decades, which, however, cannot be taken up here (for an overview cf. e.g. Diewald 1997, Leirbukt 1997, Askedal 2005).

(INSERT 5)

(6)   Examples of voice constructions with the verb *überweisen* 'transfer'

(INSERT 6)

The voice distinctions obviously make up a grammatical paradigm in German (and are treated as such in current grammars). However, there is no communicative or syntactic context in which a speaker would be forced to use a passive in German, i.e. there are no contexts in which a passive construction is obligatory in the strict sense, meaning that another choice of one of the paradigmatic members would be grammatically wrong. The choice is communicatively steered; it is a question of speaker perspective and not determined by linguistic structure.[9]

The rules of usage can be formulated in conditional clauses which refer to speaker's needs. In analogy with the rule for language internal obligatoriness, communicative obligatoriness can be formulated in the following conditional formula:

(7)   Rule for communicative obligatoriness

(INSERT 7)

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[9] The fact that passives are not possible with all verbs is neglected here. Restrictions of this type are not sufficient to make a decision about their status as a grammatical category as the applicability to all relevant category members (host class extension in the diction of Himmelmann (2005: 89)) is also a matter of degree. It affects many grammatical categories (there are, for example, nouns without plurals, inclinable pronouns etc.). This is quite clearly stated in Himmelmann (2005: 89): "*Host classes of individual grams differ significantly in size. Plural markers may be restricted to nouns denoting animate beings, passive markers to transitive verbs, applicatives to motion and transfer verbs, etc. Only certain types of grams are associated with a host class which is co-extensive with a major lexical category. Well-known examples are tense-aspect-mood auxiliaries, (clitic) articles, (some) simple adpositions (or clitic case markers) and negators. These gram types can be used to define highly general syntactic slots where practically all the members of a given major lexical category may occur.*"

According to the category concerned, this rule may be expanded as needed. For the choice of the *werden*-passive as in the example above, the conditions motivating its use of a *werden*-passive may be formulated as in (8):

(8)   Conditions motivating the use of a *werden*-passive

        (INSERT 8)

To sum up: Many linguistic items, which are classified as genuine grammatical categories of a language, and which are rightly classified as such because they share many of the features of grammatical categories (a sufficient degree of formal and semantic reduction, paradigmatic association in a closed class), do not pass the strict test of obligatoriness. The criterion of strict obligatoriness works only with the core of inflectional grammatical categories. Therefore, language internal obligatoriness, in the way defined above, is a sufficient but not a necessary condition for the status of a gram, i.e. a grammatical marker.

2.2   Problem area 2: distinct formal expression

Problem area two revolves around the question of what counts as an explicit, formally expressed grammatical function in a language or, put differently, to what extent it is possible to treat constructions and constructional oppositions as a part of the grammar, i.e. as a valid formal realization of a grammatical meaning or category.

In the last years, it has been shown that a new grammatical function does not arise homogeneously in all uses of the linguistic item concerned but is bound in its origin to specific linguistic "contexts" or "constructions". For this see for example Bybee, Perkins & Pagliuca (1994: 11), Bisang (1998: 20), Himmelmann (2004: 31), Lehmann (1992: 406, 1995 [1982]), Traugott (2003),

Traugott (2008), Diewald (2006). Cast in sufficient generality and restricted to the diachronic origin of grammatical signs, this observation meanwhile has the status of a truism. Complications arise, however, as soon as decisions about the classification of specific synchronic phenomena are asked for, meaning as soon as the question of what types of constructions are valid realizations of grammatical categories (in the strict sense) has to be answered.

Opinions on that question vary widely and cover the full gamut between strictly gram-based and highly inclusive pattern-based models. Himmelmann (2004 and 2005), for example, takes a restrictive view on this issue and excludes constructions that lack a distinguishable grammaticalizing element, for example the topological marking of grammatical distinctions. This is stated in the following quotations:

*The major purpose of this paper, then, is to reaffirm and expound the position that grammaticisation pertains to **an element in its constructional context** or, put in a slightly different way, to **constructions which are identifiable by a construction marker** (in the sense that an accusative construction involves an accusative case marker and a future construction is identifiable by its future marker, etc.).* (Himmelmann 2005: 80, the author's emphasis)

A grammaticisation process primarily pertains to a construction but requires the presence of at least one grammaticising element in this construction (such as the article in ARTICLE-NOUN constructions, the preposition in PPs, etc.). This grammaticising element functions as the construction marker and usually, but not necessarily, also undergoes changes as part of the overall process. (Himmelmann 2005: 83)

Without being able to discuss the consequences of this type of restriction, which in its core is highly circular,[10] it must suffice here to state that this view is not supported here. Instead, this paper favors a view like the one expressed in Traugott (2003: 626) who sees grammar "*as structuring communicative as well as cognitive aspects of language*" and therefore includes a much wider range of phenomena, e.g. "*focusing, topicalization, deixis, and discourse coherence*" within the realm of grammar.

Similarly, Lehmann (2002: 7), whose work is known for keeping close track of the morphological aspects of grammaticalization and, therefore, cannot be suspected of undue neglect of form, states that there may be cases where constructions grammaticalize as a whole without one particular element in them undergoing a process of grammaticalization.[11]

Wiemer and Bisang (2004: 4) finally, in an approach close to Hopper's concept of emergent grammar, go even further and suggest understanding grammar "*as a system of more or less stable, regular and productive form-function mappings*" which also means that "*the field of grammaticalization in the above sense of a broader perspective is to be extended to all the processes involved in the diachronic change and in the emergence of such systems.*"

Without being able to discuss and properly evaluate these heavily diverging conceptions here for reasons of space, the above discussion may serve as evidence for the need for a clear conception of grammar which is independent of the notion of grammaticalization. While this issue will be taken up

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[10]For example, Himmelmann (2005: 84) justifies the exclusion of "*constructions which do not involve a grammaticising element*" (which, as he concedes, may develop in perfect parallel to constructions containing a grammaticalizing element and thus do not display a different behavior) with the following argument: "*These changes, however, are not considered instances of grammaticisation here, because the changing constructions do not involve a construction marker. [...]. Hence, host class expansion is in principle impossible in these constructions, which therefore are excluded from grammaticisation processes as defined in (1).*" This argumentation, obviously, is highly circular and not adopted here.

[11] The relevant quote is as follows: "*[...], then the grammaticalization of a construction does not entail the grammaticalization of any of its component elements*" (Lehmann 2002: 7).

again in the following section, the rest of this one is reserved for some examples showing that the above discussion is not just theoretically important but also has repercussions in the linguistic description of a grammatical paradigm in a given language. The following three examples are arranged according to increasing difficulty.

The first example concerns the integration of periphrastic constructions as paradigmatic members into an otherwise inflectional paradigm. The major building technique of verbal categories in present-day German is a periphrastic construction. Examples of this difficulty abound, although this issue is hardly raised as a problem in mainstream descriptions of the tense and mood systems of German. Instead, most authors follow the tradition of integrating some periphrastic construction while excluding others without further mention, let alone convincing arguments for the chosen selection.[12] Thus the standard tense paradigm of German for past time reference contains the perfect, the pluperfect and the future perfect as periphrastic forms but not the so-called double perfect forms, like *hat gefragt gehabt* ('has had asked')

(9)   Tense paradigm: periphrastic forms for past time reference
        (INSERT 9)

The double perfect forms are diachronically young constructions and mostly found in regional varieties and oral language. They do, however, albeit with low frequency, appear in written language and literary genres.[13] These observations may well be adduced to conclude that double perfect forms have not yet reached the same degree of grammaticalization as perfect and pluperfect forms and, therefore, should be excluded from a standard description of tense paradigms in present-

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[12] Eisenberg (2005: 21) observes "*Even for the traditional analytic categories like the passive, the perfect and the analytic subjunctive it is still controversial whether they should be considered as part of the verbal paradigm or not.*"

[13] For details on the double perfect forms see Eroms (1984), Litvinov & Radčenko (1998), Amman (2005), Rödel (2007).

day German.[14] However, many of the above mentioned factors are true of future perfect forms as well. In particular, these forms have an extremely low frequency. According to Gelhaus (1995: 143), they make up only 0.3 % of all finite verb forms found in a corpus study on written German and are thus classified by him as marginal ("*Randerscheinung*"). Still, in sharp contrast to double perfect forms, future perfect forms are typically included in standard descriptions of temporal distinctions in German while the double perfect is not. One would expect at least a slight hint of what type of consideration went into this decision of including one marginal form into a paradigm and excluding another.

The same is true of periphrastic forms with infinitive constructions. There are some which are traditionally included in the mood and tense paradigm – these are the periphrases with *werden* (literal sense: 'become') like in *wird fragen* ('will ask'), *wird gefragt haben* ('will have asked') (which are usually dubbed "future" and "future perfect" respectively) and *würde* ('would') like in *würde fragen* ('would ask'), *würde gefragt haben* ('would have asked') and there are others, e.g. the infinitive constructions with modal verbs like *mag fragen* ('may ask'), *dürfte fragen* ('might ask'), which are not included, although many of them equal verbal periphrases with *werden* and *würde* (Diewald 1999, Smirnova 2006) in frequency as well as in some of their functions.

(10)　　Future tense/mood- paradigms: periphrastic forms with infinitives

　　　　(INSERT 10)

Again, there has been a broad and long-standing discussion about the question of whether German does have an analytic future or not, in which place the *würde*-construction falls, and to what degree modal verbs plus infinitives are realizations of a complex periphrastic mood system. But

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[14] Grammars not including double perfect forms within the tense paradigm are, e.g. Eisenberg (1999: 102, 106), Zifonun et. al. (1997: 1687), Duden (2006: 509-511) (see Duden 2006: 520f., however, where exceptions are formulated for cases where double perfect forms may be used even in standard language for the sake of clarity).

again, as in the cases of the double perfect forms and the voice distinctions, all these discussions so far are hardly reflected in the standard descriptions of verbal paradigms and categories in grammars and reference books.

As is well-known, the combinatorial possibilities for complex verbal forms are manifold, and the examples given above show but a small selection of the range of periphrastic constructions in the domain of verbal categories in German. The point, however, should be clear and can be summarized as follows: As far as semantic, functional and structural aspects, as well as frequency and pragmatic factors are concerned, there is no convincing argument to draw the line between members and non-members of grammatical paradigms where it is traditionally drawn. Periphrastic verbal constructions are a constant though often neglected problem for any strict paradigmatic organisation.

Even more problematic is the second example, namely **syntactic constructions** like sentences with modal particles in German. They cannot be integrated into an inflection-based paradigm because there is no such paradigm to begin with. Still we have paradigmatic oppositions among sets of modal particles as the following:

(11a)   Das   ist   **ja**   eine   anerkannte   Studie.

          This   is   JA   an   acknowledged study.

(11b) Das ist **eben** eine anerkannte Studie.

      This   is   EBEN an   acknowledged   study.

(11c) Das ist **doch** eine anerkannte Studie.

      This   is   DOCH   an   acknowledged study.

(11d) Das ist **schon** eine anerkannte Studie.

      This   is   SCHON   an   acknowledged study.

As has been shown in a number of studies since the rise of research into modal particles in German, the discourse structuring function of these items is highly systematic, and there are groups of modal particles which form sub-paradigms with a high degree of coherence and strict oppositional values.[15]

This can be illustrated by the prototypical constructions encoding questions in German. There are two standard ways of expressing an unmarked interrogative speech act. One is by using the modal particle *denn*, like in (12):

(12)   Kommst du <u>denn</u> mit?

        Are you - DENN - coming along?

The other option is to use the same construction type without particle as in (13):

(13)   Kommst du mit?

        Are you coming along?

The functional difference between the two is the following: By using the modal particle *denn*, the question is marked as being a consequence of the communicative interaction that precedes it. Thus *denn* indicates a consecutive relation between a pragmatically given unit and the relevant situation. It marks the speech act as a non-initial, reactive turn. Particle-less questions, on the other hand, mark the question as the initial turn of an adjacency pair consisting of an initiating interrogative turn and a reactive turn. Therefore, by way of conversational implicature, particle-less

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[15] For an overview see Diewald 2007; the ample literature on modal particles can in no way be evaluated here with sufficient detail.

questions sometimes appear to be less polite than *denn*-questions. This, however, is an additional trait; the main function of the particle is to mark the turn as reactive.

This function, i.e. marking a turn as non-initial by relating it to a presupposed, pragmatically given unit, is not restricted to *denn* but is the common denominator of all modal particles of German, independent of the speech act type they are associated with. And it is this function which qualifies the modal particles in German as a grammatical category on functional-semantic grounds (Diewald 1997, 2006a, 2007). Beside this, it is particularly important to note that the distribution of the two interrogative constructions is complementary, which is to say the two constructions build a paradigmatic opposition. There are contexts where it would not be possible to leave out *denn* in a question, i.e. *denn* is communicatively obligatory in these contexts. And there are other contexts which call for particle-less questions.

While it is not possible to elaborate on this issue further here, attention should be given to the fact that, in the case of the modal particles in German, there is an explicit, morphologically expressed grammatical category, organized paradigmatically and subject to obligatory rules of the communicative type. However, there is no inflectional paradigm member, which might form the core of a paradigm built by inflectional and periphrastic members, which is the typical type of paradigm for grammatical categories in German. Furthermore, the grammatical function or meaning expressed by this paradigmatic opposition does not belong to the group of traditionally acknowledged grammatical categories. This fact seems to render it difficult for many linguists to accept the grammatical status of modal particles (see next section).

The last example to be discussed here is an even more complicated case concerning the question of the formal realization of grammatical categories. While in the cases discussed so far we still have a linguistic item which can be isolated as the substantial carrier of the grammatical distinction, there are also cases where – at first sight – there is no single item or construction detectable as a separable grammatical marker for a particular function. Instead, we find a constellation or combination of other grammatical categories which together express a meaning or

function, which has to be called grammatical as it is expressed via prototypical grammatical markers in other languages. This issue has been raised by Kaznelson (1974: 98) who, referring to related, though not identical notions by Whorf', speaks of "**evident**" versus "**latent**" grammar and describes the latter as follows:[16]

Die latente Grammatik sind die grammatischen Signale, die in den syntaktischen Verbindungen und in der Semantik der Wörter impliziert sind. (Kaznelson 1974: 98)]
Latent grammar consists of those grammatical signals that are inherent in the syntactic relations and the meaning of words. (Translation GD)

Kaznelson goes on to explain that the content of latent grammar is, by and large, the same as the content of grammatical forms in evident, overt grammar. An example of this latent realization of grammatical meaning is the exploitation of the linear ordering of constituents for the expression of the opposition between definiteness and indefiniteness in languages without articles, e.g. the Czech language. The following examples of this phenomenon are discussed in Leiss (2000: 4ff.) with reference to Krámsky (1972: 42) who also provided the examples from Czech:

(14a) Kniha je   na   stole

       book   is   on   table

       'the book is on the table'

(14b) Na   stole   je   kniha

       On   table   is   book

---

[16]A similar, though not as comprehensive, notion of grammar seems to lie behind Jespersen's statement: "*The principle here advocated is that we should recognize in the syntax of any language only such categories as have found in that language formal expression, but it will be remembered that 'form' is taken in a very wide sense, including form-words and word-position.*" (1992 [1924]: 50, my emphasis)

'there is a book on the table'

While the serialization in (14a) leads to a definite interpretation of *kniha*, the same item in (14b) receives an indefinite interpretation (Leiss 2000: 6).

As mentioned before, phenomena like these, i.e. combinations of grammatical categories or topological positions and the meanings that may be systematically expressed by them, can be treated by a constructional approach to language and grammaticalization.[17] In this approach, the notion of grammatical categories is necessarily opened up towards non-inflectional patterns of realization: Periphrastic members of otherwise inflectional paradigms can be treated on the same level as their inflectional oppositions. Likewise, syntactic constructional patterns with no anchoring in an inflectional paradigmatic partner (like the modal particles in German) are conceded the same status as grammatical categories in much the same way as inflection-based paradigms and "latent" realization of grammatical meaning, i.e. constructions building up a category meaning by configurational patterns of co-present other categories, which on their own do not show the function they have in this pattern (like subject/object-relations as topological notions in transitive sentences in English, or the expression of definiteness values via topological ordering).

Though this more open perspective on the formal realization of grammatical functions is of great advantage to the investigation of grammaticalization phenomena, there remains a fundamental problem which cannot be solved by loosening restrictions on formal realizations. It is the fact that this type of approach presupposes a set of language-independent grammatical categories which are notionally defined in an a priori manner, and which may then be expressed in a language in a variety

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[17] For the relevance of constructions in grammaticalization see e.g. Diewald 2006b, Bergs/Diewald, eds. (2008), Traugott (2008a,b). Although meanwhile there is a range of "schools" in constructional approaches, scholars usually agree on a basic notion of construction, which may be rendered in an exemplary way by the following quote by Goldberg (2006: 5): "*Any linguistic pattern is recognized as a construction as long as some aspect of its form or function is not strictly predictable from its component parts or from other constructions recognized to exist. In addition, patterns are stored as constructions even if they are fully predictable as long as they occur with sufficient frequency.*"

of formal realizations. In other words: in this approach we have to know in advance the set of grammatical functions/categories to choose from. This leads to the third problem area.

2.3   Problem area 3: a distinct set of functional domains

This problem area concerns the debate about the types of semantic and functional distinctions that should be subsumed under the notion of grammar independent of their formal expression. For the purpose of this paper, it boils down to the following question: Can we single out certain types of meaning or function that are specific for grammatical items? In other words: Do grammatical items have to have a special type of meaning?

A most vivid illustration of the consequences of this question can be seen in the debate about grammaticalization versus pragmaticalization, which arose in the discussion on the diachronic development of discourse markers from lexical items. Many linguists working on that topic have raised the question of whether the development of those particles from other elements should be subsumed under the heading of grammaticalization, or whether it should be treated as a separate process, which is usually dubbed 'pragmaticalization' or 'subjectification' (Traugott 1995/1997, 1999; Traugott/Dasher 2002; Aijmer 1997; Barth and Couper-Kuhlen 2002).

Some authors suggest drawing a more or less sharp line between grammaticalization on the one hand and pragmaticalization on the other, arguing that there is an important difference between the target areas, namely grammar in the first case, and pragmatic functions in the second (for this opinion see Aijmer 1997). However, the criteria for distinguishing between grammatical functions on the one hand and "pragmatic" (often loosely used in a broad sense covering every linguistic function that is not part of the traditional set of core grammatical functions), or "subjective" or "conversational" functions on the other are never spelled out. Instead, opinions like the following are quite frequent:

This type of change which leads to discourse and pragmatic markers, to elements which organize, structure, and contextualize discourse with respect to discourse-pragmatic concerns and not with respect to sentence-grammatical concerns (e.g. congruence, binding), contradicts classical grammaticalization. (Günthner & Mutz 2004: 98)

Despite the fact that the diachronic development of discourse markers in all relevant structural and semantic aspects is a paradigm example of grammaticalization, the authors diagnose a "contradiction" to grammaticalization. It is to be assumed that this judgment – a misjudgment according to the view taken here – originates in the fact that the function or meaning expressed by these elements does not fit into the traditional range of meanings and functions which are allotted to grammatical categories. Pragmatic meaning seems to be regarded as the wrong meaning for grammar by most authors working on discourse markers and similar elements. Thus the frontier line in this debate – which has been going on for quite a time now – seems to run between "true" grammatical function and "merely" pragmatic function. It nicely illustrates the tendency of linguistics in general and grammaticalization studies in particular to regard the traditional set of familiar grammatical categories as the semantic-functional benchmark for judging grammatical categories on semantic-functional terms. It seems necessary to try and make more positive statements about what grammatical signs or grammatical functions are. But before a preliminary suggestion will be offered, a summary of what has been said so far is in place.

2.4   Summary of problem areas

The foregoing discussion has highlighted some major points of agreement as well as of disagreement among linguists working on grammaticalization.

Points of agreement:

- There is agreement about the existence of a fundamental distinction between grammatical and lexical items as well as the fact that grammaticalization is a composed process.

- There is growing agreement that none of its sub-processes is restricted to grammaticalization.

- There is agreement that prototypical grammatical categories have a certain formal and semantic make-up – the formal criteria culminating in inflectional morphology, the semantic ones are often defined negatively as "devoid of" descriptive meaning.

- There is agreement that prototypical grammatical categories are organized in closed-class paradigms, which enforce obligatory choice among their members.

Points of disagreement:

- There is no agreement on the overall importance and status of paradigmaticity and obligatoriness.

- There is no agreement on what type of formal expression counts as realization of a grammatical category (problem of covert grammar).

- And finally, there is no agreement on the range of meanings and functions grammatical categories are to express.

It is suggested here that a great deal of these unsolved problems go back to one blind spot in grammaticalization studies: the lack of a substantial definition of what a grammatical sign is or does in comparison to a lexical sign.

3   The core of the problem and first steps to its solution

3.1   No explicit definition of the central concept

A paper by Himmelmann dating from 1992 and bearing the title "*Grammaticalization and Grammar*" states that

> *Work in grammaticalization also hardly ever makes explicit the concept of grammar underlying a given investigation.* (Himmelmann 1992: 2).

This is still a valid diagnosis for today's state of the art. There is no fundamental discussion of the underlying notion of grammar in grammaticalization studies. Instead, in a large number of influential definitions of grammaticalization, the notion of grammar is treated as an unexplained and presupposed a priori. This may be demonstrated by some quotes which represent a more or less random selection of many others, which might appear here instead.[18]

> *Grammaticalization consists in the increase of the range of a morpheme advancing from a lexical to a grammatical or from a less grammatical to a more grammatical status, e.g. from a derivative formant to an inflectional one.* (Kuryłowicz 1964: 52)

> *Grammaticalization is the process by which constructions with specific lexical items develop grammatical functions, leading to the reinterpretation of the lexical items as possessing grammatical functions.* (Croft 2000: 156)

> *'Grammaticalization' [...] refers primarily to the dynamic, unidirectional historical process whereby lexical items in the course of time acquire a new status as grammatical, morpho-*

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[18] With reference to the collection of quotes in Campbell & Janda 2001, section 2, Lehmann (2004: 153), too, criticizes the sloppiness of many definitions of grammaticalization found in literature, which may be interpreted as also – implicitly – deploring the insufficient definition of grammar.

syntactic forms, [and in the process come to code relations that either were not coded before or were coded differently.] (Traugott/König 1991: 189)

To conclude, there is evidence to suggest that grammaticalization can be defined as a distinct process, leading to the rise and development of new grammatical forms. (Heine 2003: 584)

All of the above quotes share the fact that the term "grammar" or "grammatical" is used to derive and define the term "grammaticalization", whereby the first notion, "grammar", remains unexplained in itself. Circularity arises from this kind of procedure, which has the following shape: "Grammaticalization" is "items becoming part of grammar", and "grammar" is built up by "items having undergone a process of grammaticalization".

The studies referred to tend to describe the process of grammaticalization with a number of features, most of which have been discussed in the first section of this paper, e.g. the composed nature of the process, the stages of the process, the involvement and interaction of several linguistic levels, etc. Most importantly, the target notion of the process – grammar or grammatical category – is not explained beyond reference to the notions of paradigmaticity and obligatoriness. As has been shown, these two notions are indeed indispensable as diagnostics, but, if used in the traditional way, they are insufficient for a satisfying definition of grammar (cf. the next section for an attempt at an adequate reinterpretation of the terms "paradigm" and "paradigmaticity"). In short, all these descriptions and definitions, though perfectly correct in themselves and pinpointing important features of the phenomena under discussion (namely grammaticalization and grammar), do not help to solve the basic problem: the lack of a definition of the fundamental concept.

This omission comes to light as soon as one realizes that the process of grammaticalization is not made up of distinctive, grammaticalization-specific sub-processes or features of its own (which as has been shown in section 2.1 and has been realized by linguists working on grammaticalization from the beginning). If the sub-processes are not unique to grammaticalization, they cannot be used as the

only defining criterion for grammar, and if their clustering represents an adequate diagnostics for the process of grammaticalization (which it does), this still does not imply that it allows a substantial definition of its target. In short, as grammaticalization is a target oriented, directional process, we need an explicit and non-circular description of the target beyond a description of the process leading toward it.

3.2   Some essential features of grammatical meaning

Throughout the history of linguistics, there have been efforts trying to give an explication of what grammatical categories are. As the purpose of this paper is not to present a research history of all these attempts to define grammar or grammatical categories but to work towards a definition of grammar useful for grammaticalization studies, this section will selectively turn to previous work which directly serves its purpose. The first subsection is devoted to introducing the concept of deixis as the focal criterion for defining grammar and to illustrate the functioning of deictic relations in grammatical elements. The second step (section 3.2.2) shows the way in which the deictic process and its relational structure can be transferred to secondary "fields of pointing" like anaphoric processes, thereby leading to derived realizations of the relational structure which, like the deictic one, enter into the composition of grammatical signs. Finally, section 3.2.3 claims that the basic relational structure underlying any deictic processes, derived or non-derived, is transformed from the syntagmatic to the paradigmatic dimension of linguistic structure, thereby creating the type of relational structure that lies at the heart of grammatical paradigms. Thus the variation of the deictic process and its transfer to other "fields of pointing" accounts for a non-trivial definitional criterion for grammatical elements.

3.2.1   Deixis

One of the most important results of earlier studies on the subject is that grammatical signs have an indexical potential,[19] which means that they incorporate a "pointing relation" as a central part of their meaning, that is a relational scheme or structure which "points" from a source position to a target position. This basic relational structure may be applied to various domains and levels of linguistic structure. In its fundamental realization, it constitutes a deictic relation, a relation between the actual speech situation, the deictic origo, and the linguistic utterance (or some part of it), i.e. the level of the "*narrated event*" in the sense of Jakobson [1971 [1957]: 133). Following Bühler (1989 [1934]), whose work on deixis and its derived modes of pointing provides the foundation of this account on grammatical signs, the deictic origo is "*the zero-point of subjective orientation*".[20] This "zero-point" (the origin or source of the linguistic production) is – per definition – implied in any linguistic activity and thus always has to be presupposed as "given" in a linguistic utterance, no matter whether it is explicitly encoded or not. Bühler has shown that it is this **semiotic a priori** from which the inevitable anchoring of any linguistic utterance in the non-linguistic situation results. Furthermore, it is the fundament of the basic deictic relation and all types of derivation of that relation. Bühler also demonstrates that these derivations are abstractions transferring the relational structure of the deictic process from its original field to other fields of pointing. This results in different types of relational signs (i.e. linguistic entities explicitly encoding a relational structure), which are intertwined in many ways to build up linguistic meaning and among which the relational functions of grammatical signs play a crucial role. On this footing, Diewald (1991) presents an extensive treatment of different types of deictic relations and different realizations of grammatical deictic relations, which is the basis of the following, very condensed description of the deictic process and its role in the formation of grammatical signs.

In order to explain the deictic component of grammatical signs, it is helpful to start with a brief description of the deictic process as it is realized in "classic" deictic signs, like the first person

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[19] The term "*indexical*" is taken here in the sense of Peirce to be a rough hypernym of all kinds of "pointing processes".

[20] Bühler (1989 [1934]: 102-3) calls it the "*Koordinatenausgangspunkt*" and speaks of the "*Koordinatensystem der 'subjektiven Orientierung', in welcher alle Verkehrspartner befangen sind und befangen bleiben*". This is given in the English translation as the "*coordinate system of 'subjective orientation', in which all partners in communication are and remain caught up*" (1990/1934: 118).

pronoun *I* or the deictic local adverb *here*. The deictic procedure employed during the prototypical use of these signs in an utterance is an instance of "linguistic pointing" which is composed of **two relational structures**. One relation starts from the deictic origo (in the default case concentric with the current speaker) and points to its non-linguistic referent (the deictic object, which is an entity categorized as belonging to one of the deictic dimensions, e.g. local, personal etc.), whereby it may specify the distance between the two entities (e.g. as 'near' or 'far' from the origo). The abstract core of this process can be described as a relational structure or a vector: it is a directed relation from the deictic source (the current speaker) via a path to the deictic goal (the referent of the deictic sign).

A lexical deictic sign, like *here* or the personal pronoun *I,* incorporates this deictic relation in its own semantic structure.[21] *Here* means 'a place which is concentric with the place of the origo', *I* means 'the communicative role which is concentric with the origo' (Diewald 1991: 33-34). As this relation encodes information on situational facts, namely the relation between two non-linguistic entities, one of which is necessarily the origo, it is referential as soon as it is applied in an utterance. It locates a deictic object directly in relation to the origo. This is true even in the case of deictic signs expressing far distance like German *dort* ('yonder', '(over) there'): the distance is measured **in relation to** the origo within one deictic field. This process is called strong deixis here: situational information is encoded as the essential part of the semantic features of the deictic sign. In short: strong deixis tells us that there is a referent conceived of as co-present in the deictic field of the origo, and it tells us "where in relation to the speaker" this referent is located. The relational structure of this process, dubbed "*strongly deictic relation*" or "*demonstrative relation*" (Diewald 1991: 28), may be sketched as follows:

(15)   Strongly deictic relation (demonstrative relation)

        (INSERT 15)

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[21] Langacker describes these items as "*expressions that specifically profile ground elements*" (1985: 114).

The second relation defining the deictic process takes a different direction and has a different function. It is called "*weakly deictic relation*" or "*reflexive relation*" here (Diewald 1991: 28, 54-58) as it does not refer to the deictic object (no pointing from the origo to the referent). Instead, it starts from the linguistic sign and – from there – points to the origo, that is to say, it points **back** to the zero point of the utterance. It tells us **where, starting from the linguistic utterance/sign**, the origo of this utterance is located, thus enabling the recipient to retrieve the origo and the type of connection between the linguistic utterance and the communicative situation. As the deictic origo in this relation becomes the "goal" of the retrieval process, the weakly deictic relation in this respect is the reverse of the strongly deictic relation. Turning back to our example, we can state that the deictic adverb *here* does not only mean 'a place which is concentric with the place of the origo' (which is its strongly deictic, referential meaning), it also encodes a sort of instruction for the recipient to retrieve the origo and to interpret the utterance from that perspective.

Without this reflexive relation, a linguistic sign or utterance could not be anchored to the origo. Without this second relation, the connection between language and situation could not be established.[22] Furthermore, it is this relation which accounts for the fact that the origo, and with it the whole relational structure, may be shifted to other "pointing fields", which the recipient has to retrieve in order to decode the utterance properly. The following diagram shows that the relational structure of the weakly deictic or reflexive relation is the reverse of the strongly deictic process as far as the position of the origo is concerned.

    (16)   Weakly deictic relation (reflexive relation)

           (INSERT 16)

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[22] This irreducible relation to the origo is aptly described in Mitchell (1984: 1203): "*No place can be pointed at unless it is pointed at from somewhere: without an anchoring point no direction can be fixed. [...] Whenever there is a pointing to, there is also a pointing from. On the one end there is the object pointed at; on the other there is the subject who does the pointing, who occupies the place (spatial, temporal, epistemic, or personal) pointed from.*"

As mentioned already, "classic" deictics (i.e. independent lexical items) incorporate both relations – the demonstrative, strongly deictic relation and the reflexive (origo-retrieving), weakly deictic relation. Prototypical grammatical signs, on the other hand, only have a weakly deictic relation. They do not have the potential to refer independently; they have to be combined with a lexical entity, and via their relational structure link that entity to the current origo. This relation is depicted in (17); it should be kept in mind that the "point of anchoring", i.e. the goal of this backward pointing, in the more unmarked instances of (usage of) grammatical signs, is the deictic origo, which is necessarily given as a communicative a priori in any utterance (and is not a referent in this process).

(17)   Basic relational structure of grammatical signs

(INSERT 17)

Deixis and derived indexical processes are a central part of pragmatics as deictic signs incorporate reference to the situation, in particular the respective current speaker. This is to say that, in deictic signs, "pragmatic" information is encoded as part of the inherent semantic features in the linguistic structure itself. The insight that grammatical signs always contain an indexical relation necessarily leads on to the conclusion that grammatical meaning is not only enriched by pragmatic components but that the pragmatic foundation is one of its prototypical features.

In his famous study on the grammatical categories of the Russian verb, Jakobson uses this deictic capacity as the topmost hierarchical criterion for sub-classifying grammatical signs and distinguishes deictic from non-deictic categories, which in his terminology are called "*shifters*" and "*non-shifters*" respectively. His definition of "shifters" specifies them as having a "*compulsory reference to the given message*" ([1957] 1971: 132), which means that "*the general meaning of a shifter cannot be defined without a reference to the message*" (131). In other words: deictic grammatical signs are constituted by their inherent and fundamental dependence on the "message". Now, the term "*message*" in Jakobson's study refers to the utterance in its specific communicative context. As the

centre of the communicative context is the deictic origo in the sense described above, Jakobson by this definition makes it very clear that grammar is based on deictic speaker-perspective. It is the speaker's current co-ordinate system that lies at the foundation of grammatical meaning.

The deictic potential of grammatical categories has been noted by many later linguists beside Bühler and Jakobson, among them Langacker (1985) with his concept of "*epistemic predication*", which was supplemented by the notion of "*grounding*" in Langacker's later work (e.g. Langacker 2002).[23] Thus a first attempt to specify the defining features of grammar can be formulated as follows:

(18)   Defining features of "grammar" - first attempt

(INSERT 18)

To sum up this section, we may state that if the deictic nature of grammar, which in principle has been known for several decades, had received more attention among grammaticalization scholars, a great deal of the problems referred to in the last sections could have been easily solved. It is quite sure, for example, that the lengthy discussion among grammaticalization scholars about an alleged fundamental distinction between grammaticalization and pragmaticalization could have been much abbreviated in that case.

3.2.2   Transferring the reflexive relation to the syntagmatic plane

Since Bühler it has also been repeatedly noted that this relational structure may be interpreted and reanalyzed in various ways, thus producing the different types of relational structures and layers of grammatical function. However, although the derived relational structures are not deictic in the strict

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[23] Langacker's concept of "*epistemic predication*" is discussed in detail in Diewald (1991: 54-58). See also Anderson (1985: 172) and Traugott/König (1991: 189) to name just two more studies which acknowledge the relational structure of grammatical items. For a discussion of further studies on the indexicality of grammatical signs cf. Diewald 1991, 1999.

sense, they are still expressing a vectored relation; their distinctive meaning is based on the relational semantic template given in (17).[24] This common semantic template, which consists of the grammatical element relating the linguistic entity it modifies to some other element, can be specified for different grammatical functions. Some simple examples showing deictic and derived functions may suffice here for illustration.

The deictic function is most obvious for the verbal categories of tense and mood. The relational structure that underlies any grammatical category is realized in these verbal categories as a weakly deictic relation, i.e. the anchoring point to be retrieved is the deictic origo, the speaker. The grammatical category of preterit, for example, achieves the temporal perspectivization or localization of the scene described with respect to utterance time, i.e. the origo. In addition to this purely relational function, it also denotes a specific past value which encodes distance to the origo and contrasts with other values in the grammatical paradigm of temporal distinctions. Thus the function of the preterit in an example like (19) may be given as diagram (20):

(19)   She wrote dozens of letters.

(20)   Basic relational structure for the grammatical marker of preterit
        (INSERT 20)

Leaving aside details and complications of the temporal distinctions in the German category of tense, the weakly deictic relation realized in the grammatical marker preterit gives an instruction that might be paraphrased roughly as follows: 'Go to the deictic origo; from there interpret the narrated event as temporally distant'. The value of the preterit is in opposition to the unmarked value of the tense

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[24] In the study quoted, Jakobson goes on to discuss which categories of the Russian verb are deictic, i.e. shifters, and which are not. That is, he realizes that while a large number of grammatical functions are deictic in the strict sense of the term, there are other grammatical categories which are not.

paradigm, the present tense, which in a parallel way can be paraphrased as: 'Go to the deictic origo; from there interpret the narrated event as temporally non-distant'.

While categories like tense and mood are instances of a deictic realization of the basic relational structure (which is the prototype of grammatical meaning), other categories display a derived relational structure which does not directly refer back to the deictic origo but to some other zero point being used as the origin of the localization process. Anaphoric pronouns are a case in point here. Rather than representing a deictic relation between the speaker origo and the uttered proposition, they represent a relation between elements of different, successively uttered propositions. The anaphoric pronoun *it* in sentence (21) refers back to the anchoring point, the noun phrase *the cat*, whose semantic content is indirectly taken up by the pronoun.

(21)   The cat tried to get back into the house. It jumped onto the window sill and pressed itself against the pane.

(22)   Basic relational structure for an anaphoric element
       (INSERT 22)

Again neglecting subtleties, the instruction expressed by the anaphoric realization of the reflexive relation in this example is: ' Go back to the (derived) origo, which is some kind of nominal expression (specified by additional semantic features expressed in the pronoun); from there interpret the pronoun (localize it in the universe of discourse)'.

As a final example, conjunctions may be briefly mentioned. The basic semantic content of conjunctions quite obviously contains a relational structure which usually serves to link clauses. The conjunction *but*, for example, points back to the preceding clause and relates it to the following one.

(23)   She wanted to make a call, but she could not find her mobile.

(24)   Basic relational structure for a conjunction

        (INSERT 24)

A paraphrase of this type of realization is: 'Go back to the (derived) origo, which is a proposition (proposition 1); from there interpret proposition 2 as being in a particular semantic relation to proposition 1 (according to the semantic features of the conjunction)', i.e. an adversative relation in the case of *but*.

Thus it is possible to distill an abstract feature which is the common denominator of grammatical meaning: the existence of the basic relational structure, which may be applied to different pointing fields, thus achieving deictic, anaphoric and other connective relations. The second, enriched attempt to define the notion of grammar therefore is the following:

(25)   Defining features of "grammar" – second attempt

        (INSERT 25)

One important issue must at least be mentioned here, although it cannot be discussed at any length. Of course, relational meaning is not restricted to grammar or to strong deictics like *here* or *tomorrow*; there are other lexical elements which encode relational meaning too (e.g. adverbs like *down*, *in the front,* nouns like *mother*, *daughter*, verbs like *come* or *bring*). However, it is proposed here that the relational meaning encoded in grammar is functionally different from relational meaning encoded in lexical material like the items above, and that this in principle can be captured by the fundamental opposition between the two semiotic processes of "*pointing*" ("Zeigen") and "*characterizing*" ("Nennen") that has been discovered by Bühler and motivates his distinction between deictic signs and non-deictic signs (cf. Bühler 1982 [1934]: xxix, 86-88 and passim). Thus without being able to go into details here, we may note that grammatical relations are based on deictic anchoring

and their meaning is restricted to that. Lexical items, on the other hand, have a much richer characterizing meaning, their possible relational structure being an additional component.

3.2.3 Transferring the reflexive relation to the paradigmatic plane

This section is concerned with the transfer of the reflexive relational template from the syntagmatic to the paradigmatic dimension and takes up the topic raised in section 2.1, the status of paradigmaticity and obligatoriness in defining grammar. Although we do not yet know the exact semantic and functional range of grammatical categories existent in language, we do know that every language needs a certain amount of grammatical structure, of paradigmatic organization, and of automatic distinctions which are expressed regularly and obligatorily.[25] Therefore, it is postulated here that the paradigmatic organization of a language represents a further type of relational meaning, which renders the third criterion for grammatical categories. Paradigmaticity, seen as a relational structure, is not primarily concerned with single items (which figures prominently in Lehmann's grammaticalization parameters) but with the relations between the members of a paradigm. It is concerned with the paradigm as a relational structure where each member is defined by its relational meaning(s), which encode (nothing but) its position in the paradigm itself.

To take up an example that has been treated in section 2.1, the closed paradigm of case distinctions in German does not express weakly deictic relations like tense markers, that is, it does not link the utterance to some aspect of the speech situation. Instead, the meaning of each member of the paradigm consists of nothing but its position in relation to the other members, which is encoded as a derived relational structure. The nominative represents the unmarked value and zero point of the dimension of case marking, the oblique cases encode a relational structure that localizes each of them with respect to that zero point, i.e. by "pointing back" to the nominative and encoding the

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[25] Christian Lehmann: personal communication.

"distance" from it. In other words: The paradigmatic relation is seen here as a derivation from the basic one: a transfer of the relational structure from the deictic pointing field (which is a subtype of a syntagmatic relation) to the paradigmatic axis.

It is postulated here that this paradigmatic relation holds for every paradigm – it is constitutive of the very notion of paradigm. The most obvious instances of this type of relational structure are of course small, diachronically old inflectional paradigms in which the positional paradigmatic meaning is the dominant type of relational information. They display sharper contrasts and more unequivocal, distinctive features than larger, more loosely structured paradigms, which may show sub-paradigms and peripheral members with mutual functional overlap.

However, keeping in mind the discussion in section 2, it should be very clear that the paradigmatic relation is not restricted to classical inflectional paradigms. Grammatically relevant paradigmatic organization may be found in any pattern formation in closed class contexts, irrespective of their morphosyntactic realization. Furthermore, there are paradigms of varying degrees of internal cohesion and paradigmatic integration as well as paradigms which, aside from their purely paradigmatic oppositions, encode deictic, anaphoric or other connective relations. Notwithstanding this enormous span of variation in paradigms (which, requiring thorough investigation beyond the scope of this paper, has to be taken into account), we may still contend that there is one common criterion that makes for the third feature of grammatical meaning, which can be described as follows.

(26)   Defining features of "grammar" – third attempt

(INSERT 26)

3.2.4 Summary

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The following overview assembles the three types of relational structure that have been shown to be relevant aspects of grammatical meaning. While the first one, the weakly deictic relation, is the basic, non-derived prototype, the other two relational structures are derived from the weakly deictic relation, in the sense of Bühler's notion of derived modes of pointing in derived pointing fields. The two derived relational structures operate on the syntagmatic or paradigmatic axis respectively.

It is assumed here that these three relations are not mutually exclusive and may be present in a grammatical item to varying degrees. Thereby, the varying combinations account for different types of grammatical meaning and different types of grammatical categories with deictic categories representing the semantically richer, less grammaticalized stages and highly abstract, intra-paradigmatic oppositions representing older, more grammaticalized stages.

 (27) Relational structures defining central features of "grammar"

  (INSERT 27)

Although the combinatorial possibilities and restrictions of the three relational structures in grammatical elements still have to be investigated, it is postulated here that the limiting condition for regarding an item as a grammatical element (of whatever seize, formal realization or semantic-functional domain) is the proof that it incorporates in its meaning at least the third, most abstract, paradigmatically interpreted type of the relational structure. This claim takes up the discussion on the importance of paradigms sketched in section 2. It confirms the relevance of the notion of paradigmaticity for a definition of grammar, however, and this is a very important point, it shifts the focus of attention from trying to define the outer limits of a paradigm with respect to the number of its members, its degree of obligatoriness or its semantic-functional spectrum to an investigation of the essentials of its internal structuring. As has been shown above, this internal structure of a paradigm is made-up of and represented in the meaning of its members. This meaning has the form of the paradigmatic relational structure, which encodes the localization of an item in relation to its paradigmatic zero point (and, if applicable, other co-existing paradigmatic values).

References

Aijmer, Karin. 1997. *I think* - an English modal particle. *Modality in Germanic Languages. Historical and Comparative Perspectives*, Swan, O. and O. Jansen Westvik (eds.), 1-47. Berlin, New York: Mouton de Gruyter.

Amman, Andreas. Abbau und Anschwemmung. 2005. Doppelte Perfektformen und Grammatikalisierung im deutschen Tempussystem. *Grammatikalisierung im Deutschen*, Leuschner, Thorsten; Tanja Mortelmans, Sarah de Groodt (Hrsg.), 251-275. Berlin : de Gruyter.

Anderson, John M. 1997. *A notional theory of syntactic categories*. Cambridge: CUP.

Anderson, Stephen R. 1985. Inflectional morphology. *Language typology and syntactic description. Vol. III: Grammatical categories and the lexicon*, Timothy Shopen (ed.), 150-201. Cambridge: CUP.

Askedal, John Ole. 2005. Grammatikalisierung und Persistenz im deutschen "Rezipenten-Passiv" mit bekommen / kriegen / erhalten. *Grammatikalisierung im Deutschen,* Leuschner, Thorsten; Tanja Mortelmans & Sarah de Groodt (Hrsg.), S. 211-228. Berlin : de Gruyter.

Barth, Dagmar and Couper-Kuhlen, Elizabeth. 2002. On the development of final though: A case of grammaticalization?. *New Reflections on Grammaticalization. International Symposium*, Wischer & Gabriele Diewald (eds.), 345-361. Amsterdam/Philadelphia: Benjamins.

Bergs, Alex & Gabriele Diewald (eds.). 2008. *Constructions and Language Change*. Berlin/New York: Mouton de Gruyter.

Bisang, Walter. 1998. Grammaticalization and language contact, constructions and positions. *The Limits of Grammaticalization*, Anna Giacalone Ramat and Paul Hopper (eds.), 13-58. Amsterdam and Philadelphia: Benjamins.

Bisang, Walter. 2004. Grammaticalization without coevoluation of form and meaning. *The case of tense-aspect-modality in East and mainland Southeast Asia*, Bisang, Himmelmann & Wiemer (eds.), 109-138. Berlin, New York: 2004.

Bisang, Walter; Nikolaus P. Himmelmann & Björn Wiemer (eds.) 2004. *What makes Grammaticalization? A Look from its Fringes and its Components*. Berlin, New York: Mouton de Gruyter.

Bühler, Karl. 1989 [1934]. *Sprachtheorie: Die Darstellungsfunktion der Sprache*. Stuttgart: UTB. [English translation. *Theory of Language: The Representational Function of Language*. Amsterdam: Benjamins, 1990]

Bybee, Joan L. 1985. *Morphology: A Study of the Relation between Meaning and Form*. Amsterdam: Benjamins.

Bybee, Joan L., Revere D. Perkins und William Pagliuca. 1994. *The Evolution of Grammar: Tense, Aspect and Modality in the Languages of the World*. Chicago: Univ. of Chicago Press.

Campbell, Lyle. 2001. What's wrong with grammaticalization?. *Language Sciences* 23:113-161.

Campbell, Lyle & Janda, Richard. 2001. Introduction: conceptions of grammaticalization and their problems. *Language Sciences* 23:93-112.

Campbell, Lyle (ed.) 2001. *Grammaticalization: A Critical Assessment*. Oxford: Pergamon. [Special Issue of Language Sciences 23: 2-3.]

Croft, William. 2000. *Explaining Language Change. An Evolutionary Approach*. Harlow [etc.]: Longman.

Dahl, Östen. 2000. The tense-aspect systems of European languages in a typological perspective. *Tense and Aspect in the Languages of Europe*, Östen Dahl (ed.), 3-25. Berlin/New York: Mouton de Gruyter.

Dahl, Östen. 2001. *Grammaticalization and the life cycles of constructions*. RASK 14: 91-133.

Diewald, Gabriele. 1991. *Deixis und Textsorten im Deutschen*. Tübingen: Niemeyer [Reihe Germanistische Linguistik 118].

Diewald, Gabriele. 1997. *Grammatikalisierung. Eine Einführung in Sein und Werden grammatischer Formen*. Tübingen: Niemeyer.

Diewald, Gabriele. 1999. *Die Modalverben im Deutschen: Grammatikalisierung und Poly-funktionalität*. Tübingen: Niemeyer.

Diewald, Gabriele. 2004. Grammatikalisierungsforschung. *ZGL* 32: 137-151.

Diewald, Gabriele. 2006a. Discourse particles and modal particles as grammatical elements. *Approaches to discourse particles*, Kerstin Fischer (ed.), 403-425. Amsterdam [usw.]: Elsevier.

Diewald, Gabriele. 2006b. Konstruktionen in der diachronen Sprachwissenschaft. Konstruktionen, Kerstin Fischer and Anatol Stefanowitsch (eds.), 79-103. Tübingen: Stauffenburg.

Diewald, Gabriele. 2006c. Context types in grammaticalization as constructions. Constructions. *Special Volume 1: Constructions all over - case studies and theoretical implications*, Doris Schönefeld (Hrsg.), http://www.constructions-online.de/articles/specvol1/.

Diewald, Gabriele. 2007. Abtönungspartikel. *Handbuch der deutschen Wortarten*, Ludger Hoffmann (Hrsg.), 117-142. Berlin/New York: de Gruyter.

Diewald, Gabriele [to appear]. Zum Verhältnis von Verstärkungsprozessen und Grammatikalisierung. *Verstärkungsprozesse*, Rüdiger Harnisch (ed.), Berlin: de Gruyter.

Diewald, Gabriele & Ilse Wischer. 2005. Introduction to the Workshop "Reconstructing grammaticalization and the definition of grammar", *NRG* 3, Santiago de Compostela, Spain. 19th-23rd July 2005 [unpublished manuscript].

Dikken, Den; Marcel & Christina M. Tortora. 2005. *The function of function words and functional categories*. Amsterdam: Benjamins. 1-11.

Duden. 2006. *Duden Band 4. Die Grammatik*. 7., völlig neu erarbeitete und erweiterte Aufl. Mannheim [usw.]: Dudenverlag.

Eisenberg, Peter. 1999. *Grundriß der deutschen Grammatik. Band 2: Der Satz*. Stuttgart, Weimar: Metzler.

Eisenberg, Peter. 2005. Das Verb als Wortkategorie des Deutschen. Zum Verhältnis von synthetischen und analytischen Formen. *Wortarten und Grammatikalisierung. Perspektiven in System*, Knobloch, Clemens; Schaeder, Burkhard (Hrsg.), 21-41. Berlin [u.a.] : de Gruyter.

Elmentaler, Michael. 1996. *Logisch-semantische Studien in der Grammatik des frühen 19. Jahrhunderts. Untersuchungen zur Kategorienlehre. von Simon Heinrich Adolf Herling.* Tübingen: Niemeyer.

Eroms, Hans-Werner 1984. Die doppelten Perfekt- und Plusquamperfektformen im Deutschen. *Studia Linguistica et Philologica. Festschrift für Klaus Matzel zum sechzigsten Geburtstag*, Derselbe, Bernhard Gajek und Herbert Kolb (Hrsg.), 343-351. Heidelberg: Winter.

Fischer, Olga; Muriel Norde und Harry Perridon (Hrsg.). 2004. *Up and Down the Cline: The Nature of Grammaticalization*. Amsterdam: Benjamins (TSL 59).

Gelhaus, Hermann. 1995. Die Wortarten. *Duden: Grammatik der deutschen Gegenwartssprache, 5. ed*., 85-398. Mannheim: Dudenverlag.

Goldberg, Adele E. 2006. *Constructions at work. The nature of generalization in language*. Oxford: Oxford University Press.

Günthner, Susanne. 1999. Entwickelt sich der Konzessivkonnektor *obwohl* zum Diskursmarker? Grammatikalisierungstendenzen im gesprochenen Deutsch. *Linguistische Berichte 180*. 409-446.

Günthner, Susanne & Katrin Mutz. 2004. Grammaticalization vs. Pragmaticalization? The development of pragmatic markers in German and Italian. In: Bisang, Himmelnmann, Wiemer, (eds.), 77-107. *What makes Grammaticalization? A Look from its Fringes and its Components*. Berlin, New York: Mouton de Gruyter.

Harnisch, Rüdiger. 2004. Verstärkungsprozesse. Zu einer Theorie der 'Sekretion' und des 'Re-konstruktionellen Ikonismus'. In: *ZGL 32*: 210-232.

Hartmann, Peter. 1959. Offene Form, leere Form und Struktur. *Sprache – Schlüssel zur Welt. Festschrift für Leo Weisgerber*, Helmut Gipper (ed.), 146-157. Düsseldorf: Schwann.

Haspelmath, Martin. 1998. Does grammaticalization need reanalysis? *Studies in Language 22*: 315-351.

Haspelmath, Martin. 1999. Why is grammaticalization irreversible? *Linguistics 37*: 1034-68.

Heine, Bernd. 2003. Grammaticalization. *The Handbook of Historical Linguistics*. Joseph and Janda (eds.), 575-601. Oxford: Blackwell.

Himmelmann, Nikolaus P. 1992. *Grammaticalization and Grammar. Arbeitspapiere 16 (Neue Folge).* Institut für Sprachwissenschaft Universität zu Köln.

Himmelmann, Nikolaus P. 2004. Lexicalization and grammaticalization: Opposite or orthogonal? *What makes Grammaticalization? A Look from its Fringes and its Components*. Walter Bisang, Nikolaus P. Himmelmann, Björn Wiemer (eds.), 21-42. Berlin, New York: Mouton de Gruyter.

Himmelmann, Nikolaus. 2005. Gram, construction, and class formation. *Wortarten und Grammatikalisierung,* Knobloch, Clemens und Burkhard Schaeder (Hrsg.), 79-93. Berlin : de Gruyter.

Hopper, Paul J. 1991. Some principles of grammaticization. *Approaches to Grammaticalization. Vol. I: Focus on Theoretical and methodological Issues,* Traugott, Elizabeth Closs and Bernd Heine (eds), 17-35. Amsterdam: Benjamins.

Hopper, Paul J. & Elizabeth Closs Traugott [1993] 2003. *Grammaticalization*. 2nd ed. Cambridge: CUP.

Hoffmann, Ludger. 1994. Eine Verhandlung vor dem Amtsgericht. *Gesprochene Sprache. Transkripte und Tondokumente [Phonai 41]*, 19-90. Redder, Angelika and Konrad Ehlich (eds.), Tübingen: Niemeyer.

Jakobson, Roman 1971/[1957]. Shifters, verbal categories, and the Russian verb. *Selected Writings, Vol. II: Word and language*, 130-147. Berlin: de Gruyter.

Jespersen, Otto. 1992 [1924]. *The Philosophy of Grammar.* With a new introduction and index by James D. McCawley. Chicago and London: University of Chicago Press.

Joseph, Brian & Richard D. Janda (eds.) 2003. *The Handbook of Historical Linguistics*. Oxford: Blackwell.

Kaznelson Kaznelson, S.D. [1972]1974. *Sprachtypologie und Sprachdenken*. Ins Deutsche übertragen und herausgegeben von Hans Zikmund. München: Max Hueber.

Krámsky, Jiři. 1972. *The Article and the Concept of Definiteness in Language*. The Hague, Paris: Mouton.

Kuryłowicz, Jerzy. 1964. *The inflectional categories of Indo-European*. Heidelberg: Winter.

Langacker. Ronald W. 1985. Observations and speculations on subjectivity. Iconicity in Syntax. Proceedings of a *symposium on iconicity in syntax*. Stanford. June 24-6. 1983, John Haiman (ed.), 109-150. Amsterdam, Philadelphia: Benjamins (TSL 6).

Langacker, Ronald W. 2002. Deixis and subjectivity. *Grounding: the epistemic footing of deixis and reference*, Frank Brisard (ed.), 1-27. Berlin: Mouton de Gruyter.

Lehmann, Christian. 1974. Prinzipien für "Universials 14". *Arbeiten des Kölner Universalienprojekts 1973/1974*. München: Fink.

Lehmann, Christian. 1985. Grammaticalization: Synchronic Variation and Diachronic Change. *Lingua e Stile 20*: 303-318.

Lehmann, Christian. 1995 [1982]. *Thoughts on grammaticalization. Revised and expanded version*. First published edition. München [usw.]: Lincom Europa.

Lehmann, Christian. 1992. Word order change and grammaticalization. *Internal and External Factors in Syntactic Change*, Marinel Gerritsen and Dieter Stein (eds.), 395-416. Berlin, NY: de Gruyter.

Lehmann, Christian. 2002. New reflections on grammaticalization and lexicalization. *New Reflections on Grammaticalization. International Symposium*, Wischer/Diewald (eds.), 1-18. Potsdam, 17-19 June, 1999. Amsterdam: Benjamins (TSL 49).

Lehmann, Christian. 2004. Theory and method in grammaticalization. In: Gabriele Diewald, (ed.), *Grammatikalisierung (Themenheft der Zeitschrift für germanistische Linguistik = ZGL 32)*: 152-187. Berlin: de Gruyter.

Leirbukt, Oddleif. 1997. *Untersuchungen zum bekommen-Passiv im deutigen Deutsch*. Tübingen: Niemeyer (RGL 177).

Leiss, Elisabeth. 2000. *Artikel und Aspekt. Die grammatischen Muster von Definitheit*. Berlin, NY: de Gruyter.

Leuschner, Thorsten, Tanja Mortelmans, Sarah de Groodt (Hrsg.). 2005. *Grammatikalisierung im Deutschen*. Berlin : de Gruyter.

Lindström Tiedemann, Therese. 2005a. Grammaticalization – past and present. *Logos and Language 6*: 19-35.

Litvinov, Viktor P. und Vladimir J. Radčenko. 1998. *Doppelte Perfektbildungen in der deutschen Literatursprache*. Tübingen: Stauffenburg [Studien zur deutschen Grammatik 55].

Lucy, John A. 1992. *Grammatical categories and cognition. A case study of the linguistic relativity hypothesis*. Cambridge: CUP.

Mitchell, Sollace. 1984. Indexical expressions and the enunciation of natural languages. *Semiotics Unfolding: Proceedings of the Second Congress of the International Association for Semiotic Studies, Vienna, July 1979*, *Vol. II*, Tasso Borbé (ed.). 1201-1210. Berlin [usw.]: Mouton.

Mel'čuk, Igor A. 1976. On suppletion. *Linguistics 170*: 45-90.

Newmeyer, Frederick J.. 1998. *Language Form and Language Function*. Cambridge, MA: MIT Press.

Newmeyer, Frederick J. .2001. Deconstructing grammaticalization. *Language Sciences* 23: 187-229.

Plank, Frans. 1991. *Paradigms.* Berlin [u.a.]: Mouton de Gruyter.

Plungian, Vladimir A. 1998. *Грамматические категории, их аналоги и заместители*. Диссертация на соискание ученой степени доктора филологических наук. Москва,

1998. ["Grammatische Kategorien, ihre Analoge und Alternativen", Habilitationsschrift, Moskau 1998].

Radtke, Petra. 1998. *Die Kategorien des deutschen Verbs. Zur Semantik grammatischer Kategorien*. Tübingen: Narr.

Rödel, Michael. 2007. *Doppelte Perfektbildungen und die Organisation von Tempus im Deutschen*. Tübingen: Stauffenburg.

Smirnova, Elena. 2006. *Die Entwicklung der Konstruktion würde + Infinitiv im Deutschen*. Berlin: De Gruyter.

Smirnova, Elena. 2007. Rekonstruktion eines Grammatikalisierungsprozesses. Entwicklung der Konstruktion würde + Infinitiv zum Konjunktiv II-Grammem. *Zeitschrift für Dialektologie und Linguistik* 74: 20-37.

Traugott, Elizabeth Closs. 1995/1997. The role of the development of discourse markers in a theory of grammaticalization. Paper presented at ICHL XII, Manchester 1995, Version of 11/1997 [manuscript].

Traugott, Elizabeth Closs. 1999. The rhetoric of counter-expectation in semantic change: A study in subjectification. *Historical semantics and cognition*, Blank, Andreas and P. Koch (eds.), 177-196. Berlin: Mouton de Gruyter.

Traugott, Elizabeth Closs. 2003. Constructions in Grammaticalization. *The Handbook of Historical Linguistics*, Joseph/Janda (eds.), 624-647. Oxford: Blackwell.

Traugott, Elizabeth Closs. 2008a. The grammaticalization of NP of NP Patterns. *Constructions and Language Change*, Alexander Bergs and Gabriele Diewald, (eds.), 23-45. Berlin: de Gruyter.

Traugott, Elizabeth Closs. 2008b. Grammatikalisierung, emergente Konstruktionen und der Begriff der „Neuheit". *Konstruktionsgrammatik II: Von der Konstruktion zur Grammatik*, Kerstin Fischer & Anatol Stefanowitsch (Hrsg.), 5-32. Tübingen. Stauffenburg.

Traugott, Elizabeth Closs & Richard B. Dasher. 2002. *Regularity in Semantic Change*. Cambridge: CUP .

Traugott Elizabeth Closs und Ekkehard König. 1991. The semantics-pragmatics of grammaticalization revisited. *Approaches to Grammaticalization. Vol. I*, Elizabeth Traugott & Bernd (eds.), 189-218. Amsterdam: Benjamins.

Vanek, Anthony L. 1978. The grammatical category of person in Czech: Toward a Holistic theory of communication. *Classification of Grammatical Categories. Current Inquiry into Language and Linguistics, 21, Slavic Series 6, B*ernard Comrie (ed.), 209-248. Urbana: Linguistics Research Inc.

Wiemer, Björn and Walter Bisang. 2004. What makes grammaticalization? An appraisal of its components and its fringes? *What makes Grammaticalization? A Look from its Fringes and its Components*. Walter Bisang, Nikolaus P. Himmelmann, Björn Wiemer (eds), 3-20. Berlin, New York: Mouton de Gruyter.

Wischer, Ilse. 2000. Grammaticalization versus lexicalization – 'me thinks' there is some confusion. *Pathways of Change: Grammaticalization in English*, Olga Fischer, Anette Rosenbach & Dieter Stein (eds.), 355-370. Amsterdam/Philadelphia: Benjamins.

Wischer, Ilse [to appear]: Grammaticalization. The *Encyclopedia of Language and Linguistics, 2nd ed.*, Keith Brown (et al.) (eds.), Oxford: Elsevier.

Wischer, Ilse & Gabriele Diewald (eds.) 2002. *New Reflections on Grammaticalization*. International Symposium, Potsdam, 17-19 June, 1999. Amsterdam: Benjamins (TSL 49).

Zifonun, Gisela u.a. 1997. *Grammatik der deutschen Sprache*. 3 Bde. Berlin, New York. de Gruyter.

Illustrations and tables

FIGURE 1

Figure 1. Lexicalization and grammaticalization (Lehmann 2004: 168ff)
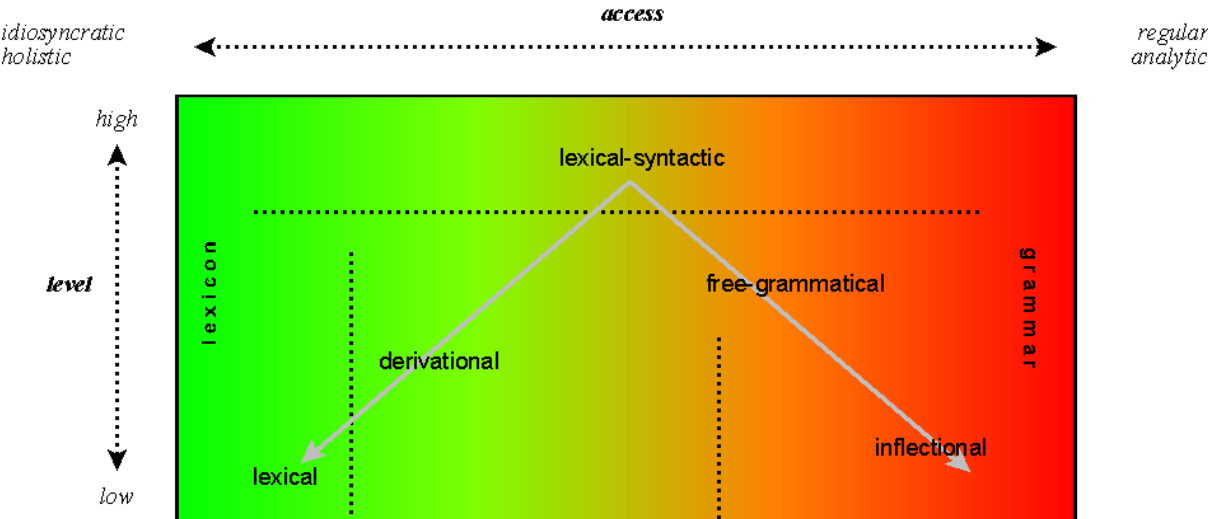
FIGURE 4

If form x, then form y

FIGURE 5

(5) The voice constructions in German:

Active	Agent	Fin. Verb	Recipient	Theme		
W-Pass. verb	Theme	Fin. Aux werden	Recipient	PrepPhr. Agent	PP	main
B-Pass verb	Recipient.	Fin. Aux bekommen	PrepPhr. Agent	Theme	PP	main

FIGURE 6

(6) Examples of voice constructions with the verb **überweisen** 'transfer'

Active			
Das Unternehmen	überweist	dem Verein	die ganze Summe.
The company	transfers	to the society	the full amount.
W-Passive			
Die ganze Summe	wird	dem Verein	vom Unternehmen	überwiesen.
The full amount	is	to the society	by the company	transferred.
B-Passive			
Der Verein	bekommt	vom Unternehmen	die ganze Summe	überwiesen.
The society	gets	by the company	the full amount	transferred.

FIGURE 7

If intention X, then form Y

FIGURE 8

(8) Conditions motivating the use of a **werden**-passive

"If the speaker wants to

      put the theme into the privileged topological position at the beginning of the sentence and

      keep the lexical verb of the corresponding active sentence and

      avoid a marked linear order (which in this case would be a topicalized object)

then the speaker must

      use the **werden**-passive (given it is possible at all)."

FIGURE 9

(9) Tense paradigm: periphrastic forms for past time reference

Standard tense paradigm:

    perfect: **hat**   **gefragt**

                      has   asked

    pluperfect: **hatte** **gefragt**

                      had   asked

    future perfect   **wird** **gefragt** **haben**

                      will   asked   have

Non-standard periphrastic forms:

    "double perfect":   **hat**   **gefragt** **gehabt**

                      has   asked   have-PII

    "double pluperfect": **hatte** **gefragt** **gehabt**

                      had   asked   have-PII

FIGURE 10

(10) Future tense/mood- paradigms: periphrastic forms with infinitives

Infinitive constructions included in future tense and mood paradigm:

      wird & infinitive: wird fragen

      würde & infinitive: würde fragen

      wird & infinitive perfect: wird gefragt haben

      würde & infinitive perfect: würde gefragt haben

Infinitive constructions not included in future tense and mood paradigm:

      modal verbs & infinitive   mag/dürfte fragen

      modal verbs & infinitive perfect   mag/dürfte gefragt haben

FIGURE 15

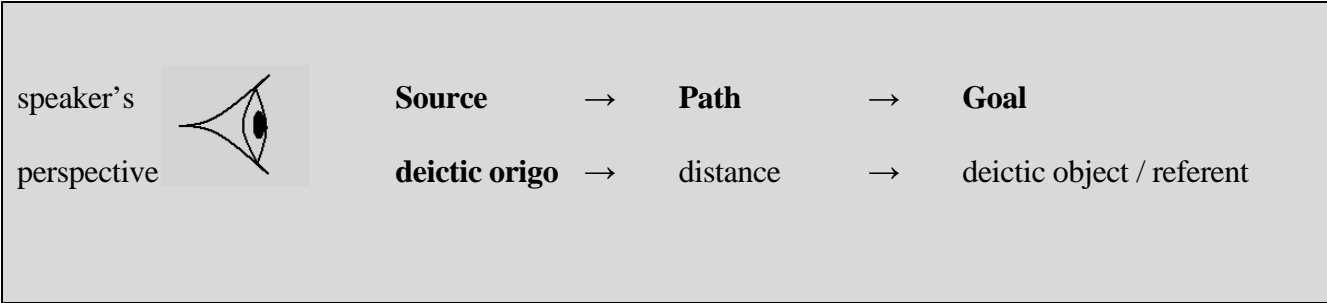(15) Strongly deictic relation (demonstrative relation)

speaker's		**Source**	→	**Path**	→	**Goal**
perspective		**deictic origo**	→	distance	→	deictic object / referent

FIGURE 16

(16) Weakly deictic relation (reflexive relation)

Goal ← **Path** ← **Source** ient's

point of anchoring ← distance ← **linguistic sign** perspective

(default: origo)
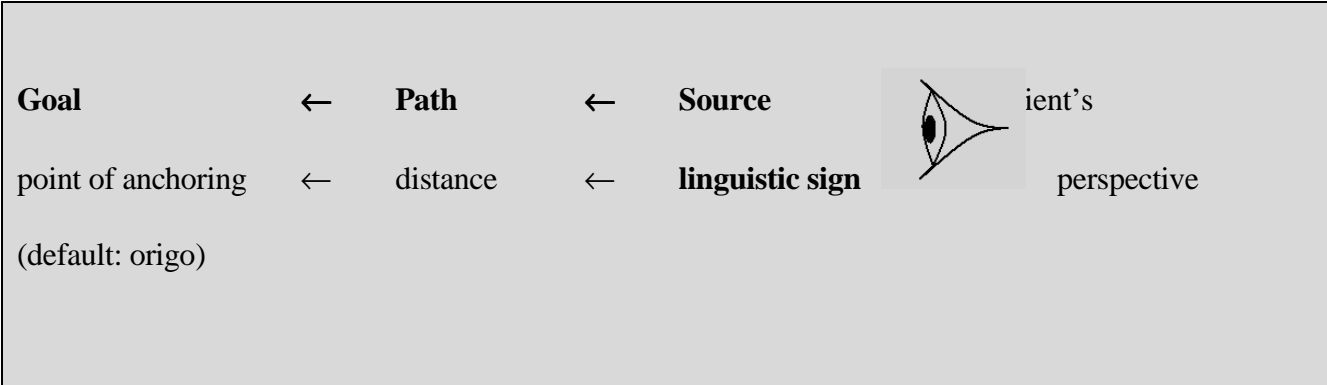
FIGURE 17

(17) Basic relational structure of grammatical signs

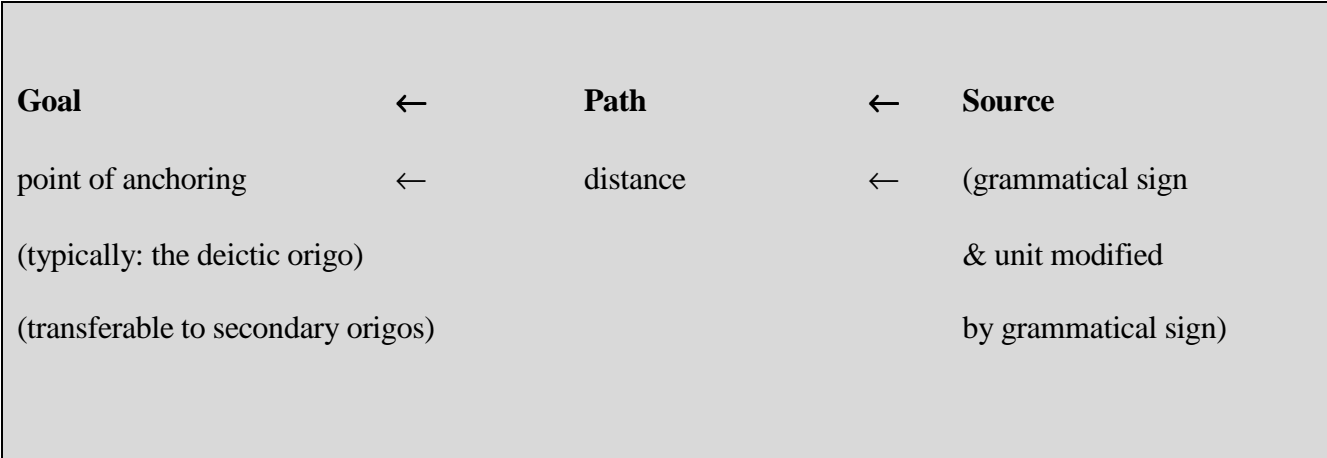| Goal	←	Path	←	Source
point of anchoring	←	distance	←	(grammatical sign
(typically: the deictic origo)				& unit modified
(transferable to secondary origos)				by grammatical sign)

FIGURE 18

Grammar locates the speaker and thus encodes speaker perspective:

Grammar is deictic

FIGURE 20

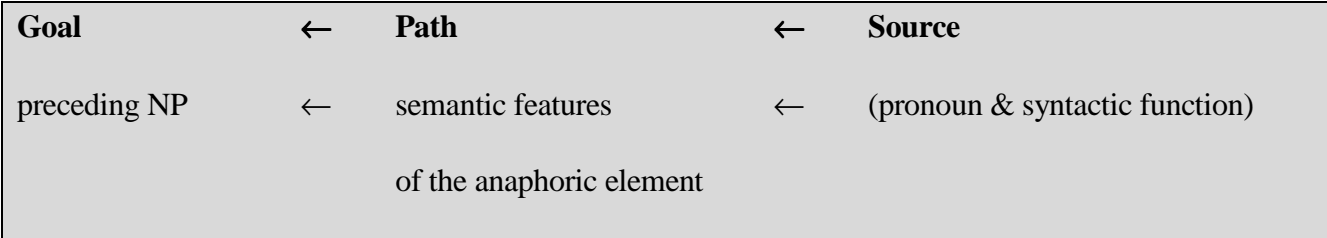(20)   Basic relational structure for the grammatical marker of preterit

Goal	←	Path	←	Source
utterance time/origo	←	PAST	←	(tense marker & proposition)

FIGURE 22

(22)   Basic relational structure for an anaphoric element

Goal	←	Path	←	Source
preceding NP	←	semantic features	←	(pronoun & syntactic function)
		of the anaphoric element		

FIGURE 24

(24)   Basic relational structure for a conjunction

Goal	←	**Path**	←	**Source**
proposition 1	←	semantic features of the conjunction	←	(conjunction & proposition 2)
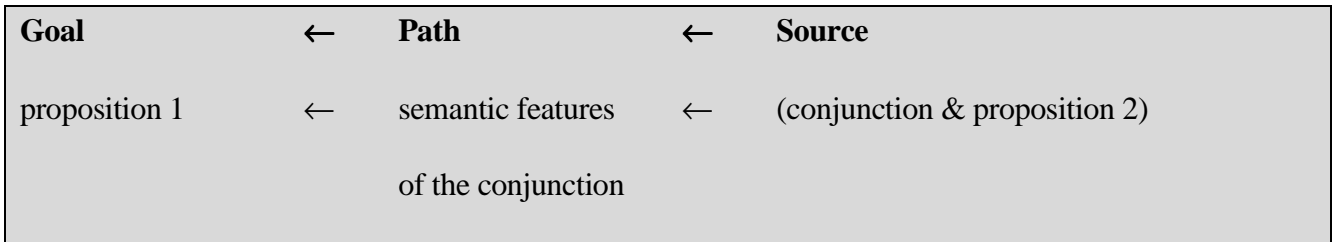
FIGURE 25

(25)   Defining features of "grammar" – second attempt

Grammatical categories share a vectored relation of the reflexive type as a common denominator, that is, a relation starting from the linguistic entity and retrieving the "origo".

This general template may be transferred to various "pointing fields".

The weakly deictic relation is the prototype of grammatical meaning (as realized e.g. in tense markers)

from which other grammatical relation (e.g. anaphoric relations, other connective relations) can be derived.

FIGURE 26

(26)   Defining features of "grammar" – third attempt

Grammatical meaning contains a relational structure that is anchored in paradigmatic organization.

The stricter the paradigmatic organization, the more the relational meaning is converted into expressing the paradigmatic opposition between marked and unmarked members;

it expresses intra-paradigmatic positional meaning.

FIGURE 27

    (27)   Relational structures defining central features of "grammar"

1. Weakly deictic relational structure:

    the linguistic sign points to the deictic origo (zero point of subjective orientation)

    thereby connecting the narrated event to the communicative situation;

    dominant relation in central grammatical categories like tense or mood.

2. Syntagmatically interpreted relational structure

    the linguistic sign points to some entity in the linguistic syntagm (secondary, transferred origo)

    thereby establishing syntagmatic relations within the linguistic level;

    dominant relation for the expression of textual meanings and functions (e.g. anaphoric relation,

    conjunctive and subjunctive relations, valency relations).

3. Paradigmatically interpreted relational structure

    the linguistic signs point to the unmarked value of a paradigm (secondary, transferred origo)

    thereby establishing/encoding intra-paradigmatic oppositions;

    dominant relation for distinctions subject to internal obligatoriness.