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RENEWAL: A FIGURE OF SPEECH OR A PROCESS SUI GENERIS?

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The concept of 'renewal' is widely used in the literature on morphosyntactic change, but hardly ever theorized. Here we scrutinize the viability of this concept theoretically as well as empirically, revisiting in detail the most frequently cited case of renewal, namely the resemblance between the Latin and French synthetic futures. Phenomena accounted for in terms of renewal can also be accounted for in terms of grammaticalization theory. We argue that there is no need and no empirical support for renewal as its own type of change alongside grammaticalization. However, grammaticalization theory so far has neglected to properly account for influences of the existing system on ongoing grammaticalization processes. As an initial approximation of this vast field of study, we propose several domains where we believe that system influences on grammaticalization are operative. On the one hand, this involves making more precise the source determination hypothesis as developed in work by Joan Bybee and colleagues. On the other, it comprises interactions between constructions in paradigm formation.*

Keywords: renewal, grammaticalization, morphosyntactic change, Italic languages, future, source determination, paradigm formation

1. Introduction. This article is concerned with the question of whether the RENEWAL of grammatical categories is a useful and theoretically viable concept in analyzing and explaining morphosyntactic change. As renewal is concerned with the development of grammatical constructions, it covers at least partially the same ground as grammaticalization theory. Hence, the viability of renewal as a process sui generis depends in part on the question of whether it can account for aspects of the development of grammatical constructions not well covered by grammaticalization theory. We argue here that the answer to this question is 'no': renewal is not a type of grammatical change, since it lacks theoretical coherence and empirical support. The view, occasionally found in the literature, that renewal pertains to aspects of morphosyntactic change not well addressed by grammaticalization theory arises from that theory's neglect of the fact that the existing language system may influence the development of grammatical constructions in various ways. Consequently, we argue, what is needed is not a theory of renewal, but rather a substantial revision of grammaticalization theory so as to explicitly take into account the fact that grammatical change does not happen in a vacuum.

The notion of 'renewal' is widely used in language histories and in literature on language change and appears in the title of Meillet's famous article 'Le renouvellement des conjonctions'. He claims in this article that the repeated disappearance and new creation

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The ideas and arguments presented here were jointly developed by the authors over a number of years, taking off from an initial exploration in UR's MA thesis in 2009. Excepting §3 and the appendix, the article was jointly written by the authors, based on a first rough draft by UR. UR is the main author of §3 and the appendix and conducted all of the research for the examples discussed there.

¹ Alternatively, 'renovation' is used by Lehmann (2002 [1982] and elsewhere) and 'conservative mutation' by Benveniste (1968). Both authors set up a contrast with 'innovation' (Lehmann) or 'innovating mutation' (Benveniste), which is the creation of categories that have no predecessor in the language. In German publications, 'Neuerung/Erneuerung/Neubildung' can be found.

² Further examples include Lerch (1925:34, 'Ersatz durch Neubildung'), Sonderegger (1979:93, 'Ersatz durch Neubildungen'), Johanson (2002:98, '(formal) renewal'), Wolff (2009:47f., 'kompensatorische Neue-

of conjunctions in Indo-European is evidence of 'the need to renew the expression in order to revive its strength' (1975 [1915/1916]:165, our translation).³ In this view, 'renewal' appears to denote a type of morphosyntactic change (or, perhaps more precisely, at least a specific type of motivation for morphosyntactic change). In other uses, especially in language histories, 'renewal' is used more ambivalently and can often be interpreted as a mere figure of speech or as a descriptive label for the observation that an emerging new form or construction appears to be similar in function and possibly also in form to an older disappearing one, without necessarily claiming that the disappearing form or construction influences or constrains the newly emerging form or construction. Section 2 provides further details on ways in which the notion of renewal is used in the literature and identifies one usage in particular that warrants further scrutiny as a potentially viable theoretical concept for analyzing morphosyntactic change.

Renewal in this potentially interesting sense, which we call the TRANSFER use of 'renewal', would provide an alternative, or at least an important independent complementary aspect, to accounts of the same phenomena in terms of grammaticalization theory. Consequently, in order to show that, in this understanding, renewal is its own type of change, one has to show that the relevant phenomena cannot be accounted for by grammaticalization theory alone. In §3, we contrast renewal and grammaticalization accounts and predictions on the basis of what is possibly the most commonly cited example for renewal, the Latin/Romance futures in which French *chanterai* (< *cantare habeo*) 'renews' Latin *cantabo*. While the empirical evidence is not fully unequivocal, our preliminary conclusion is that there is little support, empirically as well as theoretically, for postulating renewal as a process of linguistic change sui generis in addition to grammaticalization.

However, grammatical constructions do not develop in a vacuum, and we agree, to an extent, with critics of modern grammaticalization theory such as Heath (1998), who criticizes it for ignoring the existing grammatical system in its accounts of the development of new grammatical constructions. What is therefore needed is an explicit and testable theory of the ways in which the current language system constrains grammaticalization processes. The untheorized and loose use of 'renewal', we would hold, has contributed to the neglect of properly engaging with this task. We conclude the article by sketching some ways in which the existing language system may impact grammaticalization phenomena (§4). In particular, the theory of source determination, the main foundation for explaining pathways of change in grammaticalization, in our view has to make allowance for language-specific (often formal) properties of the source construction that may influence the development. Furthermore, while it is repeatedly mentioned as a core feature of grammaticalization processes, a theory of paradigm formation that would capture the major ways the existing system impacts morphosyntactic change is lacking in grammaticalization theory to date. A major challenge in this regard is the task of delimiting those aspects of paradigm formation that go beyond analogical extensions and levelings, with analogy clearly being a type of morphosyntactic change sui generis.

2. RENEWAL IN THE LITERATURE: WIDELY USED, HARDLY THEORIZED. With regard to the way the term 'renewal' is used in the literature, we may broadly distinguish among

rungen'), and Ledgeway (2012, 'replacement', p. 11; 'synthesis-analysis-cycle', p. 12). Further recent publications discussing renewal are Ramat 2005 ('Persistence and renewal in the relative pronoun paradigm: The case of Italian'), Smith 2006 ('The universal tendency for renewal'), and the contributions in van Gelderen 2009 and 2016 on cyclical change within the MINIMALIST framework.

³ 'le besoin de renouveler l'expression pour en raviver la force'

three different uses: (i) the descriptive use, (ii) the recruitment use, and (iii) the transfer use. We outline the different usages in turn and evaluate their theoretical viability. Note that the authors who employ the term or related concepts do not draw these distinctions, and that it is not uncommon for an author to employ the term in more than one of the uses distinguished here. We distinguish the three views here because they differ quite significantly in their theoretical implications.⁴

First, the term 'renewal' (or related terms) is often used in a purely descriptive sense. For instance, Hopper and Traugott state that '[r]enewal results primarily in alternate ways of saying approximately the same thing, or alternative ways of organizing linguistic material' (2003:122). If the constructions overlap in time, the initial result of such a process is what Hopper (1991) has termed LAYERING, that is, the accumulation of different constructions in a certain grammatical domain, for example, *be going to* grammaticalizing in English even though English already has the *will-* and *shall-*future constructions. Importantly, this use avoids postulating anything other than a descriptive link between functionally (and possibly formally) similar constructions.

Second, the link between old and new is conceived of in stronger terms in other publications. One metaphor widely employed is that of RECRUITMENT, a pull-chain understanding of renewal, as in the following quote from Heine and colleagues:

In the literature on grammaticalization, there are indeed MANY EXAMPLES SUGGESTING THAT, ONCE A GIVEN GRAMMATICAL FORM DECLINES AND/OR DISAPPEARS, A NEW FORM TENDS TO BE RECRUITED ON THE SAME CONCEPTUAL PATTERN AS THE OLD ONE, with the result that a kind of morphological cycle emerges. (Heine et al. 1991:246, emphasis added)

This recruitment view of renewal implies a causal nexus between old and new. It is based on the idea that BECAUSE a construction is either lost or weakened (which usually relates to diagnoses of semantic 'bleaching' and/or phonetic shortening), a new construction⁵ is 'pulled' into the system according to the slogan 'function seeks form' or, in Meillet's words, 'the need to renew the expression in order to revive its force' (1975 [1915/1916]:165–66). An earlier and even stronger statement to this effect is provided by von der Gabelentz (1901 [1891]) in his discussion of the opposing forces of *Bequemlichkeit* (literally 'comfort', but often rendered as 'economy') and *Deutlichkeit* ('clarity' or 'explicitness') shaping linguistic change:

Now, the history of the languages develops in the diagonal of two forces: the need for economy, which leads to the erosion of sounds, and the need for explicitness, which keeps this erosion from resulting in the destruction of the language. The AFFIXES ERODE, AND FINALLY VANISH WITHOUT A TRACE; THEIR FUNCTIONS, HOWEVER, OR SIMILAR ONES, REMAIN AND AGAIN STRIVE FOR EXPRESSION. They receive this expression, according to the rule of isolating languages, by means of word order or expressive words. The latter, with time, are again subject to agglutination, to erosion and to disappearance. (von der Gabelentz 1901 [1891]:256, our translation, emphasis added)⁶

⁴ There are a few further, less widespread usages of the notion. For example, Brinton (1995) explores what she labels 'functional renewal', where a form is maintained but acquires a new meaning. We do not take into account Brinton's or other less common usages of 'renewal'.

⁵ We assume that grammaticalization always affects a grammaticalizing element ('gram') within a construction, for example, *go* in *be going to VP*. We therefore generally speak of grammaticalizing constructions and only make reference to grams when they are the focus of our discussion.

⁶ 'Nun bewegt sich die Geschichte der Sprachen in der Diagonale zweier Kräfte: des Bequemlichkeitstriebes, der zur Abnutzung der Laute führt, und des Deutlichkeitstriebes, der jene Abnutzung nicht zur Zerstörung der Sprache ausarten lässt. Die Affixe verschleifen sich, verschwinden am Ende spurlos; ihre Functionen aber oder ähnliche bleiben und drängen wieder nach Ausdruck. Diesen Ausdruck erhalten sie, nach der Methode der isolierenden Sprachen, durch Wortstellung oder verdeutlichende Wörter. Letztere unterliegen wiederum mit der Zeit dem Agglutinationsprozesse, dem Verschliffe und Schwunde ... '

A causal nexus suggests itself particularly in those cases where the 'same' development appears to happen again and again. The best-known example of such a (recursive) cycle is the repeated development of new negation markers in many a language, widely known as Jespersen's cycle. Recent compilations discussing this and other cycles are van Gelderen 2009 and 2016. We are not specifically concerned here with recursive cycles, but note that the basic questions about the empirical and theoretical viability of the notion of renewal apply to them as well.

We identify several problems with the recruitment view of renewal. First, the repeated development of a new construction in the functional domain of an already existing construction poses empirical difficulties. The problem, also noted in Bybee 1988 and Bybee et al. 1994, arises in cases of layering, that is, whenever multiple new constructions with similar meanings develop concurrently or in brief succession of each other. The presumed expressive need caused by the weakening of the old construction should be resolved by the development of a single new construction. Expressive needs cannot motivate the innovation of new functionally similar and overlapping constructions in rapid succession. Instructive examples of layering are provided by Smith (2006), who undertakes a crosslinguistic survey of the renewal of the category of anteriority in the sense of the repeated grammaticalization of constructions in this grammatical domain. Based on the GRAMCATS database (see Bybee et al. 1994 for details), he finds that within a sample of seventy-six languages, there are fifty-seven anterior grams, with thirty-four of them appearing together with at least one other anterior gram in the same language, so that, in the end, only thirty-nine of the seventy-six languages possess anterior grams. One language, Margi, possesses five anterior grams (Smith 2006:140).

The more fundamental problem of pull-chain scenarios is the fact that they are examples of the widespread practice of phrasing claims and observations on diachronic change in teleological terms. This is highly problematic for the reason mentioned by Hopper and Traugott:

Some think of the cycle as starting with reduction of a form, in extreme cases to zero, followed by replacement with a more expressive form ... This kind of model is extremely problematic, because it suggests that a stage of language can exist when it is difficult or even impossible to express some concept. (Hopper & Traugott 2003:124)

Lass (1980) and many others have made clear the logical pitfalls of teleological approaches to language change: a pull-chain scenario in morphosyntax presupposes a stage of the language that is functionally insufficient. If the old construction was so important that it had to be replaced, why was it lost or allowed to weaken in the first place? Teleological assumptions are also problematic for all categories that are not universally attested in natural languages: if category X is so important, why is it not grammatically expressed in all languages?

We hold, by contrast, that a language and its elements and structures will always in principle be functionally adequate, being shaped by speaker-hearers' needs. Accordingly, we consider pull-chain understandings of renewal, such as the recruitment scenario, to be logically incoherent.⁷

⁷ Similar logical problems pertain to push-chain accounts, which are also commonly invoked in the literature on language change, if less often under the label of 'renewal'. A push-chain account logically implies a period of layering. If layering was acceptable to speakers for some time, why would an old construction need to be ousted from the language after a certain period? In general, as with alleged pull chains, it is not clear why causal factors should be at work in some cases and not in others, where we do not observe an apparent renewal of an old construction.

As one referee correctly points out, the preceding argument in part rests on the common understanding of 'function' in terms of informational clarity (recall von der Gabelentz's drive for explicitness in the quote above), grammatical constructions being conceived of as means to ensure the safe and efficient transfer of propositional content from sender to receiver. If one allows for a broader variety of functions to influence the development and use of linguistic structures, not all aspects of the preceding argument still apply. Thus, for example, Haiman (2010) forcefully argues for the need to add to the drives for explicitness and economy identified by von der Gabelentz (and since repeatedly identified in many different guises and terms) a 'drive for reproduction, decoration, or symmetry' (Haiman 2010:164), in order to account for the tendency to replicate structures across all levels of language structure and use. This drive includes the preference 'to speak in pairs' (Fox 1988) characteristic of many genres and some linguistic areas, as well as the tendency to shape newly emerging grammatical constructions on the model of older, already existing constructions. Under such a view, layering is expected as a consequence of the drive to have alternative means for conveying roughly the same propositional content.

Still, inasmuch as the recruitment view posits a direct causal link between old and new, it fails on account of the fundamental problem of all teleological explanations of linguistic change just noted, regardless of the number and kinds of functions supposedly fulfilled by linguistic structures: if speakers need and relish a particular set of forms and constructions, why should they let them deteriorate to the point of being forced to recreate new ones on the model of those that are disappearing? Note that this problem arises regardless of whether the old construction has disappeared completely or whether it has just deteriorated to the point of no longer completely fulfilling its original function. Nevertheless, while it does not support the recruitment view of renewal, allowing for a drive for replication may give support to a third usage of 'renewal', to which we now turn.

In this third usage, the TRANSFER use, the similarity between old and new is not based on a pull- (or push-)chain, but on an interaction between two constructions whereby functions are 'passed on' or 'pass over' from the old to the new construction, or alternatively are 'taken over' or 'acquired' by the new construction from the old one. We are not aware of any theoretical elaboration of the details of such processes of transfer, and it is often unclear whether we are dealing merely with a more vividly metaphorical variant of the descriptive view. An early example of this usage is Benveniste on the Latin perfect, and another is Fleischman on the Latin and Romance past and future constructions:

In the Latin verbal paradigm, a reorganization of the original perfectum is effected, a change which leads through a split to two different forms. The value inherent in the synthetic perfectum ($aud\bar{\imath}v\bar{\imath}$) is passed on to the periphrastic perfectum ($aud\bar{\imath}tum\ habe\bar{o}$), which restricts the value of $aud\bar{\imath}v\bar{\imath}$ to that of an agrist. . . .

Thus the Periphrastic Form is heir to the original perfectum, not only by virtue of a historical sequence of events, but also because it brings to light its inherent value. (Benveniste 1968:88–89, emphasis added)

In both past and future tense systems, then, an analytic formation which began as a marker of aspect (present relevance) HAS ACQUIRED, in addition, A TEMPORAL FUNCTION BELONGING TO A SYNTHETIC RIVAL. (Fleischman 1982:99, emphasis added)

The transfer use of 'renewal' shares with the previously discussed descriptive and recruitment uses the characteristic of being extremely vague. This is not a problem for the descriptive use, as this use does not involve any theoretical claims. But for the other two uses, the theoretical status of the concept of renewal is obviously of some import. Is it a

type of linguistic change sui generis? If so, how does it relate to other proposed types of morphosyntactic change, in particular grammaticalization? Empirically, what does it take to count as an instance of renewal? To the best of our knowledge, these questions have never been explicitly and comprehensively addressed in the literature. The best one can find in this regard are passing remarks of the kind we briefly review now.

For some authors, including Hopper and Traugott (2003) as well as Heine and colleagues (1991), quoted at the beginning of this section, renewal appears to be an aspect of grammaticalization, that is, something that more or less regularly happens as a concomitant of grammaticalization processes. While they take note of the phenomenon, they do not appear to consider it necessary (or useful) to provide a theoretical account in addition to what is already covered by grammaticalization theory. Other authors take a different view. For Lehmann, renewal (his 'renovation') is orthogonal to grammaticalization and appears to be conceived of as a process sui generis. He provides the following definition:

we make a clear distinction between the two diachronic relations 'y continues x' and 'y replaces x'. Within a grammaticalization scale, the relation 'y continues x' is equivalent to the relation 'x is grammaticalized to y'. However, THE RELATION 'Y REPLACES X' IS NEITHER A RELATION OF GRAMMATICALIZATION NOR OF DEGRAMMATICALIZATION. We shall call it, with Meillet's 'renouvellement' in mind, THE RELATION OF RENOVATION, also called RENEWAL in the literature. (Lehmann 2002 [1982]:18, emphasis added)

That is, renewal is something that may happen attendant upon grammaticalization processes, but it is not fully accounted for by grammaticalization theory and would thus need a theoretical account of its own.

We conclude from the observations and arguments discussed in this section that, if renewal is at all a concept helpful for the analysis of linguistic change, it would consist in a conceptually and empirically sound elaboration of the transfer view. This would centrally involve investigating the following two alternative hypotheses.

- Hypothesis 1: All developments of new grammatical constructions and markers can be fully accounted for in terms of grammaticalization theory. There is no need and no evidence for renewal as a process sui generis.
- Hypothesis 2: Renewal is a type of linguistic change of its own, which overlaps with
 grammaticalizational change in that it also involves the development of new grammatical constructions and markers. Renewal changes are to a certain extent shaped
 by preexisting grammatical constructions—possibly via some kind of transfer of
 semantic and perhaps also formal components—while grammaticalizations primarily follow their inherent dynamics, as spelled out in the various proposals for paths
 of grammaticalization.

With regard to hypothesis 2, it may be noted that there are other possible variants of this hypothesis, including, for example, the possibility that renewal is a type of morphosyntactic change to which some, but not all, principles of grammaticalization apply, but which also involves its own defining features relating to specific constraints by the existing system. The argument developed below pertains to all of these variants, but they are not addressed in detail in order to avoid making the exposition unnecessarily complex.

In the next section, we investigate these two alternative hypotheses on the basis of the Latin and French synthetic futures. We argue that the remarkable similarity between the two constructions can in fact be fully accounted for in terms of grammaticalization theory, specifically by the principle of source determination. That is, although striking similarities between constructions that historically follow each other may exist, there is no coherent homogenous phenomenon of renewal that would constitute a process of its own kind, whether in a transfer sense or otherwise.

3. Grammaticalization contra renewal. Oversimplifying the issue somewhat, the basic goal of this section is to determine whether one needs the concept of renewal—in some version of the transfer sense—in order to account for similarities between two constructions of different ages. We do so on the basis of what is probably the most widely cited example for renewal, namely the synthetic future tenses in Latin and French.

The argument is structured as follows. In §3.1, we comment on the problem of lacking criteria for examples of renewal and reflect on the point that, ideally, not only functions but also forms of old and new constructions should be very similar in order to count as an instance of renewal. Section 3.2 reviews the facts for the Latin and French synthetic futures and concludes that there is indeed a very close semantic match between these two constructions in addition to their formal similarity. We then argue in §3.3 that this match is not as remarkable as it may seem at first glance, but can be accounted for by the grammaticalizational principle of source determination (e.g. Bybee et al. 1994), which predicts that constructions deriving from similar sources will develop similar meanings. The real test case for control by the system, then, is to compare constructions with similar macrofunctions such as 'future', which derive from different types of source meanings. This test is applied in §3.4 to the French futur proche. Although the data are not clear in all details, the overall evidence supports the view that constructions from different types of sources do indeed develop differently. Thus, there is little empirical support for a concept of renewal in this case. This does not mean, however, that grammaticalization processes proceed without influences from the language system. Hence we conclude in §3.5 that what is needed is a proper place for system influences on ongoing grammaticalization processes, rather than the development of a proper theory of renewal.

3.1. What does it take to count as an instance of renewal? To the best of our knowledge, authors making use of the term 'renewal' (or one of its kin) hardly ever explicitly address the issue of what it takes to count as renewal. Implicitly, it seems to be widely assumed that having a similar function and being in a broadly conceived temporal successor relation is sufficient for application of this term. Thus, for example, the fact that some modern Indo-European languages no longer have case declensions and, in some contexts, use prepositions in grammatical functions broadly related to grammatical cases is considered a renewal of the case system by prepositions. But does it really make sense to claim that prepositions renew a morphological case system (especially when the earlier stage already included prepositions, as in the case of Latin and the Romance languages)? On what level of granularity is the relationship of renewal supposed to hold: whole 'systems' such as the case system, the tense-aspect-mood (TAM) system, and so on? Or on the level of specific forms and functions? In the latter case, which range of functions is required in order to claim that preposition X counts as a renewal of case Y? There may be a few domains, in particular negation, where answers to these types of questions appear to be straightforward. But even in the case of negation, matters become very complex once one takes into account questions of scope, interaction with mood, and so on.

In contradistinction to most of the literature, a few authors have made the possibility of extensive functional similarity contingent on formal similarity. Thus, Lehmann states (and see also Bybee et al. 1994:19–21):

TWO GRAMMATICAL CONSTRUCTIONS CAN BE FUNCTIONALLY SIMILAR ONLY TO THE EXTENT THAT THEY ARE FORMALLY SIMILAR. If the renovation of a construction enters upon a path that cannot lead to any-

thing formally similar to the former construction, a complete replacement of the old function will never be obtained, and to this extent the change will be partly renovative, partly innovative. Consider the change that is often called the renovation of Latin case inflection by prepositional constructions. Prepositions will never become case suffixes; even their development into case prefixes is relatively rare. (Lehmann 2002 [1982]:19, emphasis added)

This view implies that analytical constructions quite generally cannot replace synthetic constructions unless the grammaticalizing element is placed in a position that could at least in principle lead to an affix of the same type as the form being renewed.

We do not pursue these issues any further here, since our overall conclusion is that renewal is not a useful and viable concept for the analysis of linguistic change. It should be noted, however, that resolving these issues would be one of the major tasks for anyone who wishes to uphold the concept of renewal. For present purposes, it will suffice to note that the example we discuss in the next two sections fulfills the criteria of the most restrictive definition of renewal we can think of: the constructions are roughly formally identical (other than matching on the segmental level). Both involve suffixes that combine person and TAM values. And they match on the level of specific meanings, not just on the less sharply delimited level of a general 'gram-type' (Bybee et al. 1994) such as 'future'.

3.2. The Latin and French synthetic futures. The loss of the Latin synthetic futures and the creation of the French *futur simple* is probably the most frequently cited example for renewal, starting with Meillet (1975 [1912]) and including the general introductory works on grammaticalization (e.g. Lehmann 2002 [1982]:19, Hopper & Traugott 2003:124; see also Heine et al. 1991:244, where general reference is made to 'go-futures'). Moreover, this case has been claimed to display renewal in a strong sense with regard to form and function, that is, as the recreation of a construction that is strikingly similar to an older construction in both content and form. For instance, Lehmann notes:

There are admittedly cases where the new construction entirely and almost instantly replaces the old one, TAKING A FUNCTION AND SHAPE MAXIMALLY SIMILAR TO THE OLD ONES; this has occurred in the renovation of the Latin future in the Romance languages. (Lehmann 2002 [1982]:19, emphasis added)

With regard to future constructions in general, several authors have claimed that future seems to be a category especially prone to renewal, for example, Meillet (1975 [1912]:144–46) and Barceló (2007:47). In a similar vein, Fleischman stresses that future is—at least in some languages—a category 'sufficiently important' that it is renewed as soon as an existing future construction loses its expressive force:

Categories can, of course, become dysfunctional and eventually be eliminated from a language But if a category is of sufficient importance in a language—as future was in Latin and still is in Romance—it will survive the corrosive effects of various sorts of changes and will do so typically by replacing its endangered exponents with a new set of functionally analogous but more viable forms. (Fleischman 1982:104)

Like Fleischman, several authors attempt to make explicit the factors at work in the creation of the Romance futures. Explanations range from pull- or push-chain accounts to statements of a general trend from synthetic to analytic formations and even claims that cultural developments such as the rise of Christianity and its sociolinguistic effects might have been responsible for the erosion of the synthetic future and the rise of analytic constructions (see Fleischman 1982:40ff. for an overview). Others point to a need for more distinctive forms that avoid the risk of syncretism with forms of other paradigms (e.g. Dreer 2013).

A close examination reveals that the Latin and French synthetic future constructions indeed show an impressive similarity both on a formal and on a functional level. Both

are affixal and share all major temporal and modal usages. We illustrate the semantic overlap with one Latin and one French example each per meaning, drawing on standard reference grammars and descriptions. If not otherwise indicated, most of the examples are from Hofmann 1965:310–12 for Latin and from Batchelor & Chebli-Saadi 2011:255ff. for French.⁸ First, the basic future-related function of expressing a prediction is found for both constructions, including the subtype of the 'historical future'.⁹

- (1) Prediction¹⁰
 - a. bene vale: apud Orcum te videbo farewell in afterlife.ACC.SG.M ACC.2SG see.FUT.1SG

'farewell: I shall meet you in the afterlife' (Plautus; Haverling 2010:375)

b. Adeline **arrivera** demain.

Adeline arrive.FUT.3sg tomorrow

'Adeline will arrive tomorrow.' (Batchelor & Chebli-Saadi 2011:256)

- (2) Historical future
 - a. annus hic **erit** insignis
 year.NOM.SG.M DEM.NOM.SG.M be.FUT.3SG distinguished.NOM.SG.M
 novi hominis consulatu ...
 new.GEN.SG.M man.GEN.SG.M consulship.ABL.SG.M
 'this year **would be** distinguished by the consulate of a new man'
 (Liv. VII I.I; Samuelsson 1905–1906:36)
 - b. La bataille des Plaines d'Abraham entraîna la chute de sg.f battle poss.pl Plains of:Abraham lead.pst.3sg sg.f fall poss Québec in 1759; ce sera la fin de la Québec en 1759 DEM.SG.M be.FUT.3sg sg.f end poss sg.f Nouvelle-France.

New-France

'The battle for the Plains of Abraham led to the fall of Quebec City; that **would be** the end of New France.'

(Batchelor & Chebli-Saadi 2011:257)

Moreover, both constructions occur in a number of modal functions (exx. 3–7). These are, first, conjecture and inference, which are often subsumed by Latinists under a sin-

⁸ Naturally, categorization and terminology vary across reference grammars and descriptions. Here, with a few exceptions, we disregard variation depending on lexemes or speech act and focus on different usage contexts that appear to be part of the semantics of the future constructions themselves (inasmuch as such a distinction is at all possible). Furthermore, we employ standardized terminology according to contemporary usage in crosslinguistic descriptions. However, in order to accommodate descriptive traditions, we have added especially widespread mentions of additional subtypes or derived usages, as well as alternative terminology, in footnotes. Note that the treatment here is meant to cover major functional differences between usages as noted by grammarians, rather than offer an exhaustive list. It goes without saying that we are dealing with a heterogeneous list of functions, which are not strictly controlled by anything above and beyond values of tense and modality.

⁹ The following abbreviations are used in this article: ABL: ablative, ACC: accusative, AOR: aorist, COMP: complementizer, DAT: dative, DEM: demonstrative, F: feminine, FUT: future, GEN: genitive, IND: indicative, INDEF: indefinite, INF: infinitive, LOC: locative, M: masculine, N: neuter, NEG: negation particle, NOM: nominative, OBJ: objective, PL: plural, Poss: possessive, PPM: participle present middle, PPP: participle past perfective, PRF: perfect, PRS: present, PST: past, REL: relative pronoun, SG: singular, SBJV: subjunctive, VOC: vocative.

¹⁰ We consider the so-called deliberative function where the speaker wonders what to do (e.g. *Oh no! What shall I do now?*), listed by some authors as a separate usage, to be a subtype of the general predictive function, albeit restricted to a specific type of speech act. Another related subtype encoding a hedged statement is touched on in §3.4.

gle category *potential future*, as both encode probability (e.g. Sjögren 1906:109ff., Hofmann 1965:311).¹¹

(3) Conjecture

a. Iratast credo nunc mihi: **placabit** palla angry.be.3sG believe.1sG now DAT.1sG please.FUT.3sG coat.NOM.SG.F quam dedi

REL.ACC.SG.F give.PRF.1sG

'I believe she is angry with me: The coat I gave her **will please** her'
(Plautus Men. 600; Hofmann 1965:311)

b. L'été **sera** pluvieux à Halifax, je crois. M.SG:Summer be.FUT.3SG rainy.M.SG at Halifax 1SG believe.1SG 'The summer **will be** rainy in Halifax, I think.'

(Batchelor & Chebli-Saadi 2011:256)

(4) Inference

- a. haec erit bono genere nata

 DEM.NOM.SG.F be.FUT.3SG good.ABL.SG.N birth.ABL.SG.N born.NOM.SG.F

 nil scit nisi verum loqui

 nothing know.3SG except truth.ACC.SG.N speak.INF

 'She will be of a good family: she cannot but speak the truth'
- b. Irène est absente. Elle **aura** (Plautus; Wackernagel 2009 [1920, 1924]:263) encore sa migraine.

Irène be.3sG absent.sG.F she have.FUT.3sG again POSS.3sG.F migraine 'Irène is absent. She's **probably** gotten a migraine again.'

(Batchelor & Chebli-Saadi 2011:257)

A usage somewhat stronger in modal force, but closely connected to the usages of conjecture and inference, is the so-called gnomic future, which expresses general truths.

- (5) Gnomic usage
 - a. pulchra mulier nuda **erit** quam beautiful.NOM.SG.F woman.NOM.SG.F naked.NOM.SG.F be.FUT.3SG than purpurata pulchrior dressed.in.crimson.NOM.SG.F beautiful.COMP.NOM.SG.F
 - 'A beautiful woman **will be** more beautiful naked than when clad in crimson' (Hofmann 1965:310)
 - b. Il y **aura** toujours des gagnants et des perdants. it there have.FUT.3sG always INDEF.PL winner.PL and INDEF.PL loser.PL 'There **will** always **be** winners and losers.'

(Batchelor & Chebli-Saadi 2011:256)

Another modal usage found in both Latin and French, which comes from the domain of deontic modality, is as an imperative, as shown in the following two examples.

(6) Imperative¹²

a. si sapies, tacebis
if know.fut.2sg keep.silence.fut.2sg
'If you know it, you will keep silence'

(Hofmann 1965:311)

¹¹ The 'conjecture' usage may be considered a subtype of prediction with a weaker sense of certainty. However, we here follow the grammarians' categorization and list it separately. Note that formulas expressing an optative sense as listed by Hofmann (1965:310) for Latin, as well as suggestive usages such as Batchelor and Chebli-Saadi's (2011:257) *Tu comprendras que je ne peux pas lui faire confiance* 'You will understand that I can't trust him/her', are here considered to be further subtypes of the potential future.

¹² Some usages in this domain may be characterized as hortative; see Batchelor and Chebli-Saadi's (2011: 257) account for French.

b. Vous **ferez** le ménage et vous **préparerez** le déjeuner! 2PL make.FUT.2PL the laundry and 2PL prepare.FUT.2PL the dinner 'You **will do** the laundry and you **will prepare** dinner!'

(Riegel et al. 2014:552)

Finally, the future can also be used for the expression of indignation in the first person in reaction to someone else's request.

- (7) Indignation
 - a. Ego **saltabo**? Sanus hercle non es

 1sG dance.FUT.1sG sane.NOM.SG.M hercules.voc.sG.M not be.2sG

 'I **should dance**? By Hercules, you are not sane!' (Hofmann 1965:311)
 - b. Quoi? J'accepterai, moi, qu'on me remplace?¹³
 what 1sG:accept.FUT.1sG 1sG COMP:one OBJ.1sG replace.3sG
 'What? I should agree to be replaced?' (Fleischman 1982:132)

This list presents the main functions, temporal and modal, that are listed in the literature. 14 There is no major meaning not found for both Latin and French when standard reference grammars and descriptions are consulted. Of course, depending on the precise period, register, and other factors, it may be the case that not each and every usage is found in all subvarieties. This general qualification notwithstanding, this survey corroborates assertions of a 'maximal similarity' (Lehmann) between the constructions. So the question to be addressed is how this maximal similarity can be accounted for. Could it be that the older construction in one way or another influenced the development of the younger one? How could this have happened? Or is there an alternative way to account for the similarity?

3.3. AN ALTERNATIVE EXPLANATION FOR FUNCTIONAL OVERLAP: SOURCE DETERMINATION. The concept of 'renewal', in all variants outlined in §2, invokes a link between the functional space of one construction and that of another older one, and we explore the possibility of such a link involving the transfer use in the next section. An alternative way of accounting for the functional spectrum of a construction, however, is to link it back to its own semantic origins. In grammaticalization literature, it has often been observed that there is a systematic relationship between the type of source lexeme and the gram it develops into. For example, body-part terms such as 'head' or 'back' have been observed to develop into adpositions meaning 'on' or 'behind' in several unrelated languages (cf. Svorou 1988:132). A refinement of this view is the hypothesis of source determination proposed by Bybee and colleagues, who argue that 'the source meaning uniquely determines the grammaticalization path that the gram will travel in its semantic development' (1994:9). Understood in a strong sense, the source determination hypothesis is incompatible with the existing system having any kind of influence on the

¹³ Some speakers prefer a conditional in this example.

¹⁴ Another modal usage is the so-called 'concessive' usage that is listed by some authors both for Latin (Hofmann 1965:311) and French (Sten 1964:58 and Imbs 1960:52). A more precise label, however, may be 'irrelevance conditional', as it expresses unconcern for a certain given situation. In terms of modality, these examples encode the possibility that a certain situation may or may not be the case, irrespective of which another event is asserted to take place. We do not include this usage in the main text since it may be viewed as involving simple prediction, only with the particularity of being set in an 'irrelevance' context, and because the usage seems outdated or old-fashioned in French. Compare some examples: *Laudabunt alii claram Rhodon aut Mytilenen* ... 'May/Let others praise famous Rhodes or Mytilene [... (nothing) has struck me as the house of resonating Albunea]' (Horace; Hofmann 1965:311) and *Les moteurs sauteront comme ils veulent* 'The motors may hiccup as they wish. [I don't care.]' (from early-twentieth-century French) or the phrase *Arrivera ce qui arrivera* 'Come what may' (see Imbs 1960:52).

development of a construction other than providing the building blocks for the source construction. ¹⁵ Even in such cases as the Latin and French futures, where we may perceive a striking similarity between constructions, the functional spaces are to be explained by the meanings of the source constructions, rather than by some kind of link between them. An argument along these lines for the Latin and French synthetic futures would look roughly as follows.

Future constructions (i.e. constructions one of the senses of which is prediction; cf. Bybee et al. 1991:19) are argued in Bybee et al. 1991 and Bybee et al. 1994 to evolve from four different types of sources. The first is the so-called aspectual future, the semantic range of which is so broad as to also cover future reference, for example, the German present indicative *Ich spiele morgen Fußball* (1sg play.1sg.prs.Ind tomorrow soccer) 'I'll play soccer tomorrow'. Second, we find future constructions that evolve from constructions expressing 'agent-oriented' modalities. Bybee and colleagues subdivide what is otherwise subsumed as 'deontic' into so-called agent-oriented modality (ability, desire, and obligation) and speaker-oriented modality (the semantic family of requests and commands). This is a consequence of their findings that grammaticalization paths lead from subtypes of agent-oriented modality to epistemic modality, and on to speaker-oriented modality (see Bybee et al. 1991:22–25). The third category involves grams stemming from verbs of movement, such as English *be going to VP* or the French periphrastic future *aller faire qc*. Finally, the fourth category comprises grams originating as temporal adverbs.

Since the meanings are different in each of these four sources, the ensuing semantic paths of development differ, as predicted by the source determination hypothesis. Thus, if two future constructions arise from two different source types, they are predicted to overlap in part, namely in the expression of prediction, but will also show differences. For example, an aspectual future is typically rather bleached semantically, adopting predictive readings from context as in the German example above, whereas a future construction taking off from a meaning of agent-oriented modality will include all kinds of modal usages, as in the case of English *will* (see Bybee et al. 1991). By contrast, if two constructions arise from constructions of the same source type, we expect a far-reaching semantic overlap.

Turning to our example, much points to a single source type for the Latin and French synthetic future constructions. In both cases, the evidence suggests that they belong to the realm of agent-oriented modality. In addition, there are indications that the constructions take off from closely related usages within this semantic domain. We first discuss Latin and then turn to French.

Latin has different future formations depending on the respective inflectional class. While the future forms of *esse* 'to be' as well as of verbs in the third and fourth class descend from old subjunctives (also 'conjunctives'; cf. Leumann 1963 [1926–1928]:324–27 for an overview of the category), other verbs show the innovative *-b*-future. Since the origins of the *-b*-future remain only partly understood, ¹⁶ we focus on the former

¹⁵ There are, however, certain types of interaction between grammaticalizing elements and existing structures that Bybee and colleagues (1994) do allow for, as further discussed in §4.2.

¹⁶ Specialists agree that the -b-element descends from a form of Proto-Indo-European (PIE) *bhuH 'to be', but the morphological processes that led to its usage for the formation not only of future forms, but also of the imperfect in Latin, remain subject to discussion. Some authors (see e.g. Müller 1964:54, Fleischman 1982:34, Bichakjian 1990:45) assume that finite forms of *bhuH were agglutinated to infinitival or participial forms of lexical verbs, or simply to the stem, but such proposals have problems on morphophonological grounds (see Leumann 1963 [1926–1928]:327 for a summary). Others have argued that we are instead dealing with a

subjunctives. Note that the -b-forms are also connected to the former subjunctives, since their endings were formed in analogy to the latter (e.g. Meiser 1998:200).¹⁷

From what is known from Vedic and Ancient Greek especially, the subjunctive had volitional, intentional (sometimes 'deliberative'), and predictive (sometimes 'prospective') usages, partly depending on the person and speech act (e.g. Delbrück 1871, 1897, Gonda 1956, Tichy 2006, Bozzone 2012, or Dahl 2013).\(^{18}\) The volitional usage is identified by Delbrück (1897) as the original one, a claim that neatly matches crosslinguistic evidence of the often observed grammaticalization of future grams from forms expressing 'desire' (subsuming the expression of wishes as well as of willingness, that is, volitionality; cf. Bybee et al. 1994:256).\(^{19}\) 'Desire' is one of the three subtypes of agent-oriented modality (the other two are 'obligation' and 'ability') in which future grams originate, as identified by Bybee and colleagues (1991, 1994); this is illustrated in Figure 1 (the path from 'desire' is highlighted in bold). In addition to the volitional, intentional, and predictive usages, Delbrück and others have furthermore identified imperative or hortative functions, all of which match a source in the realm of 'desire'. The usages of conjecture and inference shown for Latin in \(^{8}\).2 additionally attest to an epistemic usage encoding probability, completing the semantic match.\(^{20}\)

obligation	>	intention	>	future	>	probability
desire						imperative
ability	>	root possibility	>	future	>	possibility

FIGURE 1. Semantic pathways from agent-oriented constructions to predictive usages and beyond (adapted from Bybee et al. 1991:29; boldface added).²¹

process of morphological reanalysis, followed by analogical extension. For example, Meiser (1998) outlines a scenario that takes off with the reduplicated preterite of the perfect of *bhuH. The reduplication syllable is argued to have been reanalyzed as the stem syllable, and the former stem syllable as part of the inflectional ending, the latter now starting with -b- from -bh-. By way of analogical extension, other verbs adopt these inflectional endings, which now signal imperfect function. Again by way of analogy, future forms are formed along the equivalencies of imperfect eram, erās: future ero, eris (from esse 'to be') = imperfect amābam, amābās: future amābo, amābis. Yet another proposal is that the future is the older formation and served as the analogical model for the imperfect, and that its origins are lost in the mists of time (e.g. Leumann 1963 [1926–1928]:327).

¹⁷ For this reason, we do not agree with Bichakjian's (1990) claim that a crucial difference between the Latin synthetic future and the French synthetic future is that the former involves a form meaning 'to be' (i.e. encoded in the *-b*-element), while the latter involves a gram meaning 'to have', that is, involving a finite form of *habere*. Only some of the Latin future formations involve a *-b*-element, and the older ones are the old subjunctives, and not the innovative *-b*-forms.

¹⁸ It was not a 'subjunctive', narrowly defined. It is frequent in subordinate clauses, but is also frequent in main clauses. The label originates in an Ancient Greek term (see Tichy 2006:1–2).

¹⁹ Some authors argue that the volitional usage is the result of the specifics of using the subjunctive in the first person and thus to be derived from the predictive use (see Bozzone 2012:9–12 for a brief overview). The attested volitional and intentional usages, however, are clearly semantically more concrete and therefore most likely older, given what we know from crosslinguistic evidence of grammaticalization paths. Also, note that we know from other languages that an original volitional meaning can survive longer in the first person. For example, English *I will* can still denote a sense of volition, whereas *he will* simply expresses prediction.

²⁰ Note that an alternative account, which conceives of the subjunctive as an old present, is found in a number of writings. See the appendix for details and for arguments regarding why we believe that an agent-oriented modal source construction is to be assumed.

²¹ A construction synchronically often covers several steps of development along a grammaticalization path.

The French synthetic future ('futur simple') *chanterai* is also likely to have semantically developed from an agent-oriented modal construction *cantare habeo*.²² Inflected forms of the verb of possession *habere* in construction with infinitives developed readings of obligation, similar to English *have to*. For early attestations, readings of ability have also been proposed (e.g. Müller 1964:72–73),²³ and other authors have identified usages indicating volition or desire.²⁴ Overall, however, obligation seems the function that can most clearly be identified, and there is agreement in the literature that it is the stepping stone to developing predictive interpretations (Coleman 1971:219–20, Fleischman 1982:58 et passim, Fruyt 2011).²⁵ This matches typological findings where possessive constructions have been shown to develop first into markers of obligation and then onward into futures (see Bybee & Pagliuca 1987:111–12, Bybee et al. 1994:263).²⁶ Thus, in the case of the French future, the data is suggestive of the pathway in Figure 2, highlighted in bold.

obligation desire	>	intention	>	future	>	probability
						imperative
ability	>	root possibility	>	future	>	possibility

FIGURE 2. Potential semantic pathway for the French future; cf. Fig. 1 (adapted from Bybee et al. 1991:29; boldface added).

The leap from HABEO DICERE 'I can, I am able to say' to 'I have to, I must' in Tertullian's writings will remain a problem of interpretation, unless we assume an Old Latin nexus 'HABEO with inf.' with the semantic range 'it is in my power (as ability, necessity, concern) to do this or that', which slowly gave rise more clearly to the major nuances of 'I can' and 'I must, should'. (Müller 1964:73) ('Der Sprung von HABEO DICERE "ich kann, bin in der Lage zu sagen" zu dem bei Tertullian offenkundigen "ich muss, soll" wird eine Crux der Interpretation bleiben, es sei denn, man geht aus von einem altlat. Nexus "HABEO mit Inf." mit dem Bedeutungsfächer "ich habe (als Vermögen, Notwendigkeit oder Anliegen) in der Hand, dies oder jenes zu tun", aus dem sich allmählich die Hauptnuancen "ich kann" und "ich muss, soll" klarer herausgeschält haben.')

Daniel Kölligan (p.c.) points out that German *müssen* underwent a similar development from expressing ability to expressing obligation, which shows that this development is plausible (cf. e.g. Fritz 1997:85ff.). Regarding the French future, the important point here is that the meaning of prediction appears to develop out of obligation.

²⁴ Coleman (1971), following Thielmann (1885), uses the labels 'possibility' and 'obligation/necessity', in addition to the mentions of 'volition' and 'desire' by other authors (e.g. Gratwick 1972; see references in Coleman 1971:219, n. 2).

²⁵ Some authors prefer a scenario that does not involve modality (at least not in a narrow sense). For instance, Benveniste (1968) argues that the origin of the synthetic future lies instead in usages of *habeo* + INF with a meaning of 'predestination'. Such readings arise predominantly when *habeo* is combined with passive infinitives. The French synthetic future, however, goes back to combinations with active infinitive forms. It is not clear, therefore, whether it can in fact be connected to usages involving passive infinitives. Pinkster (1985) argues against intermediate modal meanings between possession and prediction. In view of the many modal meanings attributed to the construction, this seems an unlikely scenario, however.

²⁶ The usage 'indignation' listed in §3.2 might be viewed as containing a sense of obligation. If this view is adopted, it would, in the pathway proposed in Bybee et al. 1991, 1994, present a very early stage before convergence of the different subtypes of agent-oriented grams. Now, the Latin future, which we hypothesize to derive from a 'desire' and not an 'obligation' gram, also attests to this usage. It is a subject for future re-

²² The literature on this topic is vast. The reader is referred to Müller (1964), Coleman (1971, 1976), and Fleischman (1982), among others. Posner (1997:325ff.) discusses difficulties in the morphological reconstruction, none of which, however, is a serious challenge for the widely assumed origin in *cantare habeo*.

²³ The semantic gap between ability and obligation readings is accounted for by Müller via their respective origins in the possessive construction:

Some uncertainties regarding the precise demarcation of the respective source meanings notwithstanding (and variation is expected depending on person, speech act, verbal lexeme, etc.), much points to a shared prehistory of the Latin and French synthetic futures in the domain of obligation/desire.²⁷ While these are not identical source meanings, the evidence reviewed here and in §3.2 matches the crosslinguistic findings of Bybee et al. 1991 and 1994: these agent-oriented modal sources converge on a path, developing into intention, future, and on to further epistemic (probability) and speaker-oriented (imperative) functions, as illustrated in Figs. 1 and 2. The source determination scenario thus allows for a well-substantiated account of the far-reaching overlap between the Latin and French synthetic future constructions without the necessity of postulating some kind of direct link between the two constructions.

3.4. DECIDING BETWEEN ALTERNATIVE EXPLANATIONS: SOURCE DETERMINATION VS. RENEWAL. In the preceding section we outlined a 'pure' grammaticalization scenario based on the concept of source determination in order to account for the far-reaching semantic overlap of the Latin and French synthetic future constructions. This scenario by itself is, of course, not a direct argument against the possibility of a renewal scenario accounting for the same facts, 'renewal' here being used in its transfer sense—that is, the idea that the existing future construction influences the development of the new future construction in such a way that the latter finally covers almost the same functional ground as the former. So, assuming that the transfer view of renewal can be spelled out in sufficient detail to allow for testable predictions, we would have two alternative scenarios to account for the same facts and would need arguments to decide between them. We argue in this section that the source determination account is to be preferred for both theoretical and empirical reasons.

Theoretically, the argument in favor of the source determination account is the fact that such an account is needed anyway for innovative grammaticalizations (Occam's razor), that is, the development of new constructions for which no older model exists (such as the relatively recent development of definite article constructions in some branches of Indo-European).

Empirically, the two accounts make different predictions in those instances where old and new constructions go back to clearly diverging source types. Here the source determination account predicts that the functional spaces of the two constructions will not overlap to the same extent as in those instances where they go back to identical or closely related source constructions. Specifically, the new construction should not take on functions that cannot be connected to its source meaning. The renewal account makes the opposite prediction, namely, that the newly developing construction may take on functions that cannot be connected to its source meaning, but that are in the semantic spectrum of the other, older, grammatical construction. Such a case would strongly support the view that functions may indeed be passed over from one construction to the other.

We are not in a position to provide an unequivocal example supporting one or the other prediction, since this requires a degree of granularity that is rarely found in outlines of functional spaces of a particular gram. However, the newly developing peri-

search whether the modal coloring in the precise type of 'indignation' use differs from that of actual 'obligation' grams or whether there are other explanations for this possible aberration from the Bybee et al. hypothesized pathway (which may in fact also be relevant for the French future; see the next footnote).

²⁷ If 'desire' is accepted as a meaning of the source construction of the French future, the two formations would be even more alike.

phrastic future ('futur proche') *aller faire qc* in French appears to provide some support for the source determination scenario, which we now briefly sketch.

It is discussed in the literature whether the periphrastic future is in the process of replacing the synthetic future, which makes it a candidate for the kind of function transfer predicted by the transfer scenario. Fleischman remarks on this topic:

collective evidence points incontrovertibly to the fact that in contemporary Romance, as in English, THE EXPRESSION OF FUTURITY IS IN THE PROCESS OF TRANSFER FROM A SYNTHETIC TO AN ANALYTIC FORM, recapitulating, as it were, a shift that occurred in later spoken Latin over a millennium and a half ago with the emergence of *cantare habeo*. (Fleischman 1982:102, our emphasis)

The new analytic future, however, evidently descends from a source construction of a different category, namely from a construction with a source meaning involving movement, rather than modality.²⁸ Accordingly, we would expect at least partially different functional spaces on the basis of the source determination hypothesis.

We saw above the semantic paths that agent-oriented modal constructions are attested to follow in the course of their grammaticalization into future constructions, developing various epistemic and speaker-oriented modal usages. Constructions involving verbs of movement, by contrast, are stated by Bybee and colleagues (1994) NOT to evolve a host of other meanings 'along the way':

The evolution of movement constructions into futures is somewhat more direct than the evolution of agent-oriented modalities into futures, producing fewer other uses along the way. The semantics of 'movement toward' constructions implies movement in time as well as space, making the transition to future easier. (Bybee et al. 1994:268)

Thus, movement constructions usually develop fewer other (typically modal) meanings. Now, the crucial question for the current argument is: has the periphrastic *aller faire*-future developed meanings that cannot be derived from its own semantic source as a movement construction, but that are found in the semantic space of the old synthetic future? If this happened to be the case, it would strongly support the idea that some kind of semantic transfer between old and new has taken place and hence would provide evidence for the transfer view of renewal.

Turning to the French periphrastic future, the abundant literature on its distribution in different varieties of French cannot be surveyed in detail here. A finding that stands out, however, is that authors generally assume certain differences in usage between the synthetic future and the periphrastic future (see Fleischman 1982:86–102 for a survey of major proposals). While differences along several axes—aspectual, modal, and temporal—have been examined, most authors agree about a few points. First, it is generally acknowledged that the difference is not primarily one of temporality, as might be assumed given the label futur proche 'near future' for the periphrastic future. Many authors have pointed out that both futures can, in principle, be used for events that are at different degrees of temporal remoteness and that a skewing of the distribution along the temporal axis is epiphenomenal. Instead, it is argued that differences in aspectual and modal values are decisive, complemented by sociolinguistic factors such as style, register, gender, and age group (see e.g. Fleischman 1982, Wales 1983, Lorenz 1988, Poplack & Dion 2009). In particular, a number of authors have stressed that the periphrastic future, by virtue of its construction type as a present, retains a sense of a 'link to the present' (Fleischman 1982:98; see also Lorenz 1988:235-39). This link to the present, in turn, is argued to be coupled with readings of assertion (Laurendeau 2000 for

²⁸ This is recognized and emphasized by Fleischman, who remarks on the transfer of the predictive function but not of other modal meanings.

Canadian French), imminence, intentionality, and related usages (see Fleischman 1982:96 et passim). By contrast, the synthetic future encodes simple prediction and lacks a special link to the present. Furthermore, the synthetic future also figures in a number of modal usages, as illustrated in §3.2. In addition to and linked with its modal usages, there is a strong preference for the synthetic future over the periphrastic future in negated clauses (cf. Lorenz 1988:236 for written French, Laurendeau 2000:285–86, 288 for Canadian French).

In order to make these somewhat abstract distinctions more palpable to the reader in the context of the present discussion of renewal, we approach the periphrastic future against the background of the functional space of the synthetic future as outlined in §3.2.²⁹ We exempt from our discussion, however, the following usages. Prediction (exemplified in ex. 1) is the defining meaning of 'future' grams and thus attested anyway, most typically also covering 'conjecture' (ex. 3; cf. Bybee et al. 1994:240). Gnomic (ex. 5) and imperative (ex. 6) usages are late-developing functions, according to Bybee and Pagliuca (1987:119–20), which arise out of the predictive usage³⁰ and thus present potential late-developing functions of any source type.³¹ The usage of indignation (ex. 7) may be discussed here, but we refrain from doing so, as it is tied to a specific speech act of first persons and does not present a general meaning of the future constructions. What remains are the usages as historical future and for inference. We repeat below the examples from §3.2 and add a variant involving the periphrastic future. The periphrastic future seems clearly dispreferred for the historical future. The responses are slightly more mixed for the inference usage, but we find an overall dispreference for the periphrastic future here too.³²

(8) Historical future

La bataille des Plaines d'Abraham entraîna la chute de sg.f battle Poss.pl Plains of:Abraham lead.pst.3sg sg.f fall Poss Québec en 1759; ce sera / ?va être la fin de la Québec in 1759 DEM.SG.M be.FUT.3sg go.3sg be.INF sg.f end Poss sg.f Nouvelle-France.

New-France

'The battle for the Plains of Abraham led to the fall of Quebec City; that would be the end of New France.'

²⁹ We thank Martin Becker, Bertille Collignon, Fanny Cottet, Marta Donazzan, Marie Duhamel, Corinne Eichinger, Anke Grutschus, Sandra Lhafi, and Isabelle Tournier for discussing the examples in this section with us.

³⁰ Imperative usage is a (speaker-oriented) modality, so why is it found to arise in movement constructions? Bybee and colleagues (1994:273–74) argue that requests or commands do not hinge on specific modal or aspectual meanings, but on a reinterpretation of an indirect speech act in second person, which can occur with all four types of source constructions of futures.

³¹ However, while gnomic usage is attested for the synthetic future, it is not clear whether the periphrastic future has this function. With respect to imperative usage, note that there may sometimes be a difference in deontic strength, with the synthetic future expressing a polite request and the periphrastic future having a more strongly assertive meaning (cf. Batchelor & Chebli-Saadi 2011:256–57 on the synthetic future).

³² As pointed out, usages of synthetic future and periphrastic future vary significantly depending on register and sociolinguistic factors, and especially language contact. It appears that speakers with a very good command of English and/or German are more ready to accept the periphrastic future in these usages, a tendency in need of further exploration.

(9) Inference

Irène est absente. Elle aura/ ?va avoir encore Irène be.3sG absent.sG.F she have.FUT.3sG go.PRS.3sG have.INF again sa migraine.

POSS.3sG.F migraine

'Irène is absent. She's probably gotten a migraine again.'

The dispreference for the periphrastic future in these usages may be explained by it being a present indicative formation. As such, it may not lend itself well to meanings set in the past or in a nonassertive modality, which ties in with the 'link to the present' that has been attributed to it in the literature. Besides these usages, there is another minor type of modal usage that has been associated in the literature with the synthetic future, and where it is not clear whether speakers would also generally accept the periphrastic future or in fact prefer the conditional. Here, the utterance is marked as nonassertive or hedged, a construction found, for example, with verba dicendi (hence Barceló's 2007 'futur illocutionnaire').

- (10) A: Ce n'est plus un élément primordial? this NEG:be.3sG more an element crucial 'This is not a crucial element any more?'
 - B: Je **dirai** que c'est un élément très important de notre 1sG say.FUT.1sG that this:be.3sG an element very important of our défense, le président de la République l'a rappelé defense the president of the Republic it:has bring.to.mind.PPP récemment.
 - 'I **would say** that this is a very important element of our defense system, the president of the Republic brought it to mind recently'

 (adapted from Barceló 2007:52)

Another example of hedging can be found in the following semi-fixed expression *cela fera* ... , used to name the price for something, where the synthetic future constitutes the default.

(11) Cela fera vingt euros.
this make.FUT.3sG twenty euro.PL
'That'll be twenty euros.'

(see Batchelor & Chebli-Saadi 2011:257 for this and similar examples)

To conclude this brief and preliminary survey of the French periphrastic future, the synthetic future is seen in certain usages, namely as a historical future and for inference and attenuation or hedging, where the periphrastic future is not or is less commonly found. This matches the widespread view found in the literature that the two formations differ on several levels, modal and otherwise (if not so much temporally). While these distributional differences are in need of further exploration, we conclude that we find no clear evidence of a semantic development of the periphrastic future that suggests an adoption of meanings from the synthetic future, that is, which would point to a transfer scenario of renewal. Instead, its functional space shows the expected development from its source meaning. Movement in space is extended to movement in time, while the relevance to the present persists in usages expressing imminence, intention, and assertion (see Eckardt 2006:91–127 for a similar characterization of the grammaticalization of the English *be going to*-construction). In the same way as for the comparison between the Latin and French synthetic futures, Bybee and colleagues' scenario of source determina-

tion offers a persuasive account for both similarity and dissimilarity between the two French future constructions, namely as hinging on their respective source meanings.

3.5. TAKING STOCK: RENEWAL, GRAMMATICALIZATION, AND THE NEED FOR A THEORY OF SYSTEM CONSTRAINTS ON MORPHOSYNTACTIC CHANGE. Let us briefly review the arguments regarding the usefulness and viability of the notion of 'renewal' presented so far. In §2, we argued that if this concept is viable at all, it would have to be in what we call its transfer usage. We also noted that the empirical ground covered by renewal significantly overlaps with the empirical ground covered by grammaticalization theory, as both are concerned with the development of grammatical markers and constructions. Since grammaticalization theory also covers the development of constructions and markers formerly not found in a particular language, renewal would only be a useful concept if grammaticalization theory should fail to comprehensively account for the grammatical developments where 'models' for newly emerging constructions are attested at earlier stages in a particular language.

Instances where old and new constructions are functionally and formally very similar present a particular challenge for grammaticalization theory, as they suggest a direct transfer of functional and formal features from the older construction to the newly arising one. In the last subsections, we have argued that grammaticalization theory meets this challenge very well with regard to the perhaps most plausible well-attested example of a renewal pair, that is, the Latin and French synthetic futures.

Furthermore, and perhaps more importantly, we believe we have provided a model of how an argument in support of renewal as a process of morphosyntactic change sui generis could be made. Essentially, one would have to be able to show that important aspects in the semantic and possibly also formal development of a grammatical construction cannot be accounted for in terms of the source determination hypothesis. A particularly strong argument in support of renewal would be a development where an emerging construction takes on (semantic and/or formal) features not predicted by the well-established paths of grammaticalization. In the case of the new periphrastic *futur proche* in French, this would involve the development of particular modal usages typical of early developmental stages of futures taking off from modal source meanings, as discussed in §3.4. In the absence of such an argument to date, we would at least preliminarily conclude that there is no place for a concept of renewal as a process sui generis in a theory of grammatical change. The term could be used as a figure of speech, if at all—that is, as an expositional device to note similarities between older and younger constructions (= our 'descriptive' use in §2).

However, there is a line of criticism that has been leveled against grammaticalization theory which challenges this conclusion and thus briefly needs to be addressed here. A particularly strong and clear version of this critique is given by Heath (1998), who criticizes (modern) grammaticalization theory—including, for instance, the work of Bybee and colleagues—for its neglect of the influence that the current grammatical system exerts on grammatical change:³³

³³ Heath's main concern in this work are what he calls hermit-crab phenomena, for which he proposes an analysis in terms of the recruitment view of renewal: a phonetically weakened suffix is replaced by an independent word of similar phonetic (but longer) shape and more or less (often less) compatible semantics. Heath argues that the decay of the suffix induces the word to replace the suffix relatively abruptly without going through a clitic stage. This analysis thus involves a particularly strong and direct causal link between old and new form, with the old form literally recruiting the new one as its substitute. In the same way as in the case of weaker or less spelled-out versions of the recruitment view outlined in §2, we reject repair scenarios of this type for the logical problems mentioned there and for the lack of clearly persuasive empirical evidence.

In the absence of unusual contact situations, I argue here, the 'old' grammatical patterns (categories and forms) are always decisive in shaping the way 'new' patterns fit into the system. Grammaticalization is not the work of a mechanical monster or other external force. Nor are lexical items like 'go' and 'have' propelled by preprogrammed navigational paths into morphology, in the fashion of drone aircraft. (Heath 1998:730)

Heath goes on to contrast modern grammaticalization theory with its forerunners:

The point is that the centrally important Indo-Europeanists Kuryłowicz, Meillet, and Benveniste, who are correctly credited with inaugurating the modern study of grammaticalization, were keenly aware that the latter did not take place in a vacuum. They realized that grammaticalization, above all in the tense-aspect-mood-negation system of verbs, was tightly controlled by system-internal considerations, including both the gross morphosyntactic form of the language (inflected, analytic, etc.) and a strong tendency to maintain preexisting categories (whether universal or language specific) ... (Heath 1998:732f.)

Here, Heath directs attention to the undeniable fact that linguistic change (of any type) does 'not take place in a vacuum'. This, however, almost immediately raises the question of how exactly one should conceive of the influence of the existing system on ongoing change. All types of linguistic change begin with variation in the use of existing forms and constructions. But this very general observation does not necessitate a concept of renewal. For renewal to be a viable and useful notion, one would have to be able to show that there are some more specific constraints on change rooted in the existing system, as suggested by Heath's use of 'tightly controlled' in the quote above.

While Heath's allegation that modern grammaticalization completely ignores the influence of the existing system is too strong (see examples in the next section), we agree with him that much work in grammaticalization wrongly makes it appear as if grammaticalization did indeed happen in a vacuum. Grammaticalization theory can legitimately be criticized for lacking an explicit account of the ways in which the existing system may interact with ongoing grammaticalizational change.

We conclude the article with a few observations that provide a rough outline of the terrain that needs to be covered in this regard. The term 'renewal' has been used to refer to some of the phenomena we briefly mention in the following section, which to us indicates that many authors are indeed aware of the fact that there are aspects of grammaticalizational change that lack a proper account. But, as just argued, the concept of renewal is not useful in properly delimiting the relevant phenomena and addressing the theoretical tasks. Rather, it is grammaticalization theory that provides a useful framework and starting point for doing just that. In fact, we believe that the widespread loose and untheorized use of 'renewal' has been detrimental to the task of properly addressing the issue of system influences on the development of new grammatical constructions.

4. BEYOND RENEWAL: ON THE NEED FOR A THEORY OF SYSTEM INFLUENCES ON GRAMMATICALIZATION. Research on grammaticalization to date has largely, but (pace Heath 1998) not totally, ignored the way the existing language system may influence the grammaticalization of new constructions. Based on the preceding discussion, we believe the starting point for a productive approach to this topic is the source determination hypothesis outlined and applied in §3.3. According to this hypothesis, the developmental trajectory of an emerging construction is essentially determined by semantic properties of the source construction. Taking the source determination hypothesis as the starting point means that influences of the existing system need only be invoked in those instances where the development of a particular construction cannot be exclusively accounted for in terms of this hypothesis. Conceived of in this way, the theory of system constraints on grammaticalization is complementary to the theory of source determination, and needs to be developed accordingly.

The first domain in which we identify aspects unaccounted for by the source determination hypothesis as proposed by Bybee and colleagues is the form side of the source construction. Bybee and colleagues' hypothesis is directed only at the semantic level. However, whereas a meaning can be postulated for a construction irrespective of the language system, to take into account the linguistic sign as consisting of meaning and form brings system influences into the picture. The forms and structures a grammaticalizing construction draws on are of several types. One may discern a cline ranging from the influence of individual grammatical forms that may form part of a newly grammaticalizing construction, which we call *old grams*, to far-reaching global influences by general typological features. Thus, one way of capturing certain types of system influences on grammaticalization processes involves adding onto the theory of source determination, as briefly elaborated in §4.1.

Besides extending the theory of source determination, we identify paradigm formation as the second major domain of system influences on grammaticalization. Paradigm formation is a notion under which various developments have been subsumed (see e.g. Lehmann's 2002 [1982]:112ff. outline) and which may or may not turn out to constrain grammaticalization processes above and beyond source determination. Here, we provide a few examples where we think that there are indeed paradigmatic effects influencing grammaticalizing constructions that are not exhaustively accounted for by source determination. Some of the examples involve changes where semantic and syntactic properties of one element or class of elements extend to another element or class of elements, while others involve competition and contrast among constructions within one functional domain.

Before we continue, a clarification and a caveat are in order. First, we want to clarify that by 'existing system' we do not mean just grammatical forms and constructions that predate the emergence of the new construction. Rather, this also comprises constructions that are developing concurrently with the specific construction for which system influence is diagnosed. More generally, it would be a mistake to conceive of the 'existing system' as a static entity. In this regard, 'existing' is a potentially misleading attribute. The system itself is continuously evolving. The emergence of new constructions thus needs to be seen as part of an overall dynamically evolving repertoire of constructions. As for the caveat, note that the present discussion is a very preliminary attempt to delimit a complex field in need of further study. Accordingly, the following sections may generate more questions than answers.

- **4.1.** THE NEED FOR A MORE COMPREHENSIVE THEORY OF SOURCE DETERMINATION. In Bybee and colleagues' (1994:9) wording, the source determination hypothesis makes the claim that 'the actual meaning of the construction that enters into grammaticalization uniquely determines the path that grammaticalization follows and, consequently, the resulting grammatical meaning'. In our view, 'uniquely' is too strong a wording, because, taken literally, it does not allow for any kind of influence from the existing system. More importantly, by referring only to meaning, this wording appears to suggest that the formal makeup of the source construction has no particular role to play in the further development. By contrast, we believe that there are several levels on which forms and structures of the existing system constrain grammaticalizations. Roughly, one may distinguish three different levels on which the existing grammatical system may influence the development of new grammatical constructions:
 - (i) The level of THE INDIVIDUAL ITEMS that are involved in the emerging construction. Besides the meaning and distribution of the new content word that

- grammaticalizes, this involves in particular old grams such as *-ing* and *to* in *be going to VP*. Such old grams feed into and constrain the construction with their specific semantic and formal properties.
- (ii) The level of existing FORM CLASSES that may influence and constrain the development of grammaticalizing constructions. Word classes constraining host-class expansion are a prime example.
- (iii) The level of GENERAL TYPOLOGICAL FEATURES characterizing a given system, a level that is possibly somewhat controversial, but certainly quite difficult to make precise.

Regarding the first level, possibly the most significant influence of old grams is found in cases of reinforcement, where a grammatical formative receives the support of additional material that strengthens its meaning (e.g. Lehmann 2002 [1982]:20).³⁴ In some cases of reinforcement, the reinforcing material is semantically similar to the old gram. An example comes from the development of local particles into prepositions in Germanic or Romance: morphological case forms such as the accusative or ablative were 'supported' by local adverbs that specified their meaning. For instance, Latin ad in ad Romam reinforces the accusative, which beforehand could express goals on its own without the support of a spatial adverb (see Vincent 1999). An ongoing case of incipient reinforcement through elements with very similar meanings involves locative prepositions in contemporary spoken German such as in 'in' or auf 'on'. These are often supported by the partcognate and almost homonymous adverbs drin(nen) and d(a)rauf, for example Ich bin drin(nen) im Haus 'I am inside the house' and Ich sitz drauf auf dem Haus 'I am sitting on the house'. In other cases, the reinforcing material is not itself semantically similar to the old grammatical formative, but acquires its semantic force by forming part of the new constructional meaning, as in the case of the French negation construction ne ... pas. In all of these examples, the old grams bring not only their particular semantic properties but also their particular formal properties to the new construction. For instance, while German drin(nen) may still move around in the sentence (an alternative word order is Ich bin im Haus drin(nen)), the old gram in (im consists of in 'in' and the dative article dem) is constrained to the prepositional slot and governs the dative, and these properties provide the syntactic foundation for the new reinforced construction.

Turning to the second level, another formal aspect usually constraining the further development of a source construction pertains to the word classes of the elements making up the source construction. This holds in particular for those positions that are open to further expansion, often called the host class(es) of developing grams. As noted in Himmelmann 2005:91–92, the functional range of the host class of a gram is generally constrained by the given word classes of the language. For example, a developing auxiliary construction can be expected to expand with regard to its host class until it comprises all verbs of a language, but it would not be expected to also include elements of other word classes. This is, of course, not an absolute boundary for context expansion, as grammaticalization processes may also bring about changes in the system of major word classes—this is the exception rather than the rule, however.

³⁴ For Lehmann (2002 [1982]:20), 'reinforcement' is a phenomenon that is to be contrasted with 'renewal/renovation': 'If an element is weakened through grammaticalization, there are, in fact, two possibilities open to linguistic conservatism. The first is to give it up and replace it by a new, but similar one. This is renovation, as we have just seen. The second is to reinforce it, thus compensating for and checking the decay'. While adopting the notion of reinforcement, we refrain from drawing a link between reinforcement and 'renovation' (renewal), since only the former appears to involve an empirically supported link between old and new.

Third, there appear to also be more general, structural constraints that may have an impact on newly emerging constructions. For example, Schiering (2010) argues that only languages with stress-based phonologies favor cliticization and affixation, while syllable-based and mora-based phonologies disfavor them. This, in turn, means that the formal reduction widely seen as a hallmark of grammaticalization processes tends to stop short of the cliticization or affixation stage in languages with phonologies other than stress-based ones. Instead, grammatical elements in such languages are typically phonologically independent function words or at most weakly cliticized ones. Schiering's view is corroborated by Bisang for languages of Southeast Asia that have a syllable-based phonology with tonal distinctions, where function words generally do not tend to cliticize, while they nevertheless may encode rather abstract meanings (e.g. Bisang 2008, 2011).

While the example of the isolating tone languages of Southeast Asia lends some plausibility to the idea that general typological characteristics may influence the trajectory of grammaticalizations, there are many points in need of further scrutiny. In particular, such findings potentially challenge the assumption of a 'covariation of form and meaning', that is, of a far-reaching parallelism of the degree of semantic abstraction and the degree of phonetic reduction (including cliticization) of grams, as proposed by Bybee and colleagues (1994:19–21). This assumption would predict that certain types of highly grammaticalized meanings do not occur in languages of the prosodic types studied by Schiering and Bisang. Bybee (1997) claims that this is indeed the case, pointing in particular to the fact that grammatical markers are rarely if ever obligatory in isolating languages. It is not entirely clear, however, that this prediction is fully adequate on an empirical level (Bybee 1997:34 herself mentions Chinese perfective *le* as a possible exception). Or rather, it seems to us, the types of meaning explications used in grammaticalization studies to date are typically not fine-grained enough to actually test this prediction.

Another point in need of further examination is the question of whether the factors of relevance here are all related to prosody (or more generally to the phonological system). Bybee (1997), for example, instead sees the tendency to stop grammaticalizations at the clitic stage as motivated by discourse conventions. The morphological type of a language may be another candidate for a similarly constraining role, as raised in Heath's quotation in §3.5 ('the gross morphosyntactic form of the language') and as pointed out by a referee. For example, highly inflectional languages may be less permissive about the cliticization of new material in comparison with languages that show less morphological complexity. While all of these proposals have some initial plausibility, it is far from clear how to make them sufficiently precise as to render them testable ('obligatoriness', for example, is not straightforward to operationalize as a criterion, as is well known).

4.2. The NEED FOR A THEORY OF PARADIGM FORMATION. Going beyond an extended theory of source determination, we would like to suggest that it is particularly in the domain of paradigm formation that influences of the language system on grammaticalization processes may be identified. Note that, similar to the notion of 'renewal', paradigm formation (or 'paradigmatization' or 'paradigm(atic) integration') is often conceived of as a component or correlate of grammaticalization (e.g. Lehmann 2002 [1982], Diewald & Smirnova 2012), rather than as a type of morphosyntactic change distinct from it. For example, Diewald and Smirnova write: 'we advocate the view that [paradigm formation] can and must be formulated as an essential criterion for differentiating grammaticalization from lexicalization and from other types of semantic change' (2012:112).

Bybee and Dahl claim that paradigm formation is an epiphenomenal effect of individual grammaticalizations of such constructions that have a similar structure from the beginning and grammaticalize in the same period:

if each gram follows a path of development according to its original meaning, then it develops independently of other grams. It belongs to a structural class if other grams from structurally SIMILAR SOURCES ... UNDERGO GRAMMATICIZATION AT APPROXIMATELY THE SAME PERIOD OF TIME. Its membership in a structural class, then, is not determined solely by its meaning, but at least in part by chronological coincidence. (Bybee & Dahl 1989:61, emphasis added)

We agree with Bybee and Dahl that paradigm formation can at least sometimes be accounted for exhaustively as an epiphenomenal result of the grammaticalizations of structurally similar constructions at a similar time. Bybee and Dahl give the example of the English modal auxiliaries. These do indeed descend from verbal forms that had similar semantic and formal properties from early on. Their grammaticalization in the same period thus automatically led to the formation of a tightly integrated paradigm. The classes of simple prepositions in modern Romance or Germanic languages are another example of such epiphenomenal paradigm formation. These descend from a set of Proto-Indo-European (PIE) spatial adverbs with a shared distribution, among other things occurring in juxtaposition with local case forms (see Vincent 1999, Hewson & Bubenik 2006).

In other cases, however, the members of a class of grammatical elements do not share such similar origins, but derive from different syntactic classes and/or periods. The following case study comes from the Hindi simple postpositions.³⁵ These descend from at least three different syntactic classes (adverbial, nominal, participial) and grammaticalized at different points in time, and thus cannot be straightforwardly accounted for in terms of (extended) source determination. Their integration into a paradigm is analyzed in detail in Reinöhl 2016:Chs. 5 and 8. Here, we only look briefly at the origin of the Hindi postposition par 'on' (see Reinöhl 2016:85–117). The forerunner form of Hindi par was upari, originally a zero-valent adverb in Vedic Sanskrit meaning 'above', a usage still attested in early Middle Indic Pali; see ex. 12. From younger periods of Sanskrit onward, *upari* and a host of other adverbs began to also appear with genitive dependents and with relational semantics, a development referred to in Reinöhl 2016 as the 'post-Vedic genitive shift'. While *upari*, either in isolation or in apposition with local case forms, used to mean 'above' in a spatially absolute sense (i.e. denoting a space high up in a three-dimensional space), it shifted to locate something 'on' something else when combining with a genitive, as illustrated in ex. 13.

```
(12) Pali
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```
upari bhikkhave ākāse verambā nāma vātā
above monk.voc.pl sky.loc.sg Veramba.nom.pl named wind.nom.pl
vāyanti
blow.3pl
'Oh brothers, in the sky, above, winds blow which are called Veramba.'
(Sam II, p. 231)
```

³⁵ Another well-documented example of a historically heterogeneous paradigm is the Dutch determiners ('determinatives'), whose development one by one into 'the determiner slot' is explored by van de Velde (2010).

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(13) Pali
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seyyathāpi ... payasotattassa nibbāyamānassa upari santānakaṃ just.as boiled.milk.gen.sg cool.ppm.gen.sg on scum.nom.sg hoti evam evaṃ pātur ahosi become.3sg just.so manifest be.AOR.3sg 'Even as scum forms on boiled milk that is cooling, so did [the earth] appear.'
```

How did this change occur? Since post-Vedic times, relational noun constructions consisting of relational nouns and genitive dependents were a steeply proliferating strategy to form periphrastic expressions of case. An example is GEN + madhye 'in the middle of something', which over time became more and more semantically general, relating not only to spatiotemporal containers, but also to abstract ones (e.g. 'in the middle of my heart' to express strong emotions). The formal and semantic shift of upari and other adverbs can be explained as an adaptation to relational noun constructions through reanalysis in semantically and formally ambiguous usages. First, only adverbs that, due to their phonological form, could be mistaken for relational nouns underwent reanalysis. For example, *upari* has the phonological structure of a locative of a nominal r-stem. Second, reanalysis could take place in such constructions where, due to syncretism between local case forms and genitive forms, one could not in fact know whether one was dealing with a locative standing in apposition to the respective spatial adverb, such as the 'sky' with respect to upari in ex. 12, or with a genitive depending on the spatial adverb. Third, formal ambiguity was matched by semantic ambiguity in certain combinations, depending on the image schema of the spatial entity involved. For example, there are instances where upari combines with a term denoting a raised surface, which invites reinterpretation of 'above' as 'on'. Thus, for example, 'snow lies above, at the mountain (LOC)' invites a reading as 'snow lies on the mountain'. The following example is ambiguous on all of these levels and thus allows for being assigned the new underlying structure.

(14) Pali

```
mahantassa phalakaṃ soṇḍāya upanibandhati,
great.GEN.SG shield.ACC.SG trunk.LOC.SG tie.3SG
tomarahattho ca puriso upari gīvāya
holding.a.lance.NOM.SG.M and man.NOM.SG.M above neck.GEN/LOC.SG.F
nisinno hoti
sit.down.PPP.NOM.SG.M be.3SG
'He ties a shield to the great beast's trunk, a man holding a lance is sitting
on his [= an elephant's] neck.' (Majjh III, p. 133)
```

Accordingly, we are dealing with an adaptation of *upari* and other adverbs to the most frequent and proliferating construction type in the semantic domain of localization, namely relational nouns with adnominal genitives. It would seem that this adaptation at least in part involves (something akin to) an analogical extension (local case form Y is to local adverb X as is nominal genitive A to relational noun B). However, note that the proportion is considerably strained on both the formal and, in particular, the semantic side, even though the bridging contexts provide a plausible scenario for the reanalysis to have taken place.

At this point we should make it clear that analogical change is, of course, a major force in the creation and (re)shaping of grammatical paradigms, both lexical and constructional. In line with much of the literature, we consider analogy a highly potent

process in morphosyntactic change which clearly differs from grammaticalization, but may frequently interact with it. Inasmuch as paradigm-formation phenomena can be explained by analogy, there is no need for a theory of paradigm formation as a component of a comprehensive theory of grammaticalization.³⁶ For the examples discussed in this section, we would hold that it is not clear to what extent they can be fully explained as analogical extensions. If indeed they cannot be explained by (extended) source determination in combination with analogy, then we believe they point to the need for a theory of paradigm formation.

In the case of the remaining example types briefly mentioned now, it would seem to be even clearer that source determination and analogy are not enough for a complete account. This is the case in what has been called the 'grammaticalization of zero' (Bybee 1994). Such examples are perhaps the strongest evidence that contrast indeed has linguistic reality, if less pervasively so than originally assumed in structuralist theories. The grammaticalization of zero may occur in cases where a semantic distinction used to be unexpressed morphologically and only optionally expressed by analytic means, as, for example, if a language previously did not mark number on nouns. If an obligatory plural marker develops, it will entail the grammaticalization of zero through contrast; that is, zero marking acquires the contrasting grammatical value, in this case singular (see Bybee 1988, Bybee et al. 1994:294–95 for discussion and examples).

In other cases, we may not be dealing with a 'zero morpheme', but the gram nevertheless enters into an entirely novel contrast. Note that, while the previous example involved grams that contrast from the start, the following examples involve grams that develop a competition for a particular meaning, as a result of which a contrast may develop. For instance, Bybee (1988) outlines the semantic development of the English simple present in reaction to the grammaticalization of the present progressive. Whereas the simple present used to cover a broad semantic domain including progressive, habitual, generic, and future readings in Old English, it has over time developed a functional space which in part contrasts with that of the present progressive. As Bybee (1988:253) points out, only the habitual and generic readings are now available with certain verbs.

This example of how the English simple present developed shows that a construction may retreat from some of its grammatical usage contexts. This phenomenon presents a challenge for the source determination hypothesis, which predicts the development of a more and more encompassing semantic space. Such withdrawal effects may occur when two (or more) constructions compete for specific meanings. In particular, when a young construction develops meanings that are also expressed by another old construction, it may happen that the old construction is given up in some of these usages. Note that, while the young construction develops as predetermined by its source meaning, it is the old gram (the present tense in the preceding example) whose functional space is 'curtailed'.³⁷

³⁶ Examples of analogical change in historical syntax can be found among the cases labeled 'reanalyses' in Harris & Campbell 1995. While some of the examples listed there can be accounted for as grammaticalizations, other examples involve a purely structural reanalysis and subsequent analogical extension. A case in point comes from older periods of French, where verb-final -t, which occurred in third-person singular forms of some verbs, was reanalyzed in combination with cliticized -il to yield the question marker ti. Subsequently, ti extended to verbs lacking a -t in the third-person singular, and even to non-third-person forms (Harris & Campbell 1995:66).

³⁷ While it appears to be typically the older gram whose functional space is curtailed, which gram will expand and which one will recede in a given semantic contrast does not seem to be predetermined. For example, in a recent study on the competition between perfective and past grams well known from Romance and other languages, Fløgstad (2016) outlines how it is not necessarily perfective grams that expand to past contexts at the cost of past grams; the converse expansion of a past gram at the expense of a perfective one is also attested.

Some authors may choose to view this process as a push chain. However, we would like to emphasize once more that there is no such thing as a direct causal relation between the development of two constructions (including the disappearance of a construction) since both overlap and nongrammaticalization of a certain meaning are equally possible options, as illustrated by the overlap of *will* and *shall* expressing prediction in the first-person singular, and by languages lacking future grams. Therefore, while such examples lend themselves to a metaphorically loose understanding of a transfer scenario of renewal, we are not in fact dealing with a transfer of meaning from one construction to another. Instead, it is an epiphenomenal effect of the constellation where one construction develops a meaning (through source determination) that may be optionally given up at some point by another (often, but not necessarily, older) construction.

Note that curtailing may lead not only to the loss of meaning, but also to the creation of new meaning, but in a somewhat different way from in the cases of the grammaticalization of zero noted above. Haspelmath (1998) describes how the grammaticalization of progressive constructions into presents may lead to old presents withdrawing from main-clause, indicative usages. As a result, such old presents may survive only in subjunctive, future, and other 'niche' usages (see Haspelmath 1998 and Bybee et al. 1994: 232–33 for a variety of other languages), a scenario also taken into consideration (but rejected) for the Latin synthetic future in the appendix to this article. An aspect of such curtailing is the absorption of meaning from the new, restricted context. Bybee and colleagues (1994:232–33) outline how an old present may start to appear again in main clauses, but now encoding irrealis meanings, as happened for instance in Armenian (see Bybee et al. 1994:233–36 for similar examples involving other functional domains).³⁸

To conclude our very preliminary thoughts on the need for a theory of paradigm formation, interaction between constructions exists in the somewhat trivial but precise sense that, when a speaker uses one construction, s/he does not at the same time use another one. As a result, when a new construction develops into the functional spectrum also expressed by another, often older, one, the latter might (or might not) be given up over time in this usage. While this process involves the loss of meaning components on the side of the curtailed construction, it may also lead to the acquisition of new meanings from the new restricted context, a process similar, and perhaps actually identical, to what has been called the grammaticalization of zero. This 'absorption' of meaning is clearly not covered by either source determination or analogical extension. Similarly, we believe that source determination and analogical extension do not fully account for the first example type reviewed above, the development of paradigms out of elements from structurally heterogeneous sources, which poses problems in that here one construction changes both meaning and form at the same time on the model of another construction.

5. CONCLUSION. In conclusion, we are unable to detect a productive and theoretically viable sense in which the notion of 'renewal' might present a process sui generis that may be applied to the analysis of grammatical change. While it is at times used as a figure of speech and thus without theoretical implications, more often than not authors seem to assume some sort of direct link between an older and a younger construction that resemble each other. Besides the purely descriptive understanding, we identified a

³⁸ Bybee and her colleagues and Haspelmath differ slightly in their interpretations of this development. Whereas Bybee and colleagues suggest that the linguistic context of subordinate clauses 'rubs off' semantically, Haspelmath argues that nonassertive readings arise not necessarily just in subordinate contexts, but from 'extralinguistic context ... favored by the perfective readings that old presents are given preferentially after the introduction of the new present' (Haspelmath 1998:58).

recruitment and a transfer view of renewal that turn up in the literature. We reject the recruitment view on several empirical and theoretical grounds, first and foremost due to its presumption of the existence of functional deficiency in natural language (allowing for a broad understanding of 'function', not just informational). In order to scrutinize the transfer view, we revisited in detail what is probably the most frequently cited case of renewal, namely the resemblance between the Latin and French synthetic futures. Their functional similarity, which is indeed striking, can be fully accounted for by grammaticalization alone, and specifically by the source determination hypothesis as formulated in Bybee et al. 1994. There is considerable evidence that both constructions descend from semantically closely related modal constructions encoding desire (or volition) and obligation, respectively. Thus, they are expected to develop a very similar functional space simply due to their predetermined semantic development. Since this evidence would in theory still allow for a transfer scenario, we also looked at the French periphrastic future aller faire qc, which derives from a source construction involving a meaning of movement rather than a modal. We cannot identify clear evidence that the periphrastic future adopts meanings of the synthetic future—which constitutes further support for the far-reaching explanatory potential of the source determination hypothesis as well as against renewal as a process of its own kind.

Consequently, in our view, renewal turns out to be a diffuse concept that has blurred the view on the empirical phenomenon that needs to be accounted for, namely, the fact that the grammaticalization of constructions happens WITHIN constantly emerging language systems. We acknowledge and emphasize the need for a revised and considerably extended theory of grammaticalization that takes into account system influences. In the past few decades, grammaticalization researchers have focused on refining the mechanisms and pathways of change in grammaticalization phenomena, and the understanding of such phenomena has significantly evolved. What is needed now is an approach to grammaticalization as change in context, where grammaticalizing constructions are shaped by forms and structures they are built up from as well as by constructions they interact with.

As an initial approximation of this vast field of study, we have proposed several domains where we believe that system influences are operative and need to be accounted for. On the one hand, this involves extending the source determination hypothesis from meaning to also cover form, ranging from the influence from old grams to prosodic constraints. On the other hand, this comprises interactions between constructions in paradigm formation in a way that cannot be captured properly by the source determination hypothesis or the other major force in historical developments of constructions, analogical change.

APPENDIX: THE MORPHOLOGICAL AND SEMANTIC ORIGINS OF THE PIE SUBJUNCTIVE

A note is in order on an alternative scenario that is found implicitly or explicitly in some publications on the old Indo-European (IE) subjunctive. Morphologically, the subjunctive is formed by means of the thematic vowel -e-/-o-, added to a verbal stem, to which are added different sets of person/number suffixes (e.g. Watkins 1969:59ff., Hill 2009). Apart from the particular forms of the stems and some particularities in the person/number suffixes, the thematic vowel is the distinctive marker of the subjunctive. This thematic vowel, in turn, is identical in form to the thematic vowel employed for the indicative stem of the so-called thematic verb classes. Somewhat simplified, given an athematic class, present indicative forms lack a thematic vowel, whereas present subjunctive forms add one. For example in Vedic, where the thematic vowel appears as an -a-, we find as-ti 'be.IND.3sG' vs. as-a-t(i) 'be.SBJV.3sG'. By contrast, given a thematic class, present indicative forms by definition have the thematic vowel and then lengthen this vowel for subjunctive forms: for example, bhavati 'become.IND.3sG' vs. bhavāt(i) 'become.SBJV.3sG', which is commonly analyzed as two thematic vowels, that is, a + a. As a result, the formation of subjunctives of athematic classes is structurally

roughly the same as the formation of indicatives of thematic classes: for example, subjunctive *as-a-ti* 'he may/will be' and indicative *bhav-a-ti* 'he is, becomes'. This sameness in form has been taken as evidence that we are dealing with one and the same formation historically. For example, Renou (1932), followed by Watkins (1969), argues that forms marked by the thematic vowel are historically identical and were originally without any modal specification. In recent times, Bozzone (2012) takes up this line of thought and argues based on Kuryłowicz 1964, Bybee et al. 1994, and Haspelmath 1998 that we are seeing here an instance of Bybee and colleagues' (1991, 1994) first source type of futures (see remarks in §§3.3 and 4.2), namely an old present (see also Dahl 2013 for a similar argument). In line with the scenario proposed for this source type, Bozzone argues that old thematic present formations were pushed to the periphery of the language system when new presents entered the system, and the old presents became associated with modal values. This constitutes a counterproposal to our view that the origin of the subjunctive lies in an agent-oriented modal construction.

We agree with some of the critique raised by Bozzone,³⁹ and she offers an interesting, typologically informed scenario to account for the distribution of these morphologically similar formations across inflectional classes and moods. Nevertheless, we believe that our suggestion of a modal origin is more plausible on several grounds. First, it remains unclear which factors should have pushed one and the same morphological formation to the periphery for some inflectional classes, acquiring 'niche semantics' as an old present, while remaining a productive indicative formation in other classes (i.e. in thematic ones). Above and beyond this specific challenge for Bozzone's scenario, the functional space of the PIE subjunctive does not fit that of an old present. Note that it is not so much the case that old presents 'actively' develop predictive meaning, but context endows them with this meaning (cf. §4.2). In Bybee and colleagues' words, '[f]or grams marking perfective and imperfective aspect, future arises as a contextually determined use, and not, as is the case with primary futures, as an evolutionary endpoint in the unfolding development of originally lexical material' (1994: 275). Because of this origin, old presents developing into a future 'tend to be highly generalized, having progressive, habitual, gnomic, and often narrative usages' (see Bybee et al. 1994:276). However, this is not what we find in the case of the IE subjunctive. We are dealing with much more specific meanings, namely volition and intention besides prediction. 40 Also distributionally, we find numerous main-clause attestations (see Delbrück 1871, Tichy 2006), which shows that the construction by no means survives only in the functional periphery in the way typical of old presents (nor does it match the late-developing return of old presents with irrealis meanings to main-clause contexts, a scenario outlined in §4.2). Formally, the connection to indicative forms of thematic conjugations is of course undeniable. However, it is very much a possibility that the formal similarity is due to homonymy rather than to a shared morphological ancestry.⁴¹ In the end, we are only dealing with a morpheme consisting of a single segment, or, depending on the analysis, only with vowel lengthening in the thematic classes. Moreover, assuming an analysis of vowel lengthening, the two morphological processes to form subjunctives might be considered actually quite distinct. In conclusion, these various semantic, distributional, and formal arguments clearly point to an origin in a source type of agent-oriented modality rather than in an old present.

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³⁹ In particular, we share Bozzone's critical view of earlier attempts at finding a shared functional origin of indicative and subjunctive, such as Renou's (1932) 'éventuel' and others.

⁴⁰ Bozzone (2012:12) reinterprets the volitional usages as 'hortative', which would allow for the scenario as an old present, hortative usages being late-developing speaker-oriented moods, according to Bybee and colleagues' (1991, 1994) findings. However, this seems to rest on a different understanding of 'hortative' from the one commonly found, which is a weak speaker-oriented request. The rich collections of examples in Delbrück 1871 and Tichy 2006 display the many volitional and—most frequently—intentional usages. Intentional usages such as *We will* (i.e. *intend to*) *praise you* ... should not be mixed up with hortative usages of the kind *Let us praise you* ... and so forth.

⁴¹ In fact, Tichy (2004:101–2) proposes that we may not be dealing with the same morpheme at all, based on instances of uncontracted forms of the thematic vowel and the 'conjunctive suffix' (i.e. what others consider to be the second thematic vowel) in Old Avestan.

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