To dare to or not to dare
Is auxiliarization reversible?

Julia Schlüter
University of Bamberg

This article revisits the alleged unidirectionality of grammaticalization, focusing on the marginal modal dare, which previous research has discussed as a potential counterexample. Being in its origin a member of the inhomogeneous group of modal auxiliaries, dare has since Early Modern English times developed certain full verb characteristics that would assign it a place near the lexical end of the grammaticalization scale. This study provides detailed corpus data, yielding a complex picture that defies an easy localization of dare on the lexical-grammatical scale: different verb forms of dare have to be distinguished, which appear to occupy different stages of evolution or even tend to drift into opposite directions. The results furthermore point to cross-cutting influences on the marking of dependent infinitives (rhythm, grammatical complexity).

1. Introduction

This paper treads much-visited terrain in research on the directionality of grammaticalization. The unidirectionality hypothesis, formulated very pointedly in Heine, Claudi & Hünnemeyer (1991: 212), Lehmann (1995: 19) and Haspelmath (1999: 1046) and more carefully in Hopper & Traugott (2003: 16–17, 99, 132), claims that if there is change in the degree of grammaticalness of an item, it will invariably and irreversibly shift the item from the lexical to the grammatical end of the scale. Whether this strong hypothesis can be maintained or whether a once grammatical item can also move back ‘up’ the grammaticalization cline and

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become more lexical is one of the "most pressing themes in recent research on grammaticalization" (Fischer, Norde & Perridon 2004: 2). The evolution of the group of modal auxiliaries in English has been adduced as a large-scale example of grammaticalization (cf. Hopper & Traugott 2003: 55–58); the diachronic analysis of the fuzzy group of English modals presented by Warner (1993: 92–235; cf. also Lightfoot 1979: 81–120) reveals that auxiliaries began to constitute themselves as a distinct grammatical category only in Middle English (based on a set of shared formal and semantic properties already present in Old English), and continued to differentiate themselves from other verbs in Early Modern English. They thus evolved from erstwhile lexical verbs to auxiliaries, which possess a more grammatical status than the former.

Meanwhile, the members of the modal auxiliary category have always differed in their respective degrees of prototypicality, dare being one of the less prototypical ones. The so-called "marginal modal", to adopt Quirk, Greenbaum, Leech & Svartvik’s (1985: 137) term, blends properties of (more lexical) full verbs and (more grammatical) auxiliaries. The more recent full verb forms have developed as alternatives to the older modal auxiliary forms (cf. Mulder 1937: 45; Visser 1969: 1434, 1436, 1439; Nagle 1989: 100; Warner 1993: 202–203; Beths 1999: 1094). Significantly, this fact has been brought to bear as a potential counterexample on the unidirectionality hypothesis (Beths 1999: 1089–1104; Taeymans 2004a: 225; cf. also Taeymans 2004c). Traugott (2001) counters this claim, pointing to the continuity between the Old English morphology and syntax of dare, which had many features in common with full lexical verbs, and the modern full verb usage of dare. This in view, the reinforced full verb usage of dare provides an example of retraction (in the sense of Haspelmath 2004: 33) rather than a reversal of auxiliarization. A different way of safeguarding unidirectionality in the face of examples like dare is proposed in Krug (2000: 243–245). In his view, dare is not leaving the auxiliary category but moving towards a different target prototype within it.

It is the aim of this contribution to shed more light on the hypothesis that dare has pursued a path of degrammaticalization (or, more precisely, de-auxiliarization) since the beginning of the modern era. The focus will be laid on the formal aspects of (de-)auxiliarization, i.e. the forms of the verb dare, their use (or non-use) as operators and, in particular, the use of marked and unmarked infinitives following them. For this purpose, a large amount of corpus material ranging from the 16th to the late 20th centuries will be scrutinized, allowing for a fine-grained quantitative approach to the phenomenon. The complex state of affairs will thus be disentangled in a stepwise progression involving three formal dimensions of auxiliarity (Section 2). Subsequently, two factors influencing the use or omission of the infinitive marker will be brought into play that are independent of the auxiliary or full verb status of dare, thus demonstrating the permeability of this feature to factors beyond the measures of auxiliarity (Section 3). The paper will be rounded off by a discussion of the compatibility of the corpus findings with the unidirectionality hypothesis (Section 4).

1.1 Auxiliarization

Auxiliarization, i.e. the evolution of auxiliaries on the basis of lexical or full verbs, has been used as a showcase example of grammaticalization (cf. Heine 1993: 27–87; Warner 1993: 195–197; Tabor & Traugott 1998: 233–234; Hopper & Traugott 2003: 55–58). There is cross-linguistic evidence, also from other Germanic languages, that if full verbs undergo grammaticalization, the first step in the process is auxiliarization, which may then go on to yield mood, aspect or tense markers (cf. Heine 1993: 53–66; Lehmann 1995: 27–37).

As for the English modal auxiliaries, the point of departure is the situation attested in Old and Middle English texts. In these early periods, the ancestors of the modern modals (can, may, must, shall, will and also dare) essentially shared the characteristics of other verbs: all could be directly negated by ne or later not; all inverted in questions (cf. Warner 1993: 99; Hopper & Traugott 2003: 56). They exhibited the ordinary tense, mood, person and number contrasts and had infinitives as well as present and past particples, though not all non-finite verb forms are attested for all pre-modals (cf. Warner 1993: 98; Hopper & Traugott 2003: 56). In some cases, formerly inexistente verb forms and syntactic patterns were supplied (cf. Warner 1993: 100–102, 144–145). As in Present-day English, the modals-to-be took bare infinitival complements. At that time, this was however hardly distinctive, since it was mainly in the Middle English period that marked infinitives really gained ground at the expense of bare infinitives after most types of verbs (except directive verbs and verbs of sense perception, cf. Warner 1993: 99, 136–139). In addition to infinitival complements, the pre-modals also appeared in intransitive, mono- or ditransitive uses and in combination with complement clauses and directional prepositional particles. Finally, even with regard to the semantics of the pre-modals, there was no clear-cut difference from full verbs (e.g. will ‘want, desire’, can ‘know, recognize, may ‘be strong’; cf. Warner 1993: 98–99).³

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2. As for the semantic aspects of the change, it has been argued that there is a continuity from internal to external necessity (cf. Taeymans 2004b: 108; cf. also Ziegeler 2004: 131), which would speak in favor of a regular process of grammaticalization. A closer consideration of this side of the phenomenon is however beyond the scope of the present study.

3. In many respects, this status quo is still perpetuated in the set of modal verbs in Modern German. Therefore, Heine (1993: 74) allocates German modals near the full-verb end and English modals closer to the grammatical-marker end of his grammaticalization chain.
Alongside these similarities, the precursors of today's modals from the outset shared certain features that predestined them for a separate development. Thus, all pre-modals except *wile* were preterite-present verbs (cf. Lightfoot 1979: 103; Plank 1984: 311; Warner 1993: 140–142; Denison 1993: 296). They showed an early tendency (which characterizes them to the present day) to allow ellipsis of their infinitival complements, to impose weak selectional restrictions on their subjects (which were rather controlled by the subordinate verbs), to remain or become again restricted to finite forms, and to have past tense forms without past-time reference (cf. Lightfoot 1979: 109; Plank 1984: 312–313; Warner 1993: 103). In addition, some of their senses were not typical of lexical verbs and can be described as expressing probability, possibility, necessity, obligation, ability, futurity and subjectivity (cf. Warner 1993: 14–15, 148, 156–157). Thus, the group already had a distinctive status on formal as well as semantic grounds and the shared characteristics exerted a strong attraction that was to bring the members even closer together (cf. Warner 1993: 108, 110, 154–155).

While this was essentially the state of affairs holding up to the early 15th century, the changes that led to a sharpened group coherence and separated the group from other verbs gained momentum in the late 15th and early 16th centuries (cf. Lightfoot 1979: 109–112; Warner 1993: 174–181): at around this time, combinations of modals with objects disappeared as the corresponding full verb meanings were given up. Similarly, the non-finite forms (participles and infinitives) fell out of use along with the syntactic possibilities dependent on them (cf. Lightfoot 1979: 110; Warner 1993: 198–199; Hopper & Traugott 2003: 56). Moreover, while modals and the other auxiliaries (*be, do* and *have*) continued to invert in questions and to take direct not-negation, all the other verbs underwent a momentous change that introduced *do*-support in questions and negations and stretched from the 15th until the turn of the 18th century (cf. Ellegård 1953: 162; Lightfoot 1979: 111–112; Denison 1993: 293, 451; Hopper & Traugott 2003: 57). In the course of the Early Modern English period, some further changes happened that increased the coherence of the auxiliary class (movement of lightly stressed adverbs before the verb, appearance of tag questions, development of clitic forms and of contracted negatives in *-n’t*, cf. Warner 1993: 206–209).

As a result of these changes, the auxiliary and full verb groups drifted further apart, so that what was formerly recognizable as a single category was now more conveniently analysed as two groups with separate defining characteristics. Importantly, auxiliary verbs are located closer to the grammatical end of the grammaticalization scale in that they have a less lexical but more grammatical (modal) meaning, occur in more fixed positions (always as the first, finite verb), involve fewer morphemes (in particular, no inflections, no infinitive marker and no *do*-support) and are members of a more tightly integrated paradigm than full verbs (cf. Heine et al. 1991: 19; Lehmann 1995: 164). We have thus witnessed a process of grammaticalization that started as a result of morphological and syntactic peculiarities and extended to a semantic change leading to increased subjectivity (cf. Warner 1993: 195–197).

The list of distinctive auxiliary and modal auxiliary features usually provided for Present-day English is straightforward (cf. Quirk et al. 1985: 120–128; Warner 1993: 3–9); yet, auxiliariness is first and foremost a gradient property. While Lightfoot (1979: 122) still argued that the emergence of the auxiliary category was a "sudden, cataclysmic, wholesale re-structuring of the grammar", more recent research (Plank 1984; Heine 1993: 27–87; Warner 1993; Lehmann 1995: 33; Hopper & Traugott 2003: 57–58) has convincingly shown that the changeover was actually a gradual and cumulative process involving a high degree of variability at all stages. In addition to diachronic gradualness, the modal category also involves a good deal of synchronic gradualness: besides the nine central modals, there are many items that hover around the fringe of the category. In a similar vein, Lehmann (1995) points out:

The dispute on whether auxiliaries are main verbs or not ... is fruitless. Two grammatical categories connected on a grammaticalization scale are neither the same nor distinct. The difference between them is gradual, and there is no clear-cut dividing line. (Lehmann 1995: 33)

In Present-day English, prototypical modal auxiliaries are thus defined both semantically and in terms of formal features. The item under study in this contribution is an example *par excellence* of the gradualness invoked by Lehmann. From a semantic perspective, it might not be desirable at all to classify *dare* as a modal auxiliary. Even if we restrict ourselves to the formal aspects of auxiliariness, as will be done in what follows, it would be misleading to classify all instances of *dare* as either auxiliary or full verb uses; rather, *dare* is (and has been) moving between these two poles for centuries and partakes of their prototypical characteristics to varying degrees.

1.2 The case of *dare*

Like the prototypical modal auxiliaries, *dare* started out as a preterite-present verb and involved the same syntax as the other modals during the greater part of the Old and Middle English eras (cf. Mulder 1937: 45; Mustanoja 1960: 530; Visser 1969: 1432; Nagle 1989: 100–101; Warner 1993: 202; Beths 1999: 1078–1093). It is possibly on account of its semantic distinctness from the other modals that *dare* subsequently took a different path of development: in present-day usage as in former times, the meaning of *dare* 'have the courage to' is more typical of a lexical than of a modal verb (cf. Rissanen 1999: 232). Nagle (1989: 100–101)
and Warner (1993: 101, 145; cf. also Beths 1999: 1093) trace the first signs of a beginning dissociation back to late Middle English, but the period of the most substantial changes was Early Modern English (cf. Nagle 1989: 100; Taeymans 2004c). The earliest marked infinitives following dare, the earliest -s/-th inflections for the 3rd person singular, the first occurrences of the present participle daring and the weak past tense form dared appeared in the late 15th and early 16th centuries (cf. Mulder 1937: 45; Visser 1969: 1434, 1436, 1439; Faß 1989: 288; Nagle 1989: 100; Warner 1993: 202–203; Beths 1999: 1094; cf. also OED 2, s.v. dare v.1).

This evolution has been interpreted as a split between auxiliary and full verb dare (cf. Beths 1999: 1103; Taeymans 2004c), but constructions blending properties of both have been in existence throughout the Modern period. By Late Modern English times, the amalgamation of auxiliary and full verb properties was fully accepted in standard usage (cf. Denison 1998: 169). Even in Present-day English, the changeover is far from completed. Dare still oscillates between auxiliary and full verb characteristics (with a more or less marked trend in favour of the full verb use) and not infrequently blends aspects of both in so-called hybrid constructions (cf. Barber 1993: 275–276; Krug 2000: 200–202). This is true of both major national varieties, but American English has been shown to be more advanced in the establishment of dare as a full verb and to employ more blend constructions than British English (cf. Johansson 1979: 208–209; Erdmann 1982: 105; Quirk et al. 1985: 139; Duffley 1992: 2; Kövecses 2000: 191; Tottie 2002: 156–157; Huddleston & Pullum 2002: 109–110; Taeymans 2004a: 220). The three construction types (auxiliary, hybrid and full verb) are illustrated in (1a–c), (1b) and (1c) being taken from Duffley (1992: 9).

(1) a. *Judith didn't dare leave the baby alone a minute.*
   b. *Judith doesn't dare leave the baby alone a minute.*
   c. *Judith doesn't dare to leave the baby alone a minute.*

Quantitative research on dare has so far been largely restricted to determining the relative shares of auxiliary, full verb and blend constructions in British and American varieties (cf. Johansson 1979: 208–209; Erdmann 1982: 105; Duffley 1992: 2; Taeymans 2004a: 220; Algeo 2006: 35) or in written and spoken usage (cf. Taeymans 2004b: 110). There are no counts yet concerning the factors influencing the choice of these three constructional types, but Duffley (1992: 11–13; 1994: 220–239) puts forward a semantic explanation based on a set of manually collected examples. In his view, the auxiliary construction portrays the event expressed by the infinitive as merely hypothetical, while the full verb construction implies a higher degree of reality or conceivability of the event; syntactic blends are considered as intermediate also in semantic terms. This approach corresponds with the expectations created by Bolinger’s (1961: 20) account of blends as well as by Aarts’s (2004: 6) view of hybrids, which are ultimately based on an intersection of the semantics of two categories.4

Many more formally oriented studies have looked for and dated the earliest instances of full verb characteristics of dare (cf. Mulder 1937: 45; Nagle 1989: 100; Warner 1993: 202–203; Beths 1999: 1094). There are, however, no counts available that actually quantify and chronicle the spread of these features at the expense of the competing auxiliary features. This task will be undertaken in the present study, and the results will allow us to pass a more informed judgement on the state of the alleged de-auxiliarization of dare. They will also allow us to assess the degree of continuity between the Early Modern English syntax of dare and its modern full verb use, which is part of Traugott’s (2001) argument contesting the validity of dare as a counterexample to the unidirectionality of auxiliarization.5 The conclusions that will be drawn from the present study concern only the formal side of auxiliarity. Thus, they are only valid if we accept the premise that formal criteria are indicators of the categorial status of an item. In addition, semantic aspects (such as potential shifts from more lexical to more grammatical meanings), which constitute the other side of the same coin, deserve similar attention, but will be neglected in the present study (compare, in this respect, Taeymans 2004b: 108; Ziegeler 2004: 131).

1.3 Methodological issues

The database used for the present study consists of three historical collections of fictional prose covering the 16th to 19th centuries,6 supplemented by the imaginative prose section of the British National Corpus, which provides a largely comparable collection of extracts from novels written in the second half of the 20th century. Table 1 provides more details on the corpus set employed.

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4. For a survey of the distinctive semantics of modal auxiliaries, see Warner (1993: 157).
5. While it is true that Traugott’s (2001) line of reasoning involves the situation in Old English and the uninterrupted existence of full verb characteristics of dare since that time, the time depth of the present study is much more restricted. However, as pointed out above, a separate category of auxiliaries can only be discerned from the Early Modern period onwards. Thus, the crucial period for which the full verb usage of dare is in question is indeed covered by this study.
6. From the ECF corpus, only the first edition of works of which the collection also contains a later edition has been included.
full verbs. The diachronic perspective adopted will allow us to assess in what respects the evolution of dare since the 16th century can be described as a process of de-auxiliarization (as claimed in the literature) and if the evolution along the three dimensions considered has been uniformly in the direction of a more lexical status of dare. Section 2.1 focuses on the morphology of the verb itself and on its syntax in questions and negations, while Section 2.2 concentrates on the marking of the infinitival complement. Further relevant dimensions of auxiliariness, in particular the semantic side, will be left out of consideration in the present study (but see Taeymans 2004b: 108; Ziegeler 2004: 131).

2.1 The form of dare: Full verb or auxiliary?

Since it is not only the syntactic behaviour of modal auxiliaries that distinguishes them from the class of full verbs, but also certain peculiarities of the verb forms themselves, it will be of interest to the present study to observe and quantify the incidence of auxiliary and full verb forms as well as of forms that are indistinct or equivocal in this respect. Table 2 lists the individual forms that constitute these three categories.

| Table 2. Classification of forms of the verb dare |
| auxiliary forms | full verb forms | ambiguous forms |
| dare (finite) | dare, dared (3rd pers. sg.) | dare/dared (finite) |
| durst (inversion/direct negation) | daring (participle) | dared/darest (inversion/direct negation) |
| dare (3rd pers. sg/past) | dared (past/participle) | dared (inversion/direct negation) |
| dare/darest (inversion/direct negation) | (to) dare (infinitive) | |

To begin with (historically older) auxiliary forms of dare, these have been claimed to be limited to non-assertive contexts in Present-day English (cf. Erdmann 1982: 96–98; Quirk et al. 1985: 138; Duffley 1992: 1, 1994: 220–222; Denison 1993: 297; Huddleston & Pullum 2002: 110; Taeymans 2004c). In earlier forms of English, this restriction appears to have been a tendency rather than a constraint (see e.g. Example (2a) below). There are in principle two simple forms of dare that can be recognized as auxiliaries, viz. durst used for all persons and dare used in the

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7. This includes the forms dare, dar, durst, darest, darest, dar'st, daresth, darent, dard, dare, dar'd, darest, durst, darest, daring, daring, dare'n't, dare'n't, daren't, dare'n't, daren't, dare'sna, dare'n'd, dare'na, durst'n't and durstna.

8. Non-assertiveness is obvious in connection with questions, negations and conditional clauses, but a wide variety of contexts ranging from concessive, comparative and certain relative clauses to semi-negatives like hardly, only, few and little also contribute to the non-assertive character of a proposition.
the regularly inflected form dared for the past tense and the past participle (3b), and all other non-finite forms, such as the infinitive (to) dare (3c) and the present participle daring (3d) (cf. Duffley 1992: 1).

(3) a. Meaning – do you slap her down if she dares to ask about the other women in your life? (S. Richmond: Winter Challenge 1993; BNC)
   b. ... then I dared to proceed no farther, but pretending want of Wine at that time; ... (Anon.: The French Rogue 1672; EEPF)
   c. "All my life I have wished to have a house of my own, but I didn't dare to hope I ever should." (G. Gissing: The Odd Women 1893; NCE)
   d. ... they employed Emilia, not daring to be too inquisitive themselves, to get Intelligence, ... (P. Aubin: Charlotte Du Pont 1739; ECF)

The third category, referred to in what follows as 'ambiguous uses', combines cases in which the verb form does not display any signs of belonging either to the auxiliary or full verb category, i.e. finite uses of dare outside of the 3rd person singular as in (4a) and the finite form darest in the 2nd person singular as in (4b), and cases in which dare appears in an inflected full verb form (dares or dareth in the 3rd person singular, or dared in the past tense), but its use in inversion as in (4c) or direct negation as in (4d) speaks in favour of an auxiliary status. The latter two types are to a large extent explained as a result of the late introduction of obligatory do-support in such syntactic contexts, but 20th-century data suggest that the types continue to exist in Present-day English.

(4) a. "These titled vagabonds think they dare say anything; but I know how to be revenged." (M. Robinson: Walsingham 1797; NCE)
   b. ... but thou Rosader the youngest in yeares, but the eldest in valour, art a man of strength and darest doo what honour allows thee; ... (T. Lodge: Rosalynde 1590; EEPF)
   c. Much less dares she ask whether Rivers is to be included in it. (T. Hardy: Jude the Obscure 1896; NCE)
   d. He sighed deeply but dared not disobey. (N. Bawden: Tortoise by Candlelight 1889; BNC)

Figures 1 to 3 indicate the normalized textual frequencies of the verb forms discussed. The total height of the columns corresponds to the sum of auxiliary, full verb and ambiguous forms per 100,000 words respectively, and the absolute figures are given as N below each column. The column segments specify the respective contributions of individual verb forms. Each chronological subsection of the corpus is represented by one column.

The general picture presented by Figure 1, referring to auxiliary forms of dare, is one of a continuous and rapid decline. The form darest, in particular, which accounts for the vast majority of auxiliary uses in the 16th and 17th centuries and
still enjoys considerable currency in the 18th century, is reduced to a marginal role in the 19th century, and by the late 20th century has fallen out of use completely. Until the 19th century, the finite forms *dare* and *darest* combined with inversion and/or direct negation stand their ground relatively better than the obsolescent *durst*; it is only in the 20th century that their incidence drops to less than 1 occurrence per 100,000 words.

As an aside, note that among the occurrences of *durst*, examples without inversion or direct negation are relatively frequent. They comprise a large number of other non-assertive contexts (e.g. *none durst + infinitive, she hardly durst + infinitive*), but in the early corpus sections *durst* is obviously not restricted to non-assertive contexts; it also occurs quite freely in assertive uses as in Example (2a). If the restriction to non-assertive contexts was thus not fully operative in Early Modern English, it might be expected that the form *dare* should, at least in the early subcorpora, be similarly free to occur in assertive contexts. Except for the 3rd person singular, its present tense forms are however equivocal between auxiliary and full verb forms. Therefore, only the uninfl ected 3rd person present tense and the past tense are included in Figure 1 (but see Figure 3). Surprisingly, uninfl ected 3rd person singular and past uses of *dare* outside of inverted or directly negated clauses (e.g. *he dare*) are extremely scarce and not found outside of non-assertive contexts at all. This lack clearly separates *dare* from the other modal auxiliaries and, as will be seen below, is partly made up for by the use of the inflected full verb form *dares/dareth*. As early as the 16th and 17th centuries, *dare* is thus subject to limitations such as the increasing restriction to non-assertive uses and the avoidance of uninfl ected 3rd person forms that are untypical of the modal auxiliary class.

The main result of the diachronic analysis in Figure 1 is that after the rapid disappearance of *durst, dare* in inverted or directly negated contexts is the only remaining auxiliary form, and the textual frequency of this item is clearly on the wane in the 20th century. On the face of it, one might thus expect that the frequency of full verb forms should increase to an extent apt to compensate for the drop in auxiliary forms.

Figure 2 displays the textual frequencies of the four types of overt full verb forms of *dare*. The most obvious finding to be derived from this is that only the three earlier corpus sections manifest the predicted rise, which is moreover less strong than expected. In the late 20th century, the frequency of all forms drops markedly, attaining roughly the same level as in Early Modern English, though the proportions of individual verb forms have shifted. On the basis of the present data, it is impossible to decide if the considerable spread of the full verb forms
(in particular the infinitive and the present participle) in the EEPF data is a true innovation or a continuation of the corresponding Old English forms (as argued by Traugott 2001).

The relevant details of the analysis in Figure 2 can be summarized as follows. Already in Early Modern English, all four subtypes of main verb forms investigated here are attested. Surprisingly, it is the present participle daring that is best established at this early date, but its frequency decreases continuously until the 20th century. The past participle or past tense form dared starts out from a much lower level, but increases rapidly in the 18th and 19th centuries. When considered separately, the past participle rises more quickly in the 18th century, but is then overtaken by the past tense form, which replaces the obsolescent form durst. The (marked or unmarked) infinitive, another witness of the novel full verb use of dare, increases steadily until the general turn of the tide in the 20th century. Note that the relatively massive presence of the infinitive is a necessary consequence of the introduction of do-support in negations and of the use of dare after do and other operators (particularly modal auxiliaries) in questions. Infinitival uses of dare thus compensate for the drop in direct negations and inversions depicted in Figure 1. It is noteworthy that for the 3rd person singular, the inflected forms dares and darest are already more widely used than the uninflected form dare (cf. Figure 1) as early as the Early Modern English period. As noted above, dare seems to differ from other modals auxiliaries in that uninflected 3rd person singular uses disappear at an extremely early date. A potential explanation will be ventured in Section 2.2. Inflected dares/dareth occurs mostly in assertive contexts in the 16th to 18th centuries; after that, its currency begins to dwindle. In the late 20th century, it only plays a marginal role.

In sum, the picture obtained from Figure 2 fails to exhibit the constant rise in the numbers of all individual full verb forms, which we might expect to find if the alleged de-auxiliarization of dare simply translated into a replacement of auxiliary forms by full verb forms. The issue will receive further attention at the end of this section.

To complete the survey, Figure 3 depicts the evolution of those forms of dare that are ambiguous between auxiliary and full verb uses. The trend in this category is towards a general reduction in the textual frequencies, which is accelerated in the 20th century and in this respect resembles the findings for auxiliary as well as full verb forms. The most obvious representative of this category is the finite use of dare (and, in some early corpus texts, darest) in the present tense outside of the 3rd person singular. The incidence of this form declines continuously, but this cannot be attributed to a shift in the degree of auxiliariality of dare since auxiliary and full verb uses have no distinct forms for these functions. In view of the overall direction of the change witnessed so far, we can only speculate that the earlier corpus texts had a greater tendency to employ dare(st) as an auxiliary, while the later texts treat it as a full verb form. (This assumption is confirmed by the form of the infinitival complement, studied in Section 2.2.)

Figure 3. Normalized frequencies of individual ambiguous (auxiliary or full verb) forms of dare in EEPF, ECF, NCF and BNC wridoml

The existence of the other two equivocal uses of dare is noteworthy because it is somewhat contradictory in itself. The inflected forms dares/dareth for the 3rd person singular and dare for the past tense as such are overt full verb forms. While the Early Modern English occurrences of inverted and directly negated forms are still compatible with dare's status as a full verb, this use is restricted to auxiliaries as far as Present-day English is concerned. The relatively substantial presence of dared in clauses with inversion and direct negation (e.g. how dared he + infinitive, she dared not + infinitive) observed in the 20th and also in the 19th century thus comes as a surprise. It is certainly a result of analogy with the past forms of other modals (e.g. could, would, should, might and also durst), but dared differs from these in that it preserves a regular past-time reference (cf. also Taeymans 2004b: 100). In combination with an inflected 3rd person singular form (dares/dareth), inversions and direct negations have been on the decline since the 18th century.

Far from explaining the ups and downs of individual verb forms studied in this section, the frequency data paint a clear and rather astonishing overall picture. A synopsis of Figures 1 to 3 indicates that while the incidence of auxiliary forms of dare has dropped consistently since the Early Modern English period, the compensation
by full verb and ambiguous forms was at most partial up to the 19th century, after which their rise was halted and even reversed. This diachronic scenario leads to the remarkable situation in which the relative share of full verb forms increases monotonously across the whole time period studied, though the actual textual frequency of full verb uses ends up in the 20th century not higher than in the 16th and 17th centuries. In terms of relative frequencies, full verb forms advance from 17.3% in the 16th and 17th centuries, to 38.2% in the 18th, 50.2% in the 19th, and 64.0% in the 20th century, while auxiliary uses fall from 61.4%, to 40.5%, to 25.7%, to 15.6% in the same time periods (the remainder being made up by equivocal uses).\(^{10}\)

Though contradictory at first glance, both effects make sense as two sides of the same coin. On the one hand, the replacement of auxiliary forms by both full verb forms in terms of relative numbers is interpretable as a prototypical case of de-auxiliarization. The new full verb forms in addition assume different functions from those standardly fulfilled by auxiliary forms. The availability of infinitives, -ing forms and past participles opens up entirely new syntactic possibilities for the verb dare, which as a result becomes more like a fully-leagued lexical verb.

On the other hand, a decrease in the degree of grammaticalization can be expected to coincide with a decline in the frequency of use of the item in question, just as an increasing grammaticalization is generally considered to be accompanied by an increase in frequency (cf. Heine et al. 1991: 213; Mair 1995: 265, 2004: 126; cf also Krug 2000: 242–243). Moreover, it is one thing to claim, as Traugott (2001) does, that auxiliary and full verb uses have coexisted for over a thousand years, irrespective of the balance stricken between them at different stages in the evolution. It is another to find that the relative shares of auxiliary compared to full verb uses have consistently been shifting in favour of the latter. Research on grammaticalization is a field of study in which considerations of frequency play an important part. Therefore, it can be argued that the changes in absolute and relative frequencies of full verb and auxiliary forms of dare should be taken seriously. Even though full verb-like uses of dare have existed since Old English times, they were marginalized by auxiliary-like uses in the Early Modern era. Importantly, since that time, the evolution has clearly favoured full verb forms, reducing auxiliary uses to a minority that has additional strongholds in fixed expressions such as I dare say and how dare you. Adding a quantitative perspective to the rivalry between full verb and auxiliary dare thus reveals that the incidence of auxiliary forms has declined significantly over the last four centuries, which is about the time during which auxiliaries and full verbs have been recognized as separate categories (cf. Warner 1993: 198–199). What we have witnessed so far is fairly consistent evidence of the de-auxiliarization of dare.

2.2 The infinitival complement: Marked or unmarked?

The apparently clear conclusion drawn from the study of the first two dimensions of auxiliariality in Section 2.1 (the morphological form of dare and its use as an operator) has to be modified considerably when the third dimension, the choice of marked or unmarked infinitival complements, is taken into account. As for Middle English, the literature informs us that dare was always used with the bare infinitive (cf. Mustanoja 1960: 530; Mulder 1937: 45). After the arrival of the newly-formed full verb forms, we might expect to find that auxiliary forms of dare continue to select bare infinitives while full verb forms are followed by marked infinitives. (In the case of ambiguous forms, infinitival marking might then be taken as an indicator of the auxiliary or full verb status of the verb.) However, cases in which a full verb form of dare is followed by an unmarked infinitive have attracted the attention of many linguists (cf. Quirk et al.: 1985: 138; Nehls 1988: 185; Nagle 1989: 100; Duffley 1992; Warner 1993: 27, 42; Beths 1999: 1095; Huddleston & Pullum 2002: 110). These constructions combine properties of full verbs as well as of auxiliaries and can therefore be viewed as 'constructional hybrids' in the sense of Aarts (2004: 17), as 'blends' in the sense of Duffley (1992: 1), and as 'transcategorial' or 'mixed category constructions' in the sense of Malouf (2000: 133). As will be seen, this is the most frequent, but not the only type of hybrid construction that occurs with dare. (In Present-day English, full verb forms occurring in inversion or direct negation, which have been discussed above, are yet another case in point.)

If we were to calculate the percentage with which the verb dare as such (i.e. all verb forms dealt with in Section 2.1) takes marked infinitives, we would find 15% in the EEPF corpus, 36% in the ECF corpus, 46% in the NCF corpus and 37% in the fictional prose section of the BNC. We would thus conclude that between the Early Modern period and the 19th century, dare takes on a more full-verb-like syntax (de-auxilarized?), and reverts to a more auxiliary-like syntax (re-auxilarizes?) in the course of the 20th century. However, the three categories of dare forms distinguished in Section 2.1 differ predictably in that auxiliary forms incline towards bare infinitives and full verb forms towards marked infinitives. Moreover, certain individual verb forms show rather idiosyncratic kinds of behaviour. Figures 4 to 6 keep them separate so as to yield fine-grained results on their respective degrees of auxiliarialhood. In contrast to Figures 1 to 3, the columns...
in each diagram now indicate the percentage of marked infinitives following each verb form relative to the total of marked plus unmarked infinitival complements. Each column is labelled with the absolute number of marked infinitives as a share of the total per category.

Figure 4, dealing with infinitival marking after auxiliary forms of dare, contradicts the view maintained in the literature according to which these forms can only take bare infinitives (cf. Visser 1969: 1433, 1438; Quirk & Duckworth 1968: 118; Duffley 1992: 4–9; Beths 1999: 1102). It is true that the overwhelming majority of auxiliary forms are indeed followed by unmarked infinitives, and incidentally the examples adduced under (2) above all illustrate this prototypical case. Yet, every single verb form occurs at least once in the corpus in combination with a marked infinitive. Relevant examples matching those in (2) are quoted in (5).

(5)  

a. ... and that I durst to believe there was nothing in this Cave that was more frightful than my self; ... (D. Defoe: Robinson Crusoe 1719; ECF)
b. Shivering at the thought, she hardly dare to touch a seed, but forced herself to do so, raised one and hastily shook it from her. (S. Baring-Gould: The Roar Of The Sea 1892; NCF)
c. How dare you to make such an application as This! (S. Fielding: David Simple 1753; ECF)
d. Yet dare I not to touch that key. (S. Fielding: David Simple 1753; ECF)

These instances thus exemplify another type of hybrid which has so far gone unnoticed in the literature: an auxiliary form of dare followed by a marked infinitive. It has to be admitted that these cases are only marginal, oscillating between 0 and 5%. (The spike in the 19th century is an artefact of the small dataset for 3rd person singular and past tense dare.) However, what Figure 4 illustrates is the mutual permeability of auxiliary and full verb forms of dare in earlier centuries: not only did the novel full verb forms to a certain extent collocate with bare infinitives, like the more ancient auxiliary forms, but the latter sporadically also took on marked infinitives, on the model of the incoming full verb forms.

Turning now to Figure 5, which focuses on the overt full verb forms of dare, we get a completely different picture. As predicted, full verb forms in general and across all subperiods have strong affinities with marked infinitives. These prototypical combinations have already been illustrated in the examples quoted under (3) above.
However, as pointed out by Duffley (1992: 4–9), when full verb forms occur in non-assertive contexts, marked infinitives compete with unmarked ones, thus giving rise to hybrid constructions. The examples in (6) illustrate this type.

(6) a. I know she feels for me often more then she dares let me see; ...  
    (E.R. Charles: Chronicles of the Schonberg-Cotta Family 1864; NCF)
   b. My residence here is much happier than I had dared expect.  
    (F. Burney: Evelina 1778; ECF)
    c. He didn’t dare look at the others.  
    (M. Magorian: Goodnight Mister Tom 1983; BNC)
   d. ... none daring offend such, lest they should be forced to take up the cudgel of enmity against a Lady;  
    (G. Mackenzie: Aretina 1660; EEFP)

As an offshoot of the analysis summarized in Figure 5, it emerges that, contrary to Duffley’s (1992: 4–9) claim, such hybrid constructions also and not infrequently occur in assertive contexts where no hint of a negative implication can be found. Consider Examples (7a–b).

(7) a. I was, indeed, most unwilling to destroy your illusion, while I dared hope it might itself contribute to the restoration of your tranquility.  
    (F. Burney: Evelina 1778; ECF)
   b. She felt beautiful, needed, and alone she dared admit to feeling loved.  
    (F. Cooper: Jay Loves Lucy 1991; BNC)

Collating the individual verb forms distinguished in Figure 5, we find that they differ noticeably in the frequency with which they select marked infinitives, and moreover, in three out of four cases, these preferences are subject to diachronic change.

Most unexpectedly, the inflected 3rd person singular form dares/dareth starts out with no more than 7% of marked infinitives, but the share increases gradually to 67% in the second half of the 20th century, so that Example (3a) is more typical of the later stages in the evolution. This puzzling deviance has also been noted by Beths (1999: 1095) and Taeymans (2004c), but has so far remained unexplained. In Section 2.1, it has been found that since the earliest corpus subsection, dares/dareth has enjoyed a greater popularity in 3rd person singular uses than the uninflected form dare. We now see that the full verb form from the outset exhibits an auxiliary-like syntactic behaviour, thus creating a great number of hybrid constructions like the one illustrated in (6a). This evolution remains a challenge to any functional explanation. It might be argued that the full-verb-like semantic interpretation of dare accounts for the longstanding avoidance of the auxiliary form he/she dare and for the early adoption of the full verb form he/she dares/dareth. This explanation however fails when it comes to the following infinitive (which initially remains unmarked) or, for that matter, to other functions of dare (where auxiliary forms have a longer lease of life). In the long run, the initially very frequent hybrid structures after dares/dareth are progressively eliminated, i.e. dares/dareth increasingly combines with marked infinitives. Preliminarily, this seems to corroborate Aarts’s prediction (2004: 35) to the effect that languages do not tolerate hybrid structures on a permanent basis.

In this respect, however, a comparison with the past tense form dared and the infinitive (to) dare is instructive. Taking the 16th- and 17th-century data for the as yet poorly represented dared with a pinch of salt, Figure 5 shows an overall inverse trend from marked infinitives, illustrated in (3b) and (3c), to unmarked ones. This translates into an increasing hybridization of the verbal syntags, which in the 20th century extends to 46% and 66% of the instances of dared and (to) dare, respectively. One example of each is given in (6b) and (6c). These two verb forms thus provide downright counterexamples to Aarts’s generalization about the elimination of hybrids. Be that as it may, for the present study, which focuses on the auxiliarization or de-auxiliarization of dare, it is important to note that these two full verb forms increasingly adopt the auxiliary characteristic of taking unmarked infinitival complements. In other words, they are undergoing a change that can be interpreted as a renewed, though only partial, auxiliarization.

The participle daring is the least variable item in Figure 5. With the exception of a few Early Modern English occurrences illustrated in (6d), it selects marked infinitives as in (3d), and thereby conforms to the expectations for an obvious full verb form (cf. also Mulder 1937: 43; Visser 1969: 1140). The -ing participle is thus the only full verb form of dare that constantly adheres to the prototypical behaviour of a full verb and does not undergo any noteworthy change along the scale of auxiliarization.

Concerning the three ambiguous verb forms represented in Figure 6, expectations for infinitival marking are hard to formulate in advance since these forms are indistinct as to their category membership. However, their association with marked or unmarked infinitives can to some extent be taken as evidence for their grammatical status. Some examples involving bare infinitives have already been given in (4) (Section 2.1). Corresponding instances with marked infinitives are provided in (8).

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11 In this respect, it resembles the -ing forms of need and help, which corpus analyses have shown to collocate strikingly often with marked infinitives, though the functional motivation behind this preference has not yet been uncovered (Günter Rohdenburg and Eva Berlage, p.c.)
This further corroborates the conclusion, drawn from Figure 5 above, that *dare/ dareth* in the very early stages functioned like an auxiliary. Its use in inversion and direct negation, however, seems to have discouraged the rise of marked infinitives observed in Figure 5. As a result, unmarked infinitives as in (4c) remain the rule until the 19th century, after which practically no instances of *dare/dareth* are left. Thus, the full verb form *dare/dareth* when used as an operator proves to remain even more auxiliary-like than the same form in other contexts.

In the case of the inflected past tense and past participle form *dared* combined with inversion and direct negation, a clear trend can be seen that is the reverse of the change observed in the case of *dare* and *dareth*. In the 16th and 17th centuries, it manifests an intermediate behaviour, selecting bare infinitives as in (4d) in 46% and marked infinitives as in (8d) in 54% of all cases. On the way to the 19th century, infinitival marking is rapidly given up and disappears totally by the 20th century. In recent times, the relatively frequent full verb form *dared* is thus adopting more and more auxiliary characteristics, one being the use as an operator in inversion and direct negation, and another being the collocation with bare infinitives.

To conclude the present diachronic investigation of the auxiliary and full verb characteristics of *dare*, we have observed the interrelations between three dimensions of auxiliariness. For one thing, the form of the verb itself is an important factor, in that overt auxiliary forms are more strongly associated with an auxiliary-like syntax whereas overt full verb forms tend to behave in a more full-verb-like manner. There is yet no one-to-one correlation with the syntax of *dare* in negations, questions, etc., which represents the second dimension of auxiliariness. Instances blending a full verb form with the syntactic function of an operator are by no means rare, even after the obligatory introduction of *do*-support for other full verbs in such contexts. As a third dimension, the choice of marked and unmarked infinitives following *dare* has been elucidated. In contrast to the obvious auxiliary forms, which behave by and large like modal auxiliaries (taking bare infinitives), the picture obtained for full verb forms is highly differentiated. While the form *dare/dareth* has evolved from a rather auxiliary-like to a more full-verb-like status, the form *dared* and the infinitive pursue the opposite trajectory of change towards a more auxiliary-like character, thereby increasing the number of hybrid constructions. At the same time, no significant change in connection with the present participle *daring* could be detected.

The impression that remains from this in-depth study is that there are hardly any limits to the ways in which formal auxiliariness and full verb properties can be combined. Hence, the distinction between the two verb classes is not a matter of either one or the other; rather, there are many shades of auxiliariness between the two poles. If anything, one can talk about the degrees of auxiliariness of individual verb forms in individual syntactic contexts, but not about the verb *dare* as a monolithic whole.
What is more, there appears to be no consistent diachronic trend towards a harmonization between formal features such as the verb form itself, its use or non-use as an operator and the form of its infinitival complement. In other words, constructional hybrids do not necessarily tend to get eliminated and the location of a verb form on the scale of auxiliarization does not become less fuzzy. Worse still, the data do not allow us to discern a consistent trend shifting dare from one end of the scale of auxiliarization to the other. Empirically well-supported proportional rise of full verb forms at the expense of auxiliary forms, which has led researchers like Beths (1999) and Taeymans (2004a) to view dare as an example of de-auxiliarization, is partly offset by the loss of infinitival marking after dared and (to) dare. Most exceptionally, the form dare/dareth, though equipped with a full-verb-like inflection, begins life with an auxiliary-like syntax and becomes more and more full-verb-like in the course of the five centuries considered.  

3. Beyond (de- auxiliaryization: Influences on infinitival marking

This section and the two corpus analyses outlined in it constitute minor side-tracks of the present study, pointing to some cross-cutting influences on infinitival marking. Their purpose is to demonstrate that the choice of marked and unmarked infinitives is not purely a matter of the grammatical status of the superordinate verb, but is additionally subject to a whole array of independent factors. Rather than providing exhaustive counts, the analyses concentrate on selected subsets of the data from Section 2. Thus, they only have an exemplary and suggestive character.

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12. It has been suggested to me by an anonymous reviewer that the different evolutions observed in this section converge in a ranking of full verb features, with full verb morphology topmost, do-support (or non-occurrence in inversion and direct negation) intermediate and marked infinitival complements at the bottom. The implication that these features are established in this chronological order and with a decreasing degree of consistency is however not tenable. While in the special case of dare/dareth, such a hierarchy might explain why the inflected form has ousted its uninflected competitor dare very early on but continues to be followed by bare infinitives for a long time, it is disconfirmed by other full verb forms. For instance dared (past/participle), the infinitive (to) dare and the participle daring select marked infinitives right from the start. Moreover, the progressive establishment of marked infinitives is limited to two out of the eleven verb forms investigated; in three of the forms, a decline can be observed (the other six not exhibiting any clear trends). The role of do-support in this respect is less than clear since it is known that it was established at vastly different speeds in individual verbs and that high-frequency collocations (such as dare + negation) were relatively resistant to the change.

3.4 Avoidance of stress clashes

The first factor to come under scrutiny is phonological in nature. The most fundamental maxim of rhythmic well-formedness for concatenations of syllables is the so-called Principle of Rhythmic Alternation, which stipulates that stressed and unstressed syllables should alternate, and that sequences of stressed syllables (stress clashes) as well as of unstressed syllables (stress lapses) should be avoided (cf. Couper-Kuhlen 1986: 60). This principle has been adduced to explain part of the variability of infinitival marking after certain verbs, including dare. The earliest reference in this respect is Fijn van Draat (1910: 96): "The presence or absence of the preposition to before the Infinitive following to dare is conditioned by the sentence-rhythm" (cf. also Strohheker 1913: 83; Bolinger 1965: 151; Visser 1969: 1434, 1435). The examples under (9) illustrate the different rhythmic constellations that result from the use or omission of the infinitive marker. Accent marks have been added to indicate the location of the stress.

(9) a. "Tell him if he dares to leave the house, I'll go to mother's
   the first thing to-morrow, ..." (G. Gissing: The Nether World 1889; NCF)
   b. "... place the man before my face who dares maintain these palpable
      falsehoods," (W. Scott: Quentin Durward 1831; NCF)
   c. Your mother scarce dares speak of it now, save in a whisper of terror; ...
      (W. M. Thackeray: The Virginians 1858; NCF)
   d. ... and such is the influence he has obtained, that no one dares
      to oppose him. (M. Taylor: Confessions of a Thug 1839; NCF)

In both (9a) and (9b), stressed and unstressed syllables in the bold-printed verbal syntagms alternate in accordance with the above-quoted principle. In (9a), this is due to the intercalation of the unstressed infinitive marker between the two stressed monosyllabic verbs, while in (9b), the absence of the marker to does not jeopardize the rhythmic well-formedness because the complement verb maintain carries no initial stress. In (9c), in contrast, the marker is dropped before a monosyllabic verb, which inevitably leads to a stress clash. (9d), finally, combines a non-initially stressed verb with an infinitive marker, which results in a stress lapse. If Fijn van Draat’s (1910: 96) assumption turns out to be correct, after monosyllabic forms of the verb dare we should expect to find a relatively high proportion of marked initially stressed infinitives and a lower proportion of marked non-initially stressed infinitives. The following count seeks to substantiate this hypothesis by focusing on the form dare.

13. The five instances of the older 3rd singular form dareth occurring in the EEPE corpus have been excluded since the ending is potentially syllabic. The present analysis assumes that the form dare was already mostly monosyllabic in Early Modern English. For a parallel analysis on a larger empirical basis, cf. Schlüter (2005: 206–209).
Figure 7 correlates the stress pattern of the infinitive with the percentage of infinitival marking.

![Diagram showing stress pattern and percentage distribution]

The resultant picture clearly supports the assumption. On the synchronic level, this means that for every single corpus subsection, initially stressed infinitives manifest a greater propensity to be marked than their non-initially stressed counterparts. Translated into the diachronic dimension, the infinitive marker is established faster before initially stressed infinitives. As a first result, the influence of rhythmic alternation on infinitival marking after dare has been confirmed. Moreover, this effect is permanent and independent of the degree of (de-)auxiliarization of the form of dare.

3.2 Compensation of syntactic complexity

A second factor impinging on the use or omission of the infinitive marker is the effect of syntactic complexity. A variety of comparable phenomena have been subsumed under the Complexity Principle, which states that cognitively complex grammatical structures tend to be compensated for through an explicit marking of grammatical relations in them (cf. Rohdenburg 1996: 151). The effects of several types of grammatical complexity on infinitival marking have been amply demonstrated (cf. Rohdenburg 1996: 155–160, 1998: 103–104, 1999: 423–424). One common factor regularly giving rise to processing difficulties is the separation of grammatically connected elements by intervening material. For modal auxiliaries, Warner (1993: 138; cf. also Plank 1984: 313) discerns a relevant effect that might be attributed to the Complexity Principle: “In Middle English ..., to-infinitives occasionally occur where a complement infinitive is separated from its governing verb.” The following analysis attempts to demonstrate that the same is true of dare in the Modern English period. The count concentrates on the infinitive (to) dare and the form dared with direct negation in the largest of the four subcorpora marshalled for this study, the NCF corpus. The examples under (10) illustrate the categories of the count for dare in the infinitive.

(10) a. Felix, grown wiser by experience, did not dare refuse the stolen money, it would have been considered as the greatest insult; ...
   (R. Jeffries: After London 1885; NCF)

b. He did not dare to share his, even his boat with so dangerous a fellow-passenger. ... (A. Trollope: The Eustace Diamonds 1873; NCF)

c. ... the absolute incapacity of the party (for neither did he dare, in Leicester’s presence, term her his wife) to wait on her Grace.
   (T. Hardy: A Pair of Blue Eyes 1873; NCF)

d. I do not dare, even for their sake, to remain in the parish.
   (W. M. Thackeray: The History of Henry Esmond 1852; NCF)

In Examples (10a) and (10b) the succession of dare and the following infinitive is uninterrupted. In (10c) and (10d), in contrast, the two are separated by an adversative insertion. Thus, while the infinitive marker is redundant as a structural signal in (10b), it fulfils the function of establishing an explicit link with dare in (10d). On the basis of the Complexity Principle, we expect a relatively low share of marked infinitives in continuous constructions and an increased share in the case of discontinuities. To test this hypothesis, the count in Figure 8 picks out two subsets of the data from Section 2.2 and supplements them with the corresponding data for examples with adversative insertions.

The contrasts obtained for infinitival uses of dare and the form dared in connection with direct negation appear to confirm the hypothesis, although the results are statistically insufficient. The overall level of infinitival marking differs extremely between the full verb form (to) dare and the mixed form of directly negated dared, but the contrast between instances with and without insertions is in the same predicted direction. Preliminarily, we can thus conclude that the infinitive marker to can be put to use as an explicit signal for grammatical continguities.
where this connection is in danger of getting lost due to intervening material. The influence of this grammatical factor however seems to be weaker than that of the Principle of Rhythmic Alternation, which can be assumed to cut across its effect in examples like (10a) and (10b).

Other factors that can be expected to exert an influence on the variable marking of dependent infinitives are the avoidance of structural identity which arises when the superordinate verb itself occurs in the (marked) infinitive (e.g. to dare to ask, cf. Rohdenburg 2003: 236–242; Vosberg 2003: 315–322) and semantic distinctions such as those described by Duffley (1992: 11–13, 1994: 220–239) in connection with examples like those quoted in (1) above.

A more detailed study of the interaction between these and other factors is beyond the scope of the present study. What has been shown, however, is that the position of the superordinate verb on the scale ranging from auxiliaries to full verbs is not the only determinant impinging on the use or omission of the infinitive marker. Put differently, (de-)auxiliarization can only be viewed independently of effects such as stress clash avoidance, the compensation of syntactic complexity and other influences provided that these factors are held constant. While the present study has not even come near this ambitious aim, it has at least demonstrated the intricacy of the issue.

### 4. Discussion

The present section summarizes the empirical findings presented in this study with a view to their implications for the theory of auxiliarization and grammaticalization (Section 4.1). This confrontation of data and theory will pinpoint some problems for the unidirectionality hypothesis, which will be argued to be too absolute in its original formulation. Section 4.2 outlines and evaluates two alternative accounts that have been proposed to me while the present article was in the making, both of them aiming to safeguard unidirectionality. A brief conclusion (Section 4.3) rounds off the discussion.

#### 4.1 Summary

As a result of the analyses presented in this contribution, we have obtained an increasingly complex view of the grammatical status of the marginal modal dare, which defies an easy localization of dare on the lexical – grammatical scale. For a start, it has once again been proved that there is no clear borderline between auxiliaries and full verbs. This applies to the diachronic as well as to the synchronic level.

As has been shown in recent research, the historical evolution of the modals does not involve a sudden switch from one category to the other. The process is a gradual one rather than the one-step reanalysis invoked by Lightfoot (1979: 122). What is true of the auxiliarization of the whole group is also true of the de-auxiliarization (to the extent that this term can be applied) in the special case of dare. Thus, we have seen that the relative share of full verb forms has continuously increased since Early Modern English at the expense of auxiliary forms, whereas overall token numbers of dare have declined in the 20th century. Both effects have been interpreted as indicators of an ongoing de-auxiliarization.

The investigation of further dimensions of auxiliarization has however confused the picture. Contrary to claims made in the literature, it has been shown that full verb and auxiliary properties can blend in hybrid constructions of more than one kind, and not only in non-assertive contexts. Besides full verb forms followed by bare infinitives, we have also found auxiliary forms followed by marked infinitives and full verb forms used in inverted or directly negated constructions up to the present day. Between clear-cut auxiliary and full verb uses, there are thus many intermediate degrees of auxiliarization that combine the characteristics of both categories in many different ways. This is evidence that one and the same verb can synchronically oscillate between a range of positions on the cline between auxiliaries and full verbs.

It is known that individual members of a paradigm (e.g. that of full verbs or of auxiliaries) can manifest different degrees of grammaticalization (cf. Heine 1993: 74;
Lehmann 1995: 168; Hopper & Traugott 2003: 57). However, to complicate matters further, applying the choice of marked or unmarked infinitival complements as a measure of grammaticalization has called for a distinction between morphologically different forms of one and the same verb. Individual verb forms appear to occupy different stages of evolution and, what is more, tend to drift along the scale into opposite directions. To the extent that an overall trend in the complementation patterns of dare can be discerned, it seems to favour unmarked infinitives in three out of five cases in which a directed change can be observed. Moreover, two out of these cases concern verb forms properly belonging to the formal inventory of full verbs (dared and (to) dare), which are, as it were, undergoing a secondary process of auxiliarization. This finding seriously restricts the conclusion drawn above on the basis of the verb forms alone in that the apparent de-auxiliarization of the forms of dare is counterbalanced by a similarly strong auxiliarization in the domain of dare's complementation pattern. We have thus witnessed an ongoing hybridization of dare. Full verb forms are increasingly adopting the complementation pattern typical of auxiliaries. This result contradicts the generalization proposed by Aarts (2004: 35) to the effect that languages are averse to constructional hybrids because these violate the clear delimitation of grammatical categories. In the case of dare at least, the maintenance of hybrid structures does not seem to present as much of a problem as Aarts assumes.15 Dare also provides an exception to Warner's (1993: 205) finding that the group of modals has in the course of time tended to become increasingly distinctive and sharply demarcated from other types of verbs.

To complicate matters even further, two sidetracks of the present study have indicated that a widely recognized diagnostic of auxiliaryhood or full-verbhood, viz. the choice of marked or unmarked infinitival complements, is not exclusively contingent on the degree of auxiliarization of the superordinate verb. Rather, the presence or absence of an infinitive marker also depends on cross-cutting phonological and processing-related factors such as the avoidance of stress clashes and the compensation of syntactic complexity. Hence, research on auxiliarization must not be isolated from the consideration of other functional aspects of language.

4.2 Alternative accounts
The data described in the present contribution have elicited a few reactions from linguists who drew my attention to alternative ways of reconciling them with the unidirectionality hypothesis. In this section I will discuss two proposals and indicate points where they do not fully meet the challenge posed by the data.

Before we engage in the discussion, note that the appropriateness of unidirectionality as an obligatory defining characteristic of grammaticalization processes is by no means uncontested among linguists. More than ten years ago, Tabor & Traugott (1998: 231) noted that "the jury is still out on the status of structural unidirectionality as a criterion for deciding what change episodes come within the purview of 'grammaticalization studies'". In the meantime, several studies have come to the conclusion that change along the grammaticalization cline is typically unidirectional, towards the more grammatical end, but that even after close examination there remain some phenomena that constitute outright exceptions to the rule (cf. e.g. Traugott 2001; Haspelmath 2004: 36). It will be argued that certain aspects of the case illustrated here also qualify as valid counterexamples.

One way around viewing dare as an instance of a reversed auxiliarization is suggested in Traugott (2001). She argues that the original full-verb-like uses of dare and the innovative auxiliary-like uses have coexisted for over a thousand years, that the numerical balance between them has tilted in favour of auxiliary usage in Early Modern English, and in favour of main verb usage in the present day, but that neither full verb nor auxiliary uses have ever been lost completely. Therefore, dare does not represent a case of de-auxiliarization, but rather of retraction. In Haspelmath's terms, retraction is defined as a grammaticalization chain in which more and less grammaticalized members co-exist (layering) and then one of the more grammaticalized ones becomes obsolete (cf. Haspelmath 2004: 33–34). The less grammaticalized members are thus no innovation, but survivals from earlier stages of the development.

One problem with this account is that, although the preterite-present verbs (including dare) in Old English behaved to some extent like full verbs, they did not take marked infinitives, had an uninflected 3rd person singular in the present, had no regular past tense form and were largely restricted to finite forms. All of these morphological and syntactic features as well as do-support developed in dare, but not in the other, more central modal auxiliaries. Thus, at least some uses of dare arguably evolved into a regular full verb.

A second problem with the retraction account is presented by the fact that in my view it is not enough to state the continued existence in the history of English of an unspecified proportion of main verb uses of dare. Grammaticalization is a field of study in which frequencies of occurrence play an important part. Thus, increasing grammaticalization is generally associated with (and indicated by) an increase in frequency. Conversely, if we allow for the possibility of degrammaticalization, this process should predictably be accompanied by a reduction in the number of occurrences. This is clearly true in the case of dare. Moreover, the shares of

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15. Pending further research this may be related to the fact that we are merely dealing with two interacting construction types that both belong to the overarching category of (complement-taking) verbs. Aarts (2004: 17–20, 33) is, in contrast, concerned with gerunds, which straddle the boundary between the two fundamental categories of nouns and verbs.
auxiliary and full verb forms have been shown to have consistently shifted in favour of the latter since the Early Modern period. Taking such quantitative changes seriously, we need to recognize that a decreasing use of auxiliary forms and a proportionately increasing use of full verb forms along with an overall reduction in numbers is indicative of a clear process of de-auxiliarization. Thus far, the results that have been obtained from the distribution of full verb and auxiliary forms in Section 2.1 fly in the face of the unidirectional hypothesis.

The study of the form of infinitival complements outlined in Section 2.2 has however painted a more complex picture. Traditionally, modal auxiliaries have always taken bare infinitival complements. In the case of dare, we have witnessed a general proportional increase of marked infinitives from the 16th to the 19th century with a slight reversal in the 20th century. Prima facie, this evidence is in line with the apparent de-auxiliarization of dare and provides another challenge to the assumption that auxiliarization is unidirectional. Here, the framework set up by Krug (2000) comes into play as another way of safeguarding unidirectionality. Krug (2000: 214–224, 245) discerns two prototypes within the category of modal auxiliaries. The older type is a closed class containing the core modal auxiliaries and is characterized, among other things, by features such as unmarked dependent infinitives and use as operators in negation and negation. These features are however no longer available for items undergoing grammaticalization in Modern English since bare dependent infinitives and lack of do-support essentially belong to Old English grammar. Therefore, any newcomers to the domain of modal auxiliaries are attracted towards a new prototype labelled ‘emerging modal’, which is a not-quite-closed class constituted mostly by the items going to, got to, want to and have to. Some of the prototypical properties of emerging modals are to-infinitives as complements and do-support in negation and interrogation (cf. Krug 2000: 230). Following Krug’s (2000: 244) reasoning, dare has always been a marginal member of the old modal auxiliary category and is now, like need (to) and ought (to), attracted to the new category of emerging modals, i.e. it increasingly takes on marked infinitives and do-support. Crucially, in Krug’s framework, this evolution does not represent a change back down the auxiliarization scale, but a sideways movement from one highly grammaticalized category to the other.

The data discussed in the present study allow us to evaluate these claims for the verb dare with more diachronic depth than is provided in Krug’s analyses, which are largely restricted to the BNC. Dare’s transition from the traditional to the emerging modals would imply a progressive loss of syntactic features such as inversion and direct negation as well as a replacement of bare infinitival complements by marked ones. The former tendency is largely confirmed by the data in Figures 1 and 3, though up to the 19th century, inverted and directly negated uses of dare/darest and dared as in Examples (4c–d) and (8c–d) show no signs of extinction; on the contrary, they represent the most frequent auxiliary-like syntagms in the 19th century and even persist into the late 20th century in considerable numbers. The latter tendency, the rise of marked infinitival complements at the expense of unmarked ones, appears to be confirmed only until the 19th century and only if we neglect major differences between individual verb forms. As we have seen in Section 2.2 (Figures 5 and 6), an increase of marked infinitives at the expense of unmarked ones can only be observed after the finite forms dores/doroeth and dare/darest. After the infinitive (to) dare and the past tense and past participle form dared, the contrary is the case. The complementation pattern of these forms seems to become more like that of traditional core modals, possibly because the main centre of gravity for emerging modals is represented by finite present tense forms (gonna, gotta, wanna and hafta) rather than non-finite forms (to be going to, will have got to, had wanted to, to have to etc.). It is thus questionable whether dare is really attracted to the new prototype of emerging modals (whose existence as such is beyond doubt), the more so since its phonological form is totally unlike the /CVCa/ template characteristic of prototypical realizations such as gonna, gotta and wanna. In addition, the waning frequency of dare differentiates the item from the prototypical emerging modals, which have been recruited from the class of lexical verbs by a process of auxiliarization connected with an increase in frequency.

Taking all empirical dimensions of the case of dare into consideration, neither Traugott’s retraction hypothesis nor Krug’s emerging modals scenario can provide a full account of the data. As I will argue in the concluding section, the reality is more complex.

4.3 Conclusion

It is certainly true that dare is not a prototypical representative that can be assigned an unambiguous place in the system of English verbs. It is neither a showcase example of auxiliarization nor of de-auxiliarization, but partakes of both processes since it is subject to the attraction of the class of full verbs as well as that of auxiliaries.

From the fact that the overall frequency of the verb has declined significantly since Early Modern English, it is obvious that de-auxiliarization is under way, and this conclusion is supported by the observation that auxiliary verb forms have progressively been losing ground to full verb forms. A well-established insight from historical linguistics is that high-frequency items tend to preserve grammatical irregularities (e.g. strong verbal inflections, unlaute plural, suppletive comparison etc.), while infrequently used ones or such that are falling into disuse tend to become regularized in analogy with productive grammatical patterns. Arguably, the decimated use of dare leads to a situation in which the verb can no
longer afford to maintain the grammatical peculiarities of core modal auxiliaries. Features such as unmarked infinitival complements, uninflected 3rd person singular forms, lack of a regular past tense and past participle and restriction to finite forms are available only to the select and highly grammaticalized group of modal auxiliaries and are thus irregular by the standards of the Present-day English system. Dare becomes regularized as a result of analogical pressure from ordinary lexical verbs; in other words, it becomes de-auxiliared. Seen from this angle, degrammaticalization is comparable to the regularization of formerly irregular grammatical forms, which is a well-attested and undisputed phenomenon among linguists of any conviction.

While there can be no question about the importance of grammaticalization as a broad pathway in language change, there is thus no particular reason to dismiss the possibility of a reversal on principled grounds. Along with Haspelmath (2004: 23), I would maintain that the unidirectionality of change along the grammaticalization cline is a statistical but not an absolute universal. Degrammaticalization appears to be less sharply defined since its outcome is less deterministic. Possibly, the consequence of degrammaticalization is a certain confusion or insecurity among speakers concerning the use of the item concerned. Thus, dare inherits the traditional formal properties of auxiliaries, but also takes on full verb forms. What is more, the latter may be deployed in an auxiliary-like syntax and potential auxiliary forms may be combined with marked infinitives, leading to a hybridization of verbal syntagms (e.g. he dared not disobey, how dared she ask, I dare to call myself). In some respects, the degrammaticalizing form may again be attracted towards its original category, as is the case when dared and (to) dare replace marked infinitives by unmarked ones. In the case of dare at least, this regrammaticalization however seems more locally restricted than the general movement towards a more full-verb-like usage.

With regard to the central question heading this study, “Is auxiliarization reversible?”, the answer is a tentative “yes”. To clarify the issue, more research into alleged auxiliarization and de-auxiliarization processes is necessary, and in the example under study the semantic correlates of (de-)auxiliarization still need to be investigated. As an important conclusion from the present case-study, we have seen that in future research it will not be enough to treat individual morphological forms as members of a homogeneous paradigm, but due attention will have to be paid to their specific trajectories of change. Moreover, cross-influences such as the avoidance of stress clashes, the compensation of syntactic complexity and other functional forces co-determining the grammatical shape of (de)grammaticalizing items have to be reckoned with. As is often the case, things become extremely complex when it comes down to corpus data. The empirical facts often defy idealized categorizations in terms of auxiliarization or de-auxiliarization.

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**Corpora**


