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To dare to or not to : Is auxiliarization reversible?

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To dare to or not to

Is auxiliarization reversible?

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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[1]

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

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*. In this 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.[2] 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

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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 favour of a regular process of grammaticalization. A closer consideration of this side of the phenomenon is however beyond the scope of the present study.

quantitative approach to the phenomenon. The complex state of affairs will thus be disentangled in a stepwise progression involving three formal dimensions of auxiliarihood (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 auxiliarihood (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 (*cann*, *mæg*, *mot*, *sceal*, *wile* and also *dearr*) 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 participles, 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 inexistent 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. *wile* 'want, desire', *cann* 'know, recognize', *mæg* 'be strong'; cf. Warner 1993: 98–99).[3]

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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 untypical 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 gram-maticalization 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, auxiliarihood 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 auxiliarihood, 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; Faiß 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 **daren't 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 auxiliarihood. 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.

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.

Table 1. Composition of the corpus

Corpus name	*Early English Prose Fiction (EEPF)*	*Eighteenth-Century Fiction (ECF)*	*Nineteenth-Century Fiction (NCF)*	*British National Corpus,* imaginative prose (*BNC* wridom1)
number of works	211	93	250	625 (excerpts)
publication dates	1518–1700	1705–1780	1782–1903	1960–1993
number of words	9,600,000	9,700,000	37,500,000	19,700,000

In this corpus, all occurring forms and spelling variants of *dare* were retrieved, including inflections for the 2nd and 3rd persons singular, past tense forms, the infinitive, the participles and contracted negative forms.[7]

The matches were subcategorized in two ways. In a first step, only the form of *dare* itself was considered, where relevant taking into account its occurrence in inversion or direct negation. The individual verb forms were distinguished and grouped together depending on whether they represent overt auxiliary forms, full verb forms or equivocal forms (for details, see Section 2.1). Secondly, for each sub-category, instances followed by marked and unmarked infinitives were separated (see Section 2.2).

Some exclusions had to be made. Thus, examples of *dare* not followed by an infinitive at all (e.g. *I dare not.*) do not qualify for the second step of the analysis and were discounted. Examples in which *dare* is separated from the following infinitive by intervening adverbial insertions were likewise discarded from all counts except the one in Section 3.2, which focuses specifically on the effect of insertions on the marking of infinitives. Furthermore, imperatives of *dare* were not considered since they only crop up in the 19th-century data and occur only in such small numbers that a quantitative analysis would be pointless. Finally, two types of fixed expressions were excluded: *I dare say* (often spelled solid: *I daresay*) and *how dare you* + infinitive. Their inclusion would have distorted the picture due to their extremely high frequency, which makes them resistant to change (cf. Taeymans 2004b: 109).

2.   Dimensions of auxiliarihood

As already mentioned, the following two counts pick out the most important formal aspects distinguishing the class of modal auxiliaries from the class of

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7.   This includes the forms *dare, dar, darst, darest, dareste, dar'st, dares, dareth, dared, dard, darde, dar'd, daredst, durst, durste, daring, dareing, daren't, darn't, dar'n't, darena, daresn't, daresna, daredn't, daredna, durstn't* and *durstna.*

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 auxiliarihood, 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
durst (finite)	*dares*, *dareth* (3rd pers. sg.)	*dare/darest* (finite)
durst (inversion/ direct negation)	*daring* (participle)	*dares/dareth* (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 the (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).[8] 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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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.

3rd person singular and in the past tense without the *-s* and *-ed* inflections. A few examples are given under (2).

(2) a. *…, his strength was so inuincible, that at one time **hee durst encounter** with a hundred knights: …*   (R. Johnson: *The Seuen Champions of Christendome* 1597; *EEPF*)

 b. *So that we all acknowledge our selues your debtors, albeit **none dare be** so vain as to undertake to be your paymasters.*   (G. Mackenzie: *Aretina* 1660; *EEPF*)

 c. ***Dare you not loue** her (said he)?*   (Lady M. Wroth: *The Countesse of Mountgomeries Urania* 1621; *EEPF*)

 d. ***I dare not compare** this woorke with the former Pallaces of Pleasure, …*   (G. Pettie: *A Petite Palace* 1576; *EEPF*)

The form *durst*, exemplified in (2a), is the old past tense form of *dare*. It resembles the modal auxiliary forms *could*, *would*, *should* and *might* in that it has lost its regular past-time reference (cf. Visser 1969: 1432, 1436; Warner 1993: 148–150; Beths 1999: 1097–1098). The finite use of the form *dare* as in (2b), where full verbs would require an inflectional ending, is another criterion of auxiliarihood. As far as Present-day English is concerned, the inversion of *dare* and the subject as in (2c) and the direct negation of *dare* by means of *not* as in (2d) (in both cases without the insertion of periphrastic *do*) provide a further clue to the grammatical status of *dare*, since only auxiliaries can function as operators. While these constructions are reliable indicators of auxiliarihood nowadays, the obligatory insertion of *do*-support for full verbs was only established by the 18th century (cf. Ellegård 1953: 162).[9] For the sake of consistency, earlier attestations involving inversion or direct negation have however been included in the count, so that the categorization of early instances of the form *dare* as an auxiliary has to be taken with a pinch of salt. The same applies to the form *darest*, which in itself is ambiguous since the 2nd person *-st* inflection is shared by auxiliary and full verb uses of *dare*. Yet, when occurring in inversion or direct negation, it has been counted among the auxiliary forms. For the unmistakable auxiliary form *durst*, the frequency of inversion and direct negation has likewise been monitored in a separate subcategory of the count.

The second category, unequivocal full verb forms, is constituted by those that have more recently been formed in analogy with full verbs. Examples, which occur freely in assertive and non-assertive contexts, are provided in (3). They include the *-s* inflection (and the earlier *-th* inflection) in the 3rd person singular (3a),

9. However, Rydén (1979) argues that, in negation contexts, *do* became obligatory only in the 19th century and with certain verbs even later than that. He moreover assumes that some (high-frequency) verbs were more resistant than others (e.g. *know* in negations and *say* in questions). *Dare* may well be another instance of a highly resistant verb.

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; *NCF*)

  d. *… they employed Emilia, **not daring to be** too inquisitive themselves, to get Intelligence, …* (P. Aubin: *Charlotta 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** any thing; but I know how to be revenged."* (M. Robinson: *Walsingham* 1797; *NCF*)

  b. *… but **thou** Rosader the youngest in yeares, but the eldest in valour, art a man of strength and **darest doo** what honour allowes 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; *NCF*)

  d. *He sighed deeply but **dared not disobey**.* (N. Bawden: *Tortoise by Candlelight* 1989; *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 *durst*, in particular, which accounts for the vast majority of auxiliary uses in the 16th and 17th centuries and
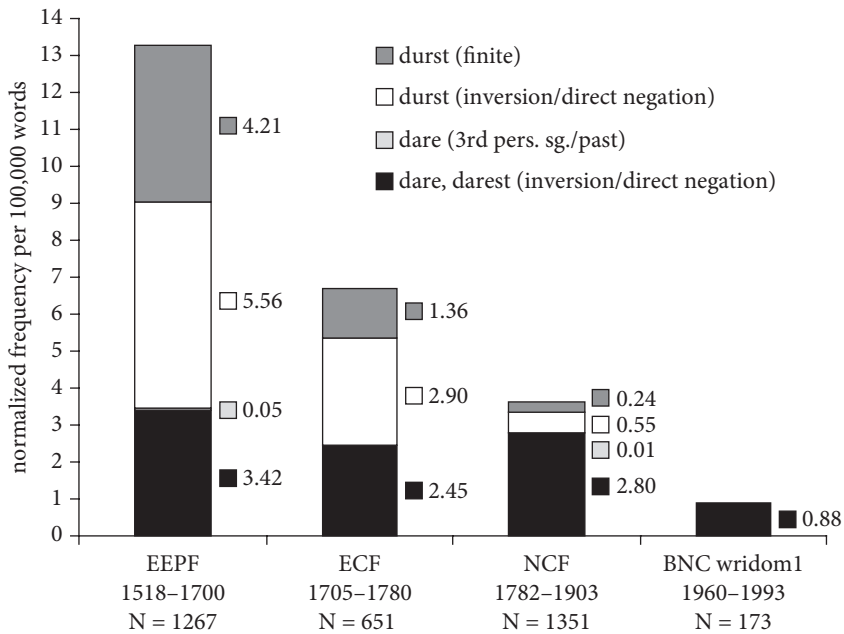
Figure 1. Normalized frequencies of individual auxiliary forms of *dare* in *EEPF*, *ECF*, *NCF* and *BNC* wridom1

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 uninflected 3rd person present tense and the past tense are included in Figure 1 (but see Figure 3). Surprisingly, uninflected 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 uninflected 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

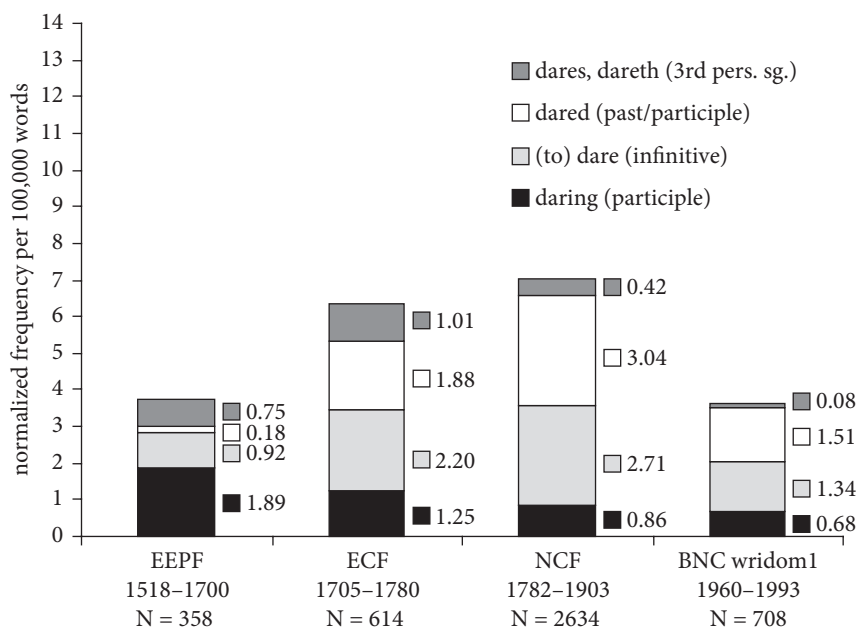**Figure 2.** Normalized frequencies of individual full verb forms of *dare* in *EEPF*, *ECF*, *NCF* and *BNC* wridom1

(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 *dareth* 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 modal 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 auxiliarihood 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.)
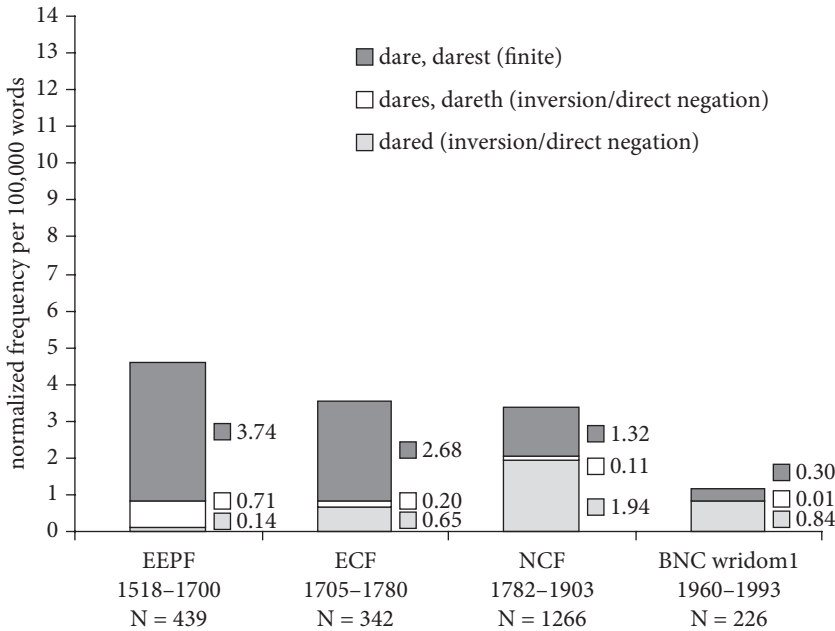
Figure 3. Normalized frequencies of individual ambiguous (auxiliary or full verb) forms of *dare* in *EEPF*, *ECF*, *NCF* and *BNC* wridom1

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 *dared* 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 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-fledged lexical verb.

On the other hand, a decrease in the degree of grammaticalness 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

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10.   Evaluating this juxtaposition, one has to keep in mind that the high-frequency expressions *I dare say* and *how dare you* + infinitive, both of them clear or at least potential auxiliary forms in shape, have been discounted. This may be the reason why, in contrast to the fictional prose section of the *BNC* investigated here, the spoken parts of the same corpus have been shown to preserve a considerably higher share of auxiliary forms (see Krug 2000: 200–201).

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 auxiliarihood 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 totted up) 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-auxiliarizes?), and reverts to a more auxiliary-like syntax (re-auxiliarizes?) 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 auxiliarihood. 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: 1435, 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).

Figure 4. Marked infinitives as a share of the total of marked and unmarked infinitives following individual auxiliary forms of *dare* in *EEPF*, *ECF*, *NCF* and *BNC* wridom1

(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.
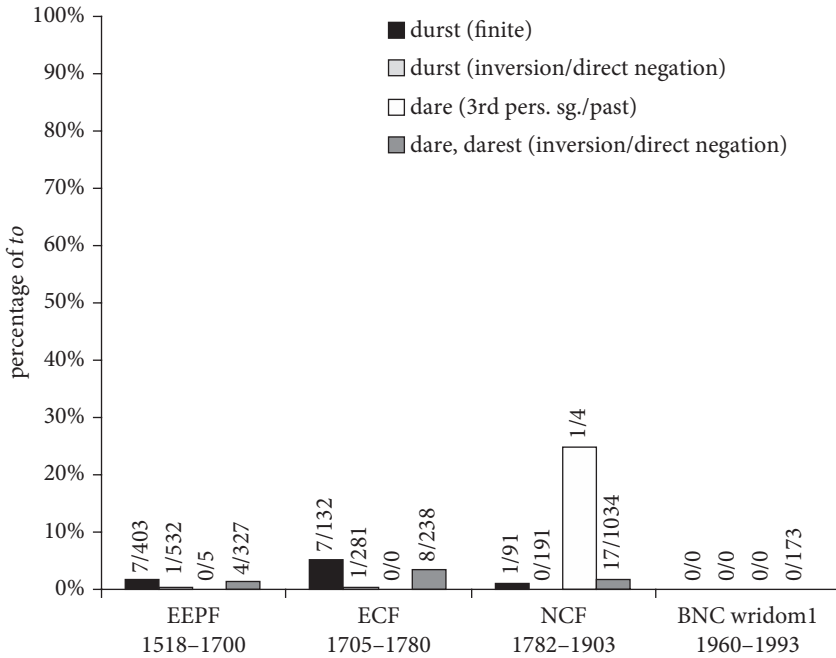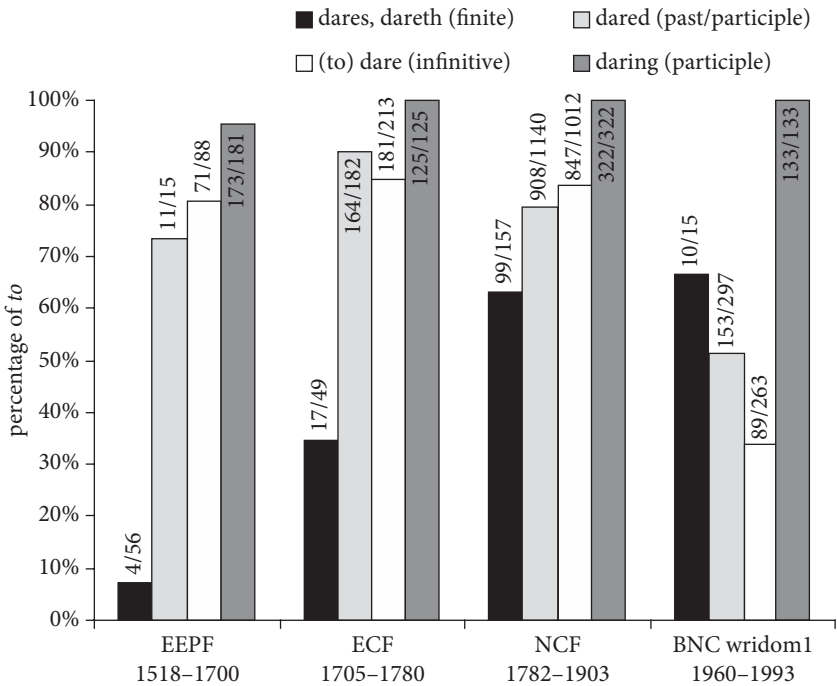

Figure 5. Marked infinitives as a share of the total of marked and unmarked infinitives following individual full verb forms of *dare* in *EEPF*, *ECF*, *NCF* and *BNC* wridom1

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; *EEPF*)

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 tranquillity; …*
            (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 syntagms, 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).[11] 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 auxiliarihood.

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.).

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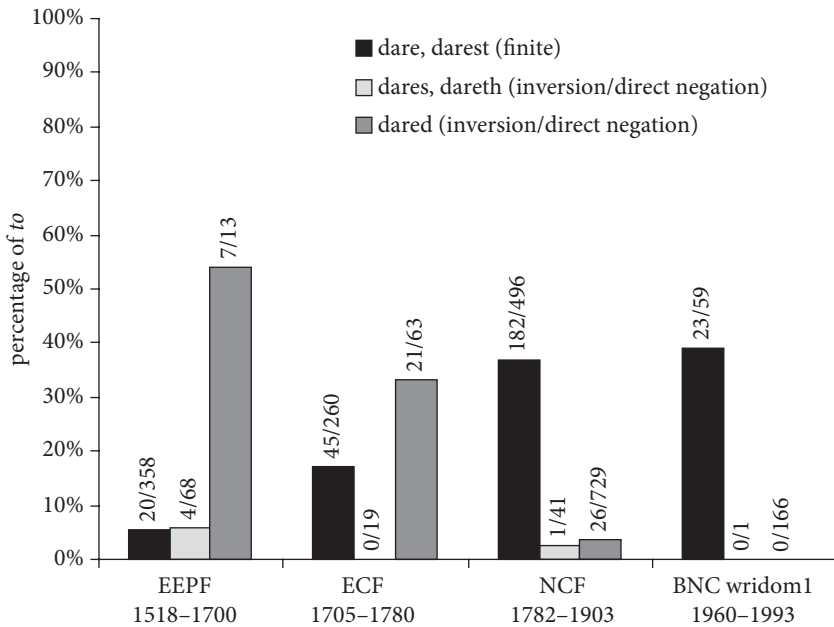
Figure 6. Marked infinitives as a share of the total of marked and unmarked infinitives following individual ambiguous (auxiliary or full verb) forms of *dare* in *EEPF*, *ECF*, *NCF* and *BNC* wridom1

(8) a. *"Not that **I dare to call** myself that."*   (G. Eliot: *Felix Holt* 1866; *NCF*)
     b. *Whoever **thou** art, that **darest to doubt** of these excursions of amorous Souls; …* (W. Charleton: *The Ephesian and Cimmerian Matrons* 1668; *EEPF*)
     c. *"how **dares a fellow like you to call** himself a gentleman?"*
                   (W. M. Thackeray: *The Memoirs of Barry Lyndon* 1856; *NCF*)
     d. *I cannot further Anatomize my body, for **I dared not to look** on my Leggs with the Swan, …*   (Anon.: *The Life and Death of Mrs. Mary Frith* 1662; *EEPF*)

To begin with, the finite forms *dare* and *darest*, illustrated in (4a–b) and (8a–b), start out in the 16th and 17th centuries with a very low percentage of marked infinitives. The share increases gradually and attains a maximum of 39% in the late 20th century. This suggests that the forms originally served as auxiliaries, but were then to some extent reinterpreted as full verb forms, in line with the overall trend towards a more full-verb-like use of *dare*. This reanalysis is however far from complete in Present-day English, where usage still fluctuates considerably.

The inflected 3rd person singular form *dares/dareth* is not very frequent in inverted and directly negated clauses, as has been shown in Figure 3. What emerges from Figure 6 is that despite its full-verb-like morphology, instances with marked infinitives, an example of which can be found in (8c), are extremely rare.

This further corroborates the conclusion, drawn from Figure 5 above, that *dares/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 *dares/dareth* are left. Thus, the full verb form *dares/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 *darest*. 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 auxiliarihood. 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 auxiliarihood. 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 *dares/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 auxiliary 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 auxiliarihood between the two poles. If anything, one can talk about the degrees of auxiliarihood 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 auxiliarihood 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 auxiliarihood to the other. The 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 *dares/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.[12]

3.   Beyond (de-)auxiliarization: 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 *dares/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.

3.1   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 Stroheker 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 stresses.

(9)   a.   *"Tell him if he **dáres to léave** 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 **dáres maintáin** these palpable*
                   falsehoods."   (W. Scott: *Quentin Durward* 1831; *NCF*)
         c.   *Your mother scarce **dáres spéak** 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 **dáres***
                   ***to oppóse** 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 *dares*.[13]

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13.   The five instances of the older 3rd singular form *dareth* occurring in the *EEPF* corpus have been excluded since the ending is potentially syllabic. The present analysis assumes that the form *dares* 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.
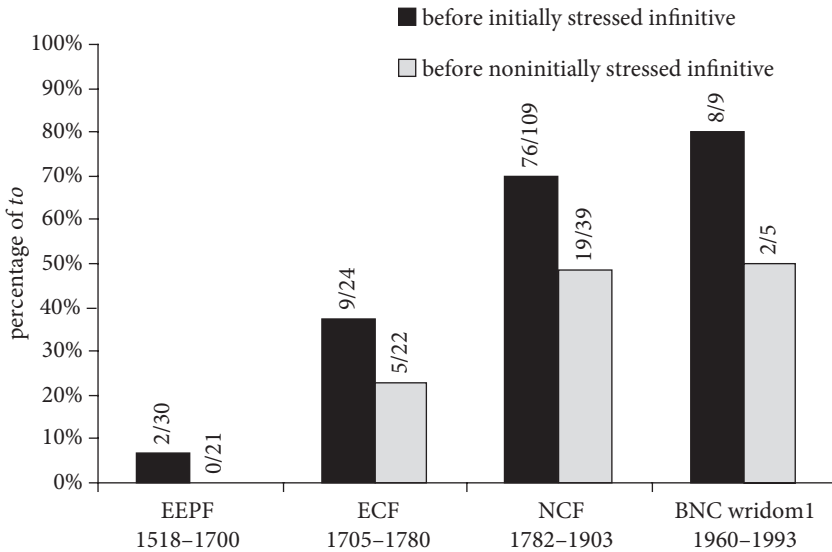
Figure 7. Marked infinitives as a share of the total of marked and unmarked infinitives following the form *dares/dareth* as a function of the stress pattern of the infinitive in *EEPF*, *ECF*, *NCF* and *BNC* wridom1

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.[14] 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

14.   While the datasets for the *EEPF*, *ECF* and *BNC* are too small to yield statistically reliable results, the more ample *NCF* data show a significant contrast ($\chi^2 = 5.51$, df = 1, p = 0.019).

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. Jefferies: *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 adverbial 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 adverbial 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 contiguities
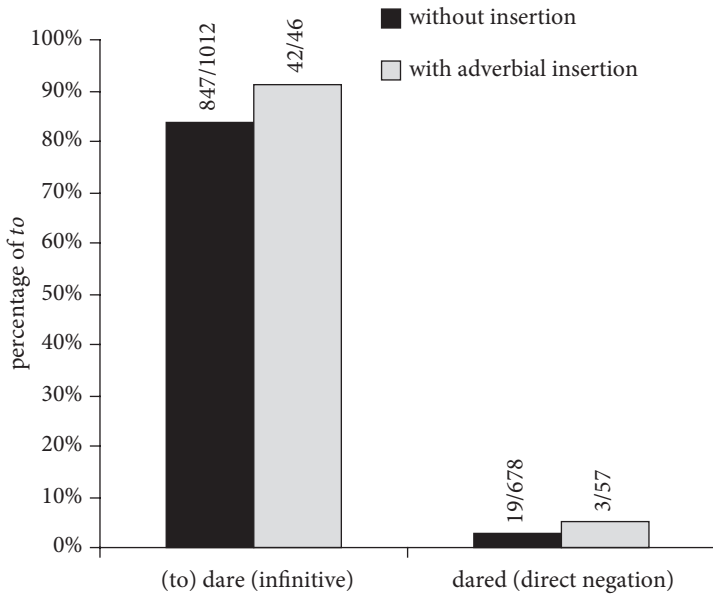
Figure 8. Marked infinitives as a share of the total of marked and unmarked infinitives following the forms *(to) dare* (infinitive) and *dared* (with direct negation) as a function of the presence of adverbial insertions in *NCF*

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 auxiliarihood 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 auxiliarihood 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 auxiliarihood 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

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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, 35) is, in contrast, concerned with gerunds, which straddle the boundary between the two fundamental categories of nouns and verbs.

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 downright 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 number 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

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 unidirectionality 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 modals and is characterized, among other things, by features such as unmarked dependent infinitives and use as operators in inversion 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 modals', 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 *dares/dareth* 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 /CVCə/ template characteristic of prototypical realizations like *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, umlauted plurals, 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. They become regularized as a result of analogical pressure from ordinary lexical verbs; in other words, they become de-auxiliarized. 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 grammatical-ization 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 dares 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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