

MARKERS OF FUTURITY IN OLD ENGLISH AND THE
GRAMMATICALIZATION OF *SHALL* AND *WILL*¹

ILSE WISCHER

University of Potsdam

ABSTRACT

This paper examines the use of potential source lexemes of future markers in Old English, such as *willan*, *sculan*, *beon* and *weorþan*. First their frequency is analysed in a selection of texts from the OE part of *the Helsinki Corpus* and compared to the frequency of their cognate forms in Old High German. This quantitative analysis is followed by an examination of the use of these verbs in their respective construction types. In this way it will be demonstrated why in Old English *willan* and *sculan* were more suitable candidates for grammaticalisation as auxiliaries to denote future time than *beon* and *weorþan*.

¹ This paper is part of a larger project, a comparative study of the grammaticalisation of future markers in English and German. It is partly based on an unpublished paper co-authored by Gabriele Diewald (Univ. Hannover), Angelika Lutz (Univ. Erlangen) and Mechthild Habermann (Univ. Erlangen), which we presented at the conference "New Reflections on Grammaticalization 2", held at the University of Amsterdam, 4-6 April 2002. The project tries to answer the question of why it is *will* and *shall* in English, but *werden* in German that were grammaticalised as future grams. For this reason we will first compare the situation in Old English (OE) and Old High German (OHG) on the basis of corpus data. The principles concerning the design of the language corpora used and the basic considerations that have led to the building of our data-base are the comparability and the quantity of texts. Wherever possible we use maximally comparable texts in German and in English with respect to chronology, text type, content etc. The size of the analysed texts comprise about 80 000 words for English as well as for German. The length of the individual text sections varies according to availability. Since the work is still in progress I will not be able to present any final data, but I will show certain tendencies with a special focus on the English data.

1. Theoretical preliminaries

According to Bybee *et al.* (1994: 244) a future gram signals "... a prediction on the part of the speaker that the situation in the proposition, which refers to an event taking place after the moment of speech, will hold". Markers of futurity are not necessarily grammatical means. There can be lexical units or pragmatic expressions that signal future reference as well. Such markers are often poly-functional, having future as only one of their uses. Furthermore, they can exist in layers with or without functional specification that vary in their degree of grammaticalisation.

In Modern English futurity can be expressed by *will/shall*, *be going to*, the present progressive or the simple present. This formal variability is the main reason why the existence of a future tense in Modern English is sometimes questioned.

Bybee *et al.* (1994: 244) distinguish between two types of futures according to their source structures:

- | | | |
|-----------------------|---|--|
| 1) Primary Futures: | < | constructions involving movement verbs |
| | < | markers of obligation, desire, and ability |
| | < | temporal adverbs |
| 2) Aspectual Futures: | < | forms expressing perfective/inceptive or imperfective aspect |

2. Frequency of the source lexemes

It is commonly argued that OE had only two tenses: a past and a non-past. Futurity is expressed by the present tense and additional lexical or pragmatic means. On the other hand, the verbs *willan*, *sculan*, *weorþan* and *beon*, as well as the verbal prefix *ge-* are often referred to as conveying a future meaning.

This raises the following two questions: (1) To what extent did there exist suitable source lexemes/constructions for grammaticalisation? (2) To what extent had they already been grammaticalised?

The history of *will* and *shall* as prime exponents of futurity in English is discussed in more or less detail in most handbooks on English historical syntax and in many treatments on the history of English modals (cf. e.g. Jespersen 1919; Mustanoja 1960; Kisbye 1971; Berndt 1982; Arnovick 1990; van Kemenade 1993). OE *weorþan* is mainly dealt with in connection with passive markers. It is often claimed that passive constructions with *weorþan* in the present tense have a future connotation (Kilpiö 1989: 61-62; Mitchell 1985: §755; Visser 1973: §1918). Similarly, the use of OE *beon* for future states of being or statements of eternal truth is often mentioned in passing but hardly ever elaborated

any further. The aspectual character of OE/OHG prefixed verbs, especially those with *ge-/gi-*, and their potential force to refer to future events is mentioned e.g. in Streitberg (1891), Bloomfield (1929), Mossé (1938), Brunner (1965), Lindemann (1965), Leiss (1992), Lass (1994), Eroms (1997), Wischer – Habermann (2005). Nevertheless, the development of *will* and *shall* into future grams in English is more or less taken for granted without considering other potential alternative sources in OE.

The restructuring of the English aspectual system and the loss of the verbal prefixes let us exclude the prefixed verbs from our analysis. An aspectual future based on perfective aspect markers could not develop in English. That leaves us with the potential source lexemes *will*, *shall*, *weorþan* and *beon*. We assume that for a successful grammaticalisation at least two preconditions are jointly relevant:

- 1) the frequent use of the source lexeme > leading to semantic and phonetic attrition
- 2) its occurrence in a suitable construction type > leading to reanalysis

Therefore we analysed first the frequency of the relevant items and second the construction types in which they were used in OE and OHG text corpora. The English data are based on a selection of texts from the OE part of *the Helsinki Corpus*. It comprises about 80 000 word forms of text segments dating from 880-1120.

- *AB* = Alfred's *Boethius* (ca. 880): about 11 000 word forms, West Saxon dialect, translation from Latin;
- *AC* = Alfred's *Cura Pastoralis* (ca. 885): about 18 000 word forms, West Saxon dialect, translation from Latin;
- *AO* = Alfred's *Orosius* (ca. 885): about 9 000 word forms, West Saxon dialect, free translation from Latin;
- *WG* = *West Saxon Gospels* (ca. 990): about 10 000 word forms, West Saxon dialect, translation from Latin;
- *LG* = *Lindisfarne Gospels* (ca. 960): about 9 000 word forms, Northumbrian dialect, gloss from Latin;
- *CI* = *Chronicle MS E* (ca. 970-1050): about 9 000 words, West Saxon dialect;
- *C2* = *Chronicle MS E* (ca. 1070-1120): about 9 000 words, West Saxon dialect;
- *GG* = Gregory the Great (manuscript dating from ca. 1100; original from 885): about 5 000 word forms, West Saxon dialect, translation from Latin.

The distribution and frequency of the source lexemes in the OE texts is given in Table 1.

Table 1. Frequency of source lexemes in OE

	<i>willan</i>		<i>sculan</i>		<i>weorþan</i>		<i>beon</i> ¹	
	Σ	%	Σ	%	Σ	%	Σ	%
AB	84	0,76	23	0,21	33	0,30	191	1,74
AC	120	0,66	83	0,46	54	0,30	248	1,38
AO	41	0,46	19	0,21	44	0,49	9	0,10
WG	37	0,37	5	0,05	15	0,15	35	0,35
LG	15	0,17	1	0,01	50	0,56	57	0,63
C1	42	0,47	43	0,48	20	0,22	12	0,13
C2	34	0,38	12	0,13	49	0,54	3	0,03
GG	16	0,32	19	0,38	9	0,18	31	0,62
Total	389	0,49	205	0,25	274	0,34	586	0,73

¹occurs only in the present tense and in infinitive

Table 2 shows the frequency of the OE source lexemes in their present tense forms, which are the most relevant forms for a grammaticalisation of future markers.

Table 2. Frequency of source lexemes (present tense) in OE

	<i>willan</i>		<i>sculan</i>		<i>weorþan</i>		<i>beon</i>	
	Σ	%	Σ	%	Σ	%	Σ	%
AB	37	0,34	20	0,18	25	0,23	167	1,52
AC	54	0,30	55	0,31	34	0,19	212	1,18
AO	6	0,07	4	0,04	–	–	–	–
WG	15	0,15	1	0,01	–	–	28	0,28
LG	6	0,07	–	–	2	0,02	57	0,63
C1	–	–	–	–	–	–	1	0,01
C2	2	0,02	–	–	1	0,01	–	–
GG	6	0,12	3	0,06	1	0,02	21	0,42
Total	126	0,16	83	0,10	63	0,08	586	0,73

A comparison between OE and OHG (Table 3) reveals remarkable differences (cf. Figure 1).

Table 3: Comparison of source lexemes in OE / OHG

	Old English	Old High German
<i>beon</i>	0,75	–
<i>willan</i>	0,49	0,29
<i>weorþan</i>	0,34	0,85
<i>sculan</i>	0,25	0,40

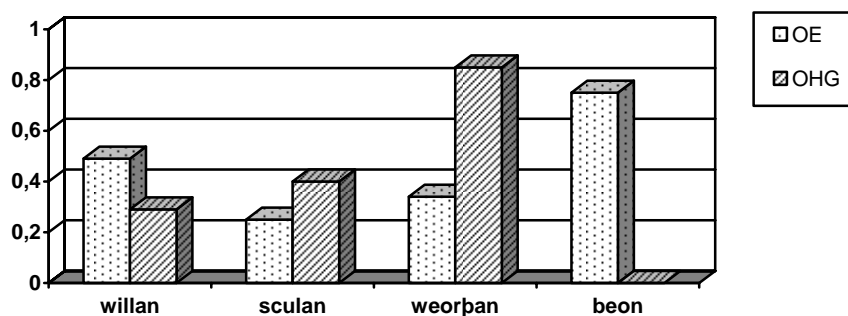


Figure 1: Comparison of source lexemes in OE and OHG

It becomes obvious that *weorþan* was much more frequent already in OHG than in OE. In OE the most frequent source lexeme was *beon*. However, it only partly overlapped semantically with *weorþan*. It was most often used to denote general truth, often with a future implication, or a prediction for the future, but it lacked the inceptive connotation found with *weorþan*, cf. ex. (1) and (2):

- 1) & for ðæm ege hi *beoð* simle swiðe earne
'and because of that fear they *will* always *be* very miserable'
(AB: 117.28).
- 2) Giet cymð se micla ... Godes dæg, se dæg *bið* irres dæg...
'There will come the great ... day of God, the day *will be* a day of wrath...'
(CP: 245.2).

Nevertheless, it can be seen as a rival to *weorþan*. A comparison between the OHG *Tatian* and the OE *Lindisfarne Gospels* rendering the same Latin text shows that where OHG uses *werdan* or a form of *wesan* ('to be') to translate Latin futures, OE prefers *beon*, cf. Table 4.

Table 4. The rendering of Latin futures in the OHG *Tatian* and the OE *Lindisfarne Gospels*

<i>Latin</i>	<i>Tatian</i>	<i>Lindisfarne Gospels</i>
II.14 Et erit tibi gaudium...	Inti her <i>ist</i> thir gifehu...	& <i>bið</i> gefea ðe...
et multi in ... <i>gaudebunt</i> .	inti manage in ... <i>mendent</i> .	& monigo in ... <i>biðon</i> glæde.
II.15 <i>Erit</i> enim magnus coram...	Her <i>ist</i> uuârlihho mihhil fora...	<i>Bið</i> forðon micel befora...
et spiritu sancto <i>replebitur</i> ...	inti heilages geistes <i>uuirdit</i> gifullit...	& gaaste halge <i>gefylled</i> <i>bið</i> ...
II.20 Et ecce <i>eris</i> <i>tacens</i> ...	Inti nu <i>uuirdist</i> <i>suiquenti</i> ...	& heono ðu <i>bist sui-</i> <i>gendæ</i> ...
... quo haec <i>fiant</i> ,	... in themo thisu <i>uuer-</i> <i>dent</i> ,	... of ðæm ðas <i>ge-</i> <i>wordes</i> ...
... quae <i>implebuntur</i> in tempore...	... thiu thar <i>gifultu uuer-</i> <i>dent</i> in ... ziti.	... ða ðe <i>gefylled biðon</i> on tid...
III.35 ... et quod <i>nascetur</i> sanctum	... thaz thar <i>giboran uu-</i> <i>irdit</i> heilag,	... & þætte <i>acenned bið</i> halig
<i>vocabitur</i> filius dei.	thaz <i>uuirdit ginemnit</i> gotes barn.	<i>bið geceid</i> sunu godes.
III.45 ... quoniam <i>perficientur</i> ea quae...	... uuanta thiu <i>uuerdent</i> <i>gifremitu</i> thiu thar...	... forðon ðerhgeendad <i>biðon</i> ða ða ðe...

3. Construction types of the source lexemes

Not only recent construction based approaches to grammaticalisation (cf. Rostila 2004) emphasize the importance of the syntactic context of the lexical item that is about to be grammaticalised. Any starting point of a process of grammaticalisation is a productive construction containing a lexeme with a very general meaning, which occurs frequently in this construction. Thus, it is not only the frequency and the semantics of the source lexeme alone, but its occur-

rence in a suitable construction that paves the way for its grammaticalisation. Lexical verbs can only turn into auxiliaries if they appear in constructions containing another verbal element, preferably a non-finite form of the verb. Table 5 presents the construction types of the OE source lexemes in the present tense.

Table 5. Construction types of the source lexemes

Constructions	<i>willan</i>	<i>sculan</i>	<i>weorþan</i>	<i>beon</i>
Suitable:	115	78	32	212
+ Infinitive	109	78	–	5 ¹
+ Present Part	–	–	2	7
+ Past Participle ²	–	–	30	200
[+ Finite Clause]	6	–		
Unsuitable:	18	5	28	274
+ NP	10	–	–	61
+ AP	–	–	6	138
+ PP	–	–	15	38
Intransitive	8	5	7	37

¹only TO-infinitives

²only suitable for future passive

3.1. *Weorþan* and *beon*

As Bybee *et al.* (1994: 275-277) point out, “aspectual futures”, especially the ones that develop from perfective aspectual meanings, are cross-linguistically very rare. In OE *weorþan* and *beon* exist as potential source lexemes, however, as we can see, compared to *willan* and *sculan* they occur in rather unsuitable construction types. A very dominant type is “V_{copula} + Complement”:

- 3) forðæm þe ælc þing wyrð to nauhte gif hit nauht goodes on him næfð
‘because everything *comes to naught* if it has nothing good in it’
(AB: 34.83.1).
- 4) Giet cymð se micla ... Godes dæg, se dæg bið irres dæg
‘Yet there shall come the big ... day of God, the day *will be a day of wrath*’
(AC: 35.245.2).

To this type may also belong most of the combinations with past participle. With both verbs they constitute the most frequent construction. Due to the verbal origin of the participle they are even suitable to be reanalysed as periphrastic

constructions, however only with a passive sense; cf. examples (5)-(6):

- 5) Gif þu þonne ænne stan toclifst, ne *wyrð* he næfre *gegadrod* swa he ær wæs
 ‘If you split a stone, it *will* never *be united* like he was before’
 (AB: 34.92.28).
- 6) gif us ðæt ne mislicað ðæt us ær licode, ðonne ne *bið* hit no us *færgiefen*
 ‘if we do not dislike what we liked before, then it *will* not *be forgiven* us’
 (AC: 54.425.3).

An analogical extension to active futures would have required a far higher frequency in clear future uses. Most of the *beon*-examples, however, and even quite a number of the *weorþan*-constructions rather convey a sense of general truth. The same is true for the examples with the present participle, which, although they have an active meaning, are comparatively rare and with *weorþan* almost nonexistent (in contrast to OHG):

- 7) Swa *bið* ðis eorðlice lif oft *yðgiende* swa swa sæ
 ‘So this earthly life often *fluctuates* like the sea’ (AC: 52.409.35).
- 8) Be ðæm eac cwæð Dryhten ðurh Essaiað ðone witgan: ðinra synna ne *weorðe*
ic gemunende, ac gemun ðu hiora.
 ‘Then the Lord said via the prophet Essaiað: I *will* not *remember*
 your sins, but you shall remember them’ (AC: 53.413.20).

In general, the number of occurrences for OE *weorðan* is quite low, and it gradually decreases from early OE until its final demise in late Middle English (ME); cf. the figures for the present-tense forms of *weorðan* in the *Helsinki Corpus* listed in Figure 2:

OE	850-950	239
	950-1050	97
ME	1150-1250	39
	1250-1350	10
	1350-1450	1

Figure 2. Occurrences of present-tense forms of *weorðan* in the different sections of the *Helsinki Corpus*

With *beon* a decline in use, like with *weorðan*, from OE through ME is not ob-

servable. However, in ME the two paradigms, that of *wesan* and that of *beon*, merge into one paradigm, the forms of *wesan* (*am, art, is, are*) being used in the indicative, and *be* (the former OE *beo, beon*) being used invariably to express the subjunctive and the infinitive. Furthermore, for phonotactic reasons the inflected forms *bið* and *beoð* became increasingly rare in ME (cf. Lutz 1991: 94-116).

This, together with the unsuitable construction types makes the forms of OE *weorðan* and *beon* unlikely candidates for grammaticalisation as auxiliaries to denote future time, despite their semantic suitability.

3.2. *Willan* and *sculan*

In contrast to *weorðan* and *beon*, *willan* and *sculan* are predominantly used in suitable construction types (cf. Table 5). In many contexts, however, they still convey a modal meaning. Nevertheless, while *weorðan* and *beon* predominantly function as copula and thus do not have auxiliary status, *will* and *shall* are in most cases unambiguously used as auxiliaries, as in ex. (9) and (10).

- 9) Hu ne meaht þu gesion þæt ælc wyrð & ælc wudu *wile weaxan* on þæm lande selest þe him betst gerist...
 ‘Canst thou not see that each plant and each tree *will grow* best in land that suits it best...’ (AB: 91.13).
- 10) Ac þæt is swiðe dyslic & swiðe micel syn þæt mon þæs *wenan scyle* be Gode
 ‘But it is very great folly and sin *to think* thus of God...’ (AB: 84.18).

Though the syntax of Old English does not allow a definite categorization of *will* and *shall* as auxiliaries, the word order still being rather flexible and the NICE properties² not applicable yet, the semantics, however, is often a clear indicator of their auxiliary status. In both ex. (9) and (10) an interpretation in terms of their original lexical meaning does not make sense.

In Modern English, the auxiliary status of *will* and *shall*, like that of all modals, is characterized by certain morphological, syntactic and semantic features (cf. Denison 1993: 292-293). In the following these shall be compared to the situation in Old English in order to determine the degree of grammaticalisation of *willan* and *sculan* in Old English.

3.2.1. Morphological features

² Cf. Huddleston (1976: 333): N: they can be Negated by a following *not/n't*; I: in Interrogative clauses they undergo subject-verb inversion; C: they occur in post-verbal ellipses (Code) instead of *do*; E: and they can carry Emphatic stress instead of using *do*; i.e. they function as operators.

In Modern English *will* and *shall* have no non-finite forms. They have no *-s* in the 3rd person singular present indicative. They have very irregular “past forms”. They are negated by adding an enclitic *not/n’t*. They can occur in phonologically reduced forms, *will/would* can even be cliticized (*’ll/’d*).

There is no single occurrence of *willan* or *sculan* in a non-finite form in our text corpus, neither in the infinitive nor in the present or past participle. Both verbs lack the typical *-ð* ending in the 3rd person singular present indicative: *willan* is an anomalous verb, ending in *-e*, and *sculan* belongs to the preterite-present verbs having no inflection for this person and number at all. Although both verbs have a weak past, their formation is irregular due to their status as anomalous/preterite-present verbs: *wille/wolde*; *sceal/scolde*. The negation of *willan* differs from that of most lexical verbs. The proclitic negative particle *ne* often merges with the verb stem giving forms like *nulle* or *noelde*. This is not possible with *sculan* because of its initial [ʃ]. On the other hand, the initial [w] cannot be the only reason for the fusion of *ne*, since it never occurs with *weorþan* or *wilian*. Phonologically reduced forms could not be attested in our corpus. However, that might be due to the fact that we only have access to the written language and its spelling conventions. Summarizing, it can be stated that *willan* and *sculan* share most of the morphological features of Modern English *will* and *shall* that distinguish them from lexical verbs.

3.2.2. Syntactic features

In Modern English *will* and *shall* are complemented by the plain infinitive. They cannot occur in a sequence of modals. They do not form a progressive, perfect or passive, and they do not have an imperative. They always fill the first position in a finite verbal group. They function as operators having the NICE properties.

84% of all *willan* tokens and 96% of *sculan* in our OE corpus are complemented by an infinitive, and in all of the cases it is the bare infinitive. Since there are no non-finite forms in our corpus, consequently *willan* and *sculan* never occur in a sequence of modals, and they do not form any progressive, perfect or passive constructions. There are 8 instances of an imperative with *willan*, but they only occur in the *Lindisfarne Gospels*, which is a Latin gloss, to render Latin negative imperatives, cf. ex. (11):

- 11) ... ille dixit *nolite flere* non est mortua sed dormit
 ... he cuoeð *nallað ge woepa* ne is dead ah slepeð
 he said not-will you weep not is dead but sleeps
 ‘... he said, don’t weep, he is not dead but only sleeping’ (LG: 8.52).

The word order criterion and the operator function do not apply in OE as has already been mentioned. Still, it should have become obvious that in their syntactic behaviour OE *willan* and *sculan* also resemble Modern English *will* and *shall* and differ thus from lexical verbs.

3.2.3. The status of *willan* and *sculan* as future grams

According to the handbooks,³ *will* and *shall* have in some uses already become quite close to future markers, expressing a mere prediction:

- 12) Nu ðu miht ongitan hu hefig & hu earfoðe þis is eall to gerecanne; ac ic *sceal* þeah hwæthwugu his onginnan þe to tæcanne...
 ‘Now, thou canst perceive how heavy and how difficult it is to explain all this; but nevertheless *I will* set to work to teach thee somewhat...’
 (AB: 127.21).
- 13) he cuæð ðæt ðæs Halgan Gæstes lar *wille* fleon leasunga.
 ‘he said that the doctrine of the Holy Spirit *will* flee falsehood’
 (AC: 243.14).

They are also often used to render Latin futures:

- 14) Ic cume eft to þe on þisne timan and þin wif Sarra *sceall habban* sunu
 ... et habebit filium Sara (Kisbye 1971: 111).
- 15) Ic *wille wyrcean* min setl on norðdæle and *wielle bion* gelic ðæm niehstan
ponam sedem meam ad aquilonem et *ero* similes altissimo
 (AC: 111, 124-5).

By late OE, if not earlier (according to Denison 1993: 304), *will* and *shall* “had developed a use which was almost a future tense.” Even if *willan* and *sculan* in most cases have a modal colouring in OE⁴, there is enough evidence that they can occur as mere futures. In these cases where they combine with stative verbs (as in the second clause in (14)) or with subjects that are incompatible with a volitional sense (as in (13)) it becomes obvious that the semantic bleaching has been successfully completed already in OE.

³ Cf. Kisbye (1971: 111), Berndt (1982: 148-149), Jespersen (1919: 275-276), Mustanoja (1960: 489).

⁴ This is actually the same in Modern English: “Although these constructions [*will/shall* + Infinitive] are the closest approximations to a colourless, neutral future, they also cover a range of modal meanings” (Greenbaum – Quirk 1992: 57).

The semantic features of *willan* and *sculan* (as well as their morphology and syntax) tell us that they had been highly grammaticalised already in OE. This is also supported by the fact that in their respective lexical meanings they had been replaced in OE by other verbs or paraphrases, such as *wilnian* or *we-san/beon + scyldig*:

- 16) Hwæper þu giet ongite þæt ða uncweðendan gesceafta *wilnodon* to
 bionne on ecnesse swa ilce swa men, gif hi meahten?
 ‘Dost thou yet perceive that the dumb creatures would like to live for
 ever, as men do, if they were able?’ (AB: 92.16).
- 17) ... ac onfoh hiora nu, forðæm hit is se læcedom & se drenc þe þu lange
wilnodest, þæt ðu þy eð mæge þære lare onfon
 ‘Well then, hear one, for ‘tis the medicine and the drink thou hast long
 been craving, so that thou mayest the more readily receive my teaching’
 (AB: 135.18).
- 18) ... se ðe ymb his hlafordes fiorh sierwe, sie he wið ðone his feores *scyldig* &
 ealles ðæs ðe he age
 ‘the one who strives after his Lord’s life, he may owe him his life and
 everything that he owns’ (Alfred’s *Laws*: 50. 4.2.).

A check on the expressions of what comes closest to a mere future in the section of Alfred’s *Boethius* revealed the following frequency:

- 11 *willan*
 5 present indicative
 4 *beon*
 3 *sculan*
 1 present subjunctive
 1 *weorthan*

Here *willan* clearly dominates with 44 % of all future expressions.

4. Summary

Although in ME futurity is still much more frequently expressed by the simple present than in Modern English, *shall* and *will* are gaining more and more ground as future markers. Their grammaticalisation began in OE. From a variety of potential source lexemes *will* and *shall* have proved most successful, in contrast to the development in German. Their auxiliarisation process had been

more advanced in OE than in OHG, they occurred in more suitable construction types, and the rival forms decreased in frequency for phonotactic reasons.

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