

THERE'S NO FUTURE IN OLD ENGLISH

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1. Introduction and background

In this paper, we investigate whether the development of modals as a morphosyntactically distinct class of auxiliaries in English had an effect on the meanings expressed by other verb forms. We focus on the question of how future meaning was expressed before the modals *shall* and *will* developed as functional elements inserted in T.

We assume that different languages, and therefore also different stages of the same language, can have different inventories of features and syntactic projections, as argued by Bobaljik and Thráinsson (1998) and Cowper and Hall (2013), and in contrast to the strictest version of the cartographic approach, articulated by Cinque and Rizzi (2010).

Further, we adopt the view, consistent with that put forward for phonology by Dresher (2009) and Hall (2007), that grammatically active features are contrastive. By “grammatically active” we mean features that are obligatory in certain contexts, and that are involved in syntactic processes such as agreement or movement (Wiltschko 2008; Cowper and Hall 2013, 2014). If an interpretable feature F is grammatically active, and thus contrastive, then its absence is interpreted semantically as ‘not F .’ Features or properties that are not grammatically active are not contrastive; the absence of a non-contrastive property G is not necessarily interpreted as ‘not G ,’ although pragmatic principles may favour a ‘not G ’ inference in some contexts. For example, English has a grammatical contrast between singular and plural, but does not grammatically distinguish plurals greater than two from duals. The absence of grammatical plurality in (1a) therefore contrasts with its presence in (1b), and (1a) cannot be interpreted as plural. This differs from the situation with a non-contrastive element such as the modifier *two* in (1c). The absence of *two* in (1b) does not contrast grammatically with its presence in (1c), and (1b) therefore does not exclude a dual reading.

- (1) a. *this book* (= exactly one book)
- b. *these books* (= two or more books)
- c. *these two books* (= exactly two books)

In Present-Day English (PDE), a contrastive feature MODALITY distinguishes modally marked clauses expressing futurity, possibility, or necessity from other finite clauses (Cowper and Hall 2013). In PDE, grammatical MODALITY is spelled out by the modal auxiliaries (*will/would, shall/should, can/could, may/might, must*).¹ In this paper we use the term

¹In Spanish and many other languages, an analogous feature is spelled out by the future and conditional tense forms (see Cowper 2005, who calls this feature IRREALIS).

“modals” to refer only to these obligatorily finite modal auxiliaries, and not to periphrastic expressions like *have to* or *be going to*, which we assume do not spell out MODALITY.

We posit, following Cowper and Hall (2013), that the development of the English modals from verbs to Infl heads in Middle and Early Modern English (Closs 1965; Lightfoot 1979; Roberts 1985; van Kemenade 1992; Warner 1993; van Gelderen 2004) involved the addition of MODALITY to the English Infl system. Before this change, the pre-modals² were verbs whose modal meaning was lexical, not grammatical, just as the lexically dual meaning of the word *two* is not grammatical. After the change, the modals came to spell out the contrastive feature MODALITY, and their absence in a given clause therefore signals the contrastive absence of this feature.

2. The current inflectional pattern

In Present-Day English, the modals *will* and (to a lesser extent) *shall* express futurity, alongside other constructions such as *be going to*. The simple present and the present progressive can be used with future time reference in matrix clauses only when the clause describes a plan or schedule that holds at speech time (Lakoff 1971; Vetter 1973; Copley 2002).^{3,4}

- (2) Planned or scheduled events are felicitous:
 - a. *The train arrives this evening.*
 - b. *The children are going to the beach tomorrow.*
- (3) Events that are simply predicted are not:
 - a. # *The hurricane arrives on the east coast the day after tomorrow.*
 - b. # *The candidate's reputation is taking a nosedive three days from now.*
 - c. # *That director wins an Oscar next year.*

Simple predictive clauses require an overt expression of futurity. Plans and schedules can also be marked this way, though the presence of *will* makes it unnecessary to interpret the clause as referring to a plan or schedule, as shown in (5).

- (4) a. *The hurricane **will** arrive on the east coast before tomorrow morning.*
- b. *That director **will** certainly win an Oscar next year.*
- (5) a. *The train **will** arrive later this evening.*
- b. *The children **will** go to the beach tomorrow.*

²This term is due to Lightfoot (1979), and refers to the earlier English verbs that later developed into the modal auxiliaries.

³Copley reserves the term ‘futate’ for these particular interpretations that are still available in PDE; we use the term ‘futate present’ more generally, for ease of exposition, to refer to any present-tense clause with future time reference.

⁴Future-referring present-tense forms are also possible in various adjunct clauses, including conditional antecedents and *when* clauses; we touch on this in §6 below, but see Huddleston and Pullum (2002: 135) for a detailed list.

The contrastive theory of grammatical features, together with the hypothesis that the feature MODALITY spelled out by the PDE modals was added to the grammar of English only when the pre-modals were reanalysed as inflectional elements inserted in T, makes a clear prediction about earlier stages of English. Specifically, we predict that before the English modals were established as a class of auxiliaries spelling out the contrastive feature MODALITY, the simple present was not contrastively non-modal. We thus expect that it should have been used to express the full range of futurate meanings. The remainder of this paper demonstrates that this prediction is borne out, drawing on evidence from historical corpus data.

3. Methodology

The primary difficulty in investigating uses of the simple present to express future meanings is determining whether a given present-tense clause from a historical source had a future or a present interpretation. In some cases the intended meaning is clear from context, but frequently it is not. Searching existing corpora, such as the Penn Parsed Corpora of Historical English (Kroch and Taylor 2000; Kroch et al. 2004, 2010) for present-tense clauses returns an overwhelming number of irrelevant examples. Narrowing the search using various heuristics, for example by restricting it to clauses also containing future-referring adverbials such as *tomorrow*, makes possibly unwarranted assumptions about the distribution of futurate presents, and would potentially skew the data.

A secondary difficulty is in finding genuinely comparable cross-temporal data. Our goal is to uncover connections between changes in the frequency of futurate presents and changes in the language itself, rather than differences due to subject matter, genre, register, or other external factors.

Our solution to both these difficulties was to compare different versions of a single text, translated into English at different periods: this text is the Christian Gospels, which exist in versions from Old English to the present day, and for which the original sources (in Latin and Greek) are also available for comparison.

We created a database of five versions of the Christian Gospels from electronic sources, as follows:

1. The Greek New Testament Gospels (Westcott and Hort 1881)
2. The Vulgate Latin Gospels (Hetzenauer 1914)
3. The Anglo-Saxon Gospels (Old English, *ca.* 993 C.E.; Bosworth and Waring 1874). These were translated from Latin, either the Vulgate or the earlier *Vetus Latina*.
4. Purvey's revision of the Wycliffe Bible (Middle English, *ca.* 1388; Purvey n.d.). These were translated from the Vulgate, and have been described as "not so literal as Wyclif's, but more rhythmical and idiomatic" (Heaton 1913: 285). They are thus potentially more representative of the English of the day than the earlier version of the Wycliffe Bible.

5. The King James Version (KJV) (Early Modern English, 1605-1611; Cogliano 2004)
This version was translated from the original Greek, though with some recourse to previous translations.

There are several drawbacks to using these texts. First, they are translations, not original vernacular texts. Second, the subject matter is scriptural, and they are thus likely in a formal register, rather than representing colloquial speech. Third, they are the output of small groups of translators, not of a broader cross-section of the population. And finally, some patterns may be due to conscious policy choices in translation, rather than reflecting the most natural way of expressing a meaning. However, this selection of texts seemed to be the best source of semantically equivalent (or nearly equivalent) clauses from multiple stages of English.⁵

At the same time, these texts do have two advantages for the present study. The first is that the chapters and verses into which they are organized provide straightforward concordance across different translations. The second is that potential futurate presents at earlier stages of English (in Old English and Middle English) can be identified not only on the basis of the Modern English translation (i.e. whether *will* or *shall* is present), but also on the basis of the Latin and Greek, whose richer morphological systems both distinguish inflectional future forms.

The database was created in FileMaker Pro, and contained all verses that either (a) contained either *will* or *shall* in the KJV, or (b) contained a verb in the future indicative or aorist subjunctive in the original Greek.⁶ The record for each verse in the KJV was duplicated as necessary to yield a separate record for each relevant verb form, and each KJV record was linked to the corresponding verse in the other versions. Each record was coded for the type of modal meaning expressed (futate, volitional, conditional, etc.); coding was done primarily on the basis of the KJV, but doubtful cases were checked across all versions.

The result was a total of 4538 records, of which 1118 were coded as futurate. These 1118 are the focus of the remainder of this paper.

4. Results and discussion

4.1 Overview of results

The 1118 records identified as involving future time reference were subsequently coded for the morphological form of the relevant predicate.⁷ This inflectional information is represented in Table 1.

⁵There are also several versions of Boethius' *Consolation of Philosophy*, but the texts are much less directly comparable.

⁶These were the most common correspondents of clauses with *will* or *shall* in the KJV.

⁷This coding was done automatically for the Greek version, using an electronic version of Strong (1890), but was done manually for the three English translations and for the Latin.

Table 1: Expression of future meaning in all five versions of the Christian Gospels

<i>n</i> = 1118	Greek		Vulgate		ASG		Purvey		KJV	
Future indic.	861	77.0%	896	80.1%	—	—	—	—	—	—
Aorist sbjv.	129	11.5%	—	—	—	—	—	—	—	—
Fut. perf. indic.	—	—	51	4.6%	—	—	—	—	—	—
Fut. periph.	—	—	32	3.0%	—	—	—	—	—	—
Total future	990	88.6%	981	87.7%	—	—	—	—	—	—
Imperf. sbjv.	—	—	18	1.6%	—	—	—	—	—	—
Pluperf. sbjv.	—	—	9	0.9%	—	—	—	—	—	—
Perf. indic.	—	—	5	0.4%	—	—	—	—	—	—
Total past	—	—	32	2.9%	—	—	—	—	—	—
Pres. indic.	40	3.6%	29	2.6%	784	70.1%	48	4.3%	7	0.6%
Pres. synchr. ⁸	—	—	—	—	104	9.3%	16	1.4%	—	—
Pres. sbjv.	3	0.3%	43	3.8%	60	5.4%	23	2.1%	—	—
Total present	43	3.8%	72	6.4%	948	84.8%	87	7.8%	7	0.6%
<i>may/magan</i>	—	—	—	—	5	0.4%	—	—	—	—
<i>shall/scealon</i>	—	—	—	—	4	0.4%	911	81.5%	824	73.7%
<i>should</i>	—	—	—	—	—	—	24	2.1%	42	3.8%
<i>will/nyll</i>	—	—	—	—	14	1.3%	4	0.4%	221	19.8%
<i>would</i>	—	—	—	—	—	—	4	0.4%	24	2.1%
<i>wurðan</i>	—	—	—	—	1	0.1%	—	—	—	—
Total modal	—	—	—	—	24	2.1%	943	84.3%	1111	99.4%
Other	85	7.6%	33	3.0%	146	13.1%	88	7.9%	—	—

Several important observations can already be made, simply from this overview. First, the majority of forms in Greek and the Latin Vulgate were indeed synthetic inflectional future forms, and the majority in the KJV involve the modal *shall*, with *will* in second place. This is so far unsurprising, as the database was constructed to include such forms, though the large overlap between the two sets selected for inclusion—EMnE clauses with modals and Greek clauses with inflectional futures—corroborates our assumption that these two constructions express similar ranges of future and conditional meanings.

More strikingly, the majority of forms in the Anglo-Saxon Gospels appear in the indicative present tense, with a further substantial number appearing in forms that are syncretic between the indicative and the subjunctive present. Also interesting is the majority use of *shall* in the Middle English Purvey text. The example in (6), from Luke 13:24, provides a concise illustration of the three stages of English represented in the corpus.

- (6) a. ASG: [...] *for ðām ic secge ēow, manega sēcaþ ðæt hig in gān, and hī ne magon.*
 b. Purvey: [...] *for Y seie to you, many seken to entre, and thei schulen not mowe.*
 c. KJV: [...] *for many, I say unto you, will seek to enter in, and shall not be able.*

⁸Many present tense forms at the relevant stage of Old English were syncretic for indicative and subjunctive. Rather than group them with either class, we count these forms separately here.

In (6a), from the Anglo-Saxon Gospels, present indicative *sēcaþ* and *magon* are both used with future time-reference. In (6b), from Purvey, *seken* is ambiguous between present indicative and present subjunctive, while *schulen not mowe* uses *shall* to express futurity, with *mowe* (an infinitive form of *may*, no longer possible in Modern English). Finally, in (6c), both clauses contain a modal expressing futurity.

The pattern reflected in (6) represents a general confirmation of the initial hypothesis. The lack of contrastive (i.e. grammatical) MODALITY correlates at earlier stages of English with a wider range of meanings for the simple “present” tense. This range narrows with the rise of modals as a syntactically distinct class, in the transition from Middle to Early Modern English.⁹

In the remainder of this section we consider each stage in more detail, to confirm that this initial interpretation of the data can be maintained.

4.2 The initial state: Old English

Table 2 provides a more detailed look at the morphological breakdown of the forms found in the Anglo-Saxon Gospels.

Table 2: Future-referring clauses in the Anglo-Saxon Gospels

<i>n</i> = 1118	ASG	
Pres. indic.	784	70.1%
Pres. syncr.	104	9.3%
Pres. sbjv.	60	5.4%
Total present	948	84.8%
<i>may/magan</i>	5	0.4%
<i>shall/scealon</i>	4	0.4%
<i>will/nyll</i>	14	1.3%
<i>wurðan</i>	1	0.1%
Total modal	24	2.1%
Other	146	13.1%

Finite clauses in Old English could be either indicative or subjunctive, and both could be used with future time reference. However, the indicative–subjunctive distinction was already in decline at this point, with many forms being syncretic between the two moods. In this set of future-referring clauses, unambiguously subjunctive forms appear only 5.4% of the time.

Perhaps most tellingly, we found no evidence that the subjunctive (often thought of as expressing irrealis or modal meaning) was preferentially used to express futurity. This confirms what we had hypothesized based on the secondary literature: the “present” tense in OE was merely non-past, not contrastively non-modal or non-future. It thus freely occurred with future interpretations.

⁹There is a remaining question of why *shall* predominates so heavily in the Purvey, to which we return in section 5.

Overall, in sentences expressing futurate meanings, there is no evidence for a contrastive feature MODALITY in the Anglo-Saxon Gospels. We conclude that MODALITY was not part of the Old English tense–mood system.

Adapting the privative features of Infl from Cowper (2005), Old English finite clauses can be characterized by the feature dependencies in Table 3. (As noted above, the distinction between indicative and subjunctive clauses was being lost; ultimately FINITE and DEIXIS came to be bundled, so that neither occurred without the other.)

Table 3: Feature dependency structures for Old English

	Non-past (no PRECEDENCE)	Past (PRECEDENCE)
Subjunctive (no DEIXIS)	Infl / Mood Tense FINITE	Infl / Mood Tense FINITE PRECEDENCE
Indicative (DEIXIS)	Infl / Mood Tense FINITE DEIXIS	Infl / Mood Tense FINITE PRECEDENCE DEIXIS

In this feature system, the “present” tense was merely contrastively non-past; in the absence of a MODALITY feature it was not contrastively non-modal or non-future, and thus was the verb form used in future-referring contexts.

4.3 The end state: Early Modern English

Table 4 provides a more detailed breakdown of the data from the King James Version of the gospels, representing Early Modern English.

Table 4: Future-referring clauses in the King James Version

	<i>n</i> = 1118		KJV
Pres. indic.	7		0.6%
<i>shall</i>	824		73.7%
<i>should</i>	42		3.8%
<i>will</i>	221		19.8%
<i>would</i>	24		2.1%
Total Modal	1111		99.4%

In the King James Version, the expression of futurity by the modals *shall* and *will* is effectively categorical. To some extent, this could be a consequence of how the database

was built; we began by extracting from the King James version all verses containing a form of *shall* or *will*. However, we then added all other verses containing a verb in either the future indicative or the aorist subjunctive in the original Greek, and the results did not change substantially. As can be seen in Table 4, *shall* and *should* predominate, at 77.5% in all, but *will* and *would* are also robustly present, at 21.9% in all.

By this stage, then, MODALITY was fully established as a contrastive grammatical feature of the English tense-mood-aspect system. The simple present tense is therefore contrastively non-modal, and is not used in clauses whose Infl includes MODALITY. Early Modern English finite clauses were characterized by the feature dependencies in Table 5.

Table 5: Feature dependency structures for Early Modern English

	Non-past (no PRECEDENCE)	Past (PRECEDENCE)
Non-modal (no MODALITY)	<pre> Infl ├── Mood │ └── FINITE+DEIXIS └── Tense </pre>	<pre> Infl ├── Mood │ └── FINITE+DEIXIS └── Tense └── PRECEDENCE </pre>
Modal (MODALITY)	<pre> Infl ├── Mood │ └── FINITE+DEIXIS │ └── MODALITY └── Tense </pre>	<pre> Infl ├── Mood │ └── FINITE+DEIXIS │ └── MODALITY └── Tense └── PRECEDENCE </pre>

4.4 Interim summary: The beginning and end of the change

The results of the examination of the Anglo-Saxon Gospels and the King James Version bear out our main hypothesis. In the King James Version, future clauses are categorically expressed with modals, while in the Anglo-Saxon Gospels, they are categorically expressed with present-tense forms. In Old English, then, the present-tense forms had a wider range of futurate meanings than they do in Early Modern English.

This supports the account proposed by Cowper and Hall (2013), according to which MODALITY was not part of the inflectional system of Old English, and present-tense forms were thus *not* contrastively non-modal. By the early 17th century, as predicted, MODALITY was part of the system of contrasts in English. Present-tense forms were contrastively non-modal, and were not used in future clauses.

We turn now to the transitional period between these two categorical stages.

5. The transitional stage: Middle English

If Middle English is an intermediate stage between the absence of MODALITY in Old English and its fully contrastive role in Early Modern English, then we expect a smaller proportion

of future-referring clauses to contain modals in ME than in EMnE. As Table 6 indicates, while this prediction is borne out for *will*, it is not for *shall*, which is in fact used more often in Purvey than in the KJV. We must then ask why *shall* is used so frequently to express future meaning in the Middle English version of the gospels.

Table 6: Future-referring clauses in Purvey’s version of the Wycliffe gospels

<i>n</i> = 1118	Purvey	
Pres. indic.	48	4.3%
Pres. syncr.	16	1.4%
Pres. subjv.	23	2.1%
Total present	87	7.8%
<i>shall/scealon</i>	911	81.5%
<i>should</i>	24	2.1%
<i>will/nyll</i>	4	0.4%
<i>would</i>	4	0.4%
Total modal	943	84.3%
Other	88	7.9%

This brings us to one of the previously mentioned drawbacks of using translated texts: some characteristics of the text could be due to editorial policies or conventions, rather than to properties of the language as spoken at the time. We investigated whether such editorial effects are at the root of the very predominant use of *shall* in Purvey.

If this is the case, then we might expect to find different proportions of *shall* versus other possible forms depending on which verb form appeared in the Vulgate source from which Purvey was translated. The distribution of tense forms used to translate future-referring clauses with various Vulgate tense forms is shown in Table 7.

Table 7: Renditions of Latin future-referring forms in Purvey

Vulgate	<i>n</i>	Purvey									
		<i>shall/should</i>		<i>will/would</i>		Present		Other		T. non- <i>shall</i>	
Fut. indic.	<i>n</i> = 896	846	94.4%	2	0.2%	15	1.7%	33	3.7%	50	5.6%
Fut. periphr.	<i>n</i> = 34	17	50.0%	1	2.9%	—	—	16	47.1%	17	50%
Syncretic	<i>n</i> = 51	29	56.9%	—	—	18	35.3%	4	7.8%	22	43.1%
Present	<i>n</i> = 72	21	29.2%	—	—	59	68.1%	2	2.8%	51	70.1%
Past	<i>n</i> = 32	18	56.3%	3	9.4%	—	—	11	34.4%	14	43.7%
Other	<i>n</i> = 33	4	12.1%	2	6.1%	5	15.2%	22	66.7%	29	87.9%

These results show that in the Wycliffe/Purvey translation, the Latin future indicative was rendered overwhelmingly with forms of *shall* (94.3%). Where the Vulgate has forms without future tense morphology, or that are ambiguous between the future perfect indicative and the perfect subjunctive, forms of *shall* remain very common in Purvey, but are used much less categorically.

We thus hypothesize that for Purvey, there was indeed an editorial policy that the Latin future indicative should be translated with *shall*, obscuring what was in fact an optional use of modals to express the future. Cases where the Latin used something other than the future indicative may more accurately reveal what was going on in English at the time of Purvey: modals were gaining ground as a way of expressing the future, but were not yet obligatory, with the present tense still fairly robustly used to express the future.

We turn now to the range of future meanings expressed by present-tense forms in Middle English. If the use of modals is optional, the present tense should be found expressing the full range of future meanings. In particular, we expect to find present-tense matrix clauses expressing simple predictions.

In all, there are 87 present-tense clauses with future time-reference in Purvey. Of the 87 examples, 38 are clearly predictive futurate clauses, like the first conjunct in (7), repeated from (6). These would require an overt expression of MODALITY in Present-Day English.

- (7) a. ASG: [...] *for ðām ic secge ēow, manega **sēcap** ðæt hig in gān, and hī ne **magon**.*
 b. Purvey: [...] *for Y seie to you, many **seken** to entre, and thei **schulen not mowe**.*
 c. KJV: [...] *for many, I say unto you, **will seek** to enter in, and **shall not be able**.*

There were also 26 examples of relative clauses, purpose clauses, temporal adjunct clauses, and other dependent constructions that were invariably rendered in KJV with a modal, but in PDE are generally in the present. (8) shows an example from Luke 9:26:

- (8) a. ASG: [...] *ðone mannes sunu forsyhþ, ðonne he **cymb** on his mægen-þrymme, and hys fæder, and hālegra engla.*
 b. Purvey: [...] *mannus sone schal schame hym, whanne he **cometh** in his maieste, and of the fadris, and of the hooli aungels.*
 c. KJV: [...] *of him shall the Son of man be ashamed, when he **shall come** in his own glory, and [in his] Father's, and of the holy angels.*

The remaining 19 examples are fairly heterogeneous; some have a conditional flavour, while others could be interpreted as futures or generics. But it is fair to say that in the Purvey/Wycliffe gospels, the present tense forms were still well attested in predictive future clauses. It thus seems reasonable to assume that in vernacular texts, with no issue of translation, we might find a higher proportion of futurate simple presents. However, given the problems outlined earlier in finding and reliably interpreting future-referring present-tense clauses in the corpus, we have not been able to test this conjecture.

5.1 The grammar in transition

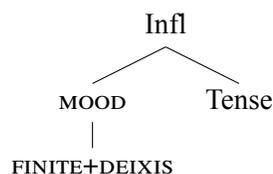
We have argued that the differences in the expression of the future between Old English, as represented by the Anglo-Saxon Gospels, and Early Modern English, as represented by the King James Version, can be captured by a single change in the grammar: whereas MODALITY was not present in the Old English Infl system, it was an integral part of the Early Modern English Infl, spelled out by the modals and making the simple present tense forms

contrastively non-modal. We now turn to the question of how to represent the intermediate stage, in which modals were optionally used to express future meanings, but the simple present tense forms retained the full range of future meanings they had in Old English. Simply put, what was the status of MODALITY in the late 14th century? A realizational theory of morphology makes possible several different accounts of this intermediate stage.

First, it could be that in Middle English, MODALITY was an optional feature of T (like the adjunct features of Wiltschko 2008). Its absence would not be contrastive, and the present tense would thus not be contrastively non-modal. Marking future time reference with a modal would thus be analogous to using the numeral *two* to mark a plurality of two—optional, but sometimes helpfully informative. Since it is unclear what would cause a modifier feature to become a contrastive feature, and since it is not obvious that modifier features are formally the same sort of constructs as contrastive features, we provisionally set this possibility aside.

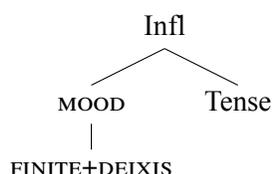
A second possibility involves the notion of competing grammars (Kroch 1989). In this view, speakers would control multiple versions of Infl. One, the conservative version shown in (9), lacks MODALITY as a grammatical feature; another, the innovative version shown in (10), does have such a feature. The relevant parts of the OE and EMnE systems coexisted and competed with each other for some part of the ME period.

(9) Conservative:

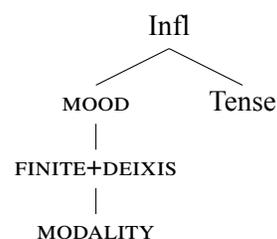


(10) Innovative:

a. Nonmodal:



b. Modal:



The final possibility also involves competition, but between realizations rather than between versions of Infl. Under this view, the feature MODALITY would be fully contrastive in Infl by Middle English, but its morphological realization would depend on a choice between conservative and innovative vocabulary items. Syntactically, Middle English would have the Infl system shown in (10), but the vocabulary items *shall/should* and *will/would*, rather than MODALITY itself, would be restricted to INNOVATIVE contexts. MODALITY is thus overtly spelled out only when INNOVATIVE is present. (See Cowper and Hall 2003 on a similar role for a register feature in a late-insertion model of morphology.)

Both the second and third possibilities are consistent standard views of language variation and change, but they should have different consequences for the syntax of Infl in Middle English more broadly. These remain to be explored.

6. A new transitional stage? Present-Day English

We turn now to what appears to be a change in progress in contemporary North American English. To begin, notice that modals were used in Early Modern English in a wider set of contexts than they are today. In particular, they were required in future-referring *adjunct* clauses introduced by *when* or *if*, where they are no longer possible, as illustrated in (11).

- (11) a. For **when** they **shall** rise from the dead, they neither marry, nor are given in marriage; but are as the angels which are in heaven. (KJV, Mark 12:25)
 b. **If** ye **shall** ask any thing in my name, I will do [it]. (KJV, John 14:14)

Visser (1963–73: §§1519–20), discussing clauses introduced by *if* and *when*, writes as follows (see also Biberauer and Roberts 2012a):

In the course of the eighteenth century the number of instances with *shall* perceptibly decreases; subsequently the use of *shall* + infinitive in conditional clauses practically passes into desuetude.... The rival type, i.e. that with a present tense form (e.g. ‘till (when) he *comes*’) began to supersede the type with *shall* in the nineteenth century with the result that nowadays the latter is practically obsolete, and only found here and there in poetic or elevated style.

This change in the eighteenth and nineteenth centuries, in and of itself, raises the question of whether MODALITY is losing ground as a contrastive feature of Infl (Biberauer and Roberts 2012a,b). Tagliamonte and D’Arcy (2007) show that modals are in decline in present-day Canadian English, being replaced in many instances by, e.g., *have to*, *be going to*, *be able to*, etc. The theory developed here predicts that if MODALITY is indeed in the process of being lost as a contrastive feature of Infl, then present tense forms should again be expanding their range of use.

In fact, we have noted a novel expansion in the range of the future-referring simple present, exemplified in (12). Unfortunately, as with futurate presents in the historical corpora, these are virtually impossible to search for in corpora of present-day English. We have collected a few dozen examples from broadcast media and a handful from print media. These examples are ungrammatical for some (plausibly more conservative) speakers, but fully grammatical for others.¹⁰

- (12) Five new contexts for futurate present in PDE:
 a. In the consequent of a future-oriented conditional:¹¹
*If I don’t tell Patty about Katie, the clients **lose** the case.* (*Damages*, s1e01)

¹⁰We have not conducted any formal study or survey, but two of the five authors of this paper reject the examples in (12), while the other three find them fully grammatical. The examples were collected by one of the authors for whom they stand out as ungrammatical.

¹¹We have happened upon one startlingly early example of this type, in a letter from J. S. McCuaig to Sir John A. Macdonald, dated 12 October 1883, quoted in Ward (1950: 78): “Unless you again contest the constituency, we lose it.”

- b. In a matrix or embedded question referring to a future situation:
 - i. *But he **gets** confirmed, right?* (referring to a possible future nomination; *The West Wing*, s7e19)
 - ii. *If the press finds out next month or next year, then I don't know what **happens** to you or your presidency.* (*The West Wing*, s7e14)
- c. In a clause modified by an adverb like *maybe* or *hopefully*:
Maybe he's up doin' the polka five minutes from now. (*The West Wing*, s6e09)
- d. Embedded under a clause with a modal, a verb with modal meaning, or a negated verb:
*We're deadlocked at \$300 Million. CBC's pushing for more after-school care. I don't think we **get** that out of committee.* (*The West Wing*, s7e02)
- e. Clefts:
*That's why the other guy **wins**.* (said months before the election; *The West Wing*, s7e08)

It seems that the presence of an appropriate operator, such as a question or modal, either adjoined to the clause or in a higher clause, makes the overt realization of MODALITY optional in a future-referring clause. This fits naturally with the earlier loss of modals in adjunct clauses introduced by *if* and *when*, and suggests that the current change in progress may be a continuation of the earlier change.¹²

Interestingly, we have not—at least so far—observed the simple present in matrix declarative clauses referring to simple predictions about the future, as it was in Old English, and to a lesser degree in Middle English. This fact calls into question what might be the most obvious hypothesis about the current change in progress, namely that MODALITY is being lost altogether as a contrastive feature of English clausal inflection. Rather, given the apparent relevance of operators having to do with conditionals, questions, and negation, it could be that MODALITY is becoming a contrastive feature of Comp rather than Infl, and that it is associated with various operators and adjuncts, or licensed by higher verbs. A shift of MODALITY from Infl to Comp would be consistent with the frequent observation that grammatically significant elements come to occupy higher and higher positions in the structure over time.

7. Conclusion

We have argued that the development of the modals as a morphosyntactically distinct class of inflectional elements in English was accompanied by the addition, in Late Middle English, of the contrastive feature MODALITY to the English Infl system. Prior to this development, there was no grammatical contrast between present and future-referring clauses,

¹²The relation of this change to the one observed by Tagliamonte and D'Arcy (2007) remains to be investigated. There, modals are losing ground, not to the simple present, but to periphrastic expressions of modality like *have to*, *be able to*, and *be going to*.

and the present tense was used for both. After a period of competition in Middle English, MODALITY was fully contrastive in Early Modern English, and modals were required in all clauses referring to future time. In the eighteenth and nineteenth century, modals were lost in clauses introduced by *if* and *when*, and at present, they are becoming optional in a wide variety of clauses headed by various operators. We hypothesize that MODALITY may be undergoing a shift from Infl to Comp, and that these operators are sufficient to spell it out, in the absence of a modal in Infl.

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