

# Investigating the past of the futurate present

Elizabeth Cowper<sup>a</sup> Daniel Currie Hall<sup>b,a</sup> Bronwyn Bjorkman<sup>a</sup> Rebecca Tollan<sup>a</sup> Neil Banerjee<sup>a</sup>  
<sup>a</sup>University of Toronto; <sup>b</sup>Saint Mary's University

DiGS 17, University of Iceland, Reykjavik  
May 29–31, 2015

## 1 Introduction

**The question:** Did the development of modals as a morphosyntactically distinct class of auxiliaries in English have an effect on the meanings expressed by other verb forms?

- Present-day English uses modals—*shall* and *will*—to express futurity; these modals thus interact with the English tense/mood system.
- How did English express the future before there was a modal *will*?

**Theoretical background and assumptions:**

### 1. Variability and contrast of morphosyntactic features

- Different languages, and different stages of the same language, can have different inventories of features and syntactic projections (Bobaljik & Thráinsson 1998; Cowper & Hall 2013a), *contra* the strictest version of the cartographic approach (Cinque & Rizzi 2010).
- Features that are grammatically active (obligatory in certain contexts, involved in agreement, etc.) are **contrastive** (Wiltschko 2008; Cowper & Hall 2013a,b).<sup>1</sup>
  - The absence of a contrastive feature [F] is interpreted semantically as ‘not F’
  - 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) contrasts with its presence in (1b): (1a) cannot be interpreted as plural.
- The absence of the modifier *two* in (1b) does not contrast grammatically with its presence in (1c): (1b) 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)

---

1. See also Hall (2007) and Dresher (2009) for a similar view of phonological features.

## 2. The feature MODALITY and its diachronic emergence in English

- In Present-Day English, the contrastive feature MODALITY distinguishes modally marked clauses, expressing futurity, possibility, or necessity, from other finite clauses (Cowper & Hall 2013a).
- In PDE, MODALITY is spelled out by the modal auxiliaries (*will/would, shall/should, can/could, may/might, must*).<sup>2</sup> We use the term **modals** to mean only these obligatorily finite modal auxiliaries, and not periphrastic expressions like *have to* or *be going to*, which we assume do not spell out MODALITY.
- Cowper & Hall (2013a) argue that the development of the English modals from verbs to T 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 the change: (Pre-)modals 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: Modals spell out MODALITY, and their absence signals the contrastive absence of this feature.

### The current inflectional pattern:

- In Present-Day English, the modals *will*, and to a lesser extent *shall*, as well as other periphrastic constructions like *be going to*, are used to express futurity.
- The simple present and the present progressive can be used with futurate meaning in matrix clauses only when the clause describes a plan, or a schedule, that holds at speech time (Lakoff 1971; Vetter 1973).<sup>3</sup>
  - (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.)
  - (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.*

**Prediction:** Before English modals were established as a class of auxiliaries spelling out the contrastive feature MODALITY, the simple present was not contrastively non-modal, and thus could be used to express the full range of futurate meanings.

**Goal today:** to demonstrate that the prediction is correct, based on historical corpus data.

---

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

3. Future-referring present-tense forms are also possible in various adjunct clauses, including conditional antecedents and *when* clauses; see Huddleston & Pullum (2002: 135) for a detailed list.

## 2 Methodology

### 2.1 The empirical challenge

- **Problem #1:** Distinguishing futurate presents from ordinary presents.
  - Sometimes clear from context, frequently not.
  - Searching existing corpora (e.g. PPCHE) for present-tense clauses turns up an overwhelming number of irrelevant examples.
  - Trying to narrow the search by requiring other elements (e.g., future-referring adverbials) prejudices the distribution of futurate presents, and thus could skew the data in unknown ways.
- **Problem #2:** Finding genuinely comparable cross-temporal data.
  - We need to be able to say that differences in the frequency of futurate presents reflect differences in the language, rather than differences in subject matter, register, etc.
- **Solution:** A single text translated into English in different periods → the Christian gospels.

### 2.2 The texts

- Five versions of the Christian gospels, digitized:
  - **Greek New Testament Gospels** (Westcott & Hort [1881] n.d.)
  - **Vulgate Latin Gospels** (Hetzenauer 1914)
  - **Anglo-Saxon Gospels (ASG)** (Old English, ca. 993 c.E.; Bosworth & Waring 1874)
    - \* translated from Latin (either the Vulgate or the earlier *Vetus Latina*)
  - **Purvey's revision of the Wycliffe Bible (Purvey)** (Middle English, ca. 1388; Purvey n.d.)
    - \* translated from the Vulgate
    - \* “not so literal as Wyclif's, but more rhythmical and idiomatic” (Heaton 1913: 285), thus potentially more representative of the English of its day
  - **King James Version (KJV)** (Early Modern English, 1605-1611; Cogliano 2004)
    - \* translated from the original Greek (but with some recourse to previous translations)
- **Drawbacks:**
  - Translations, not original vernacular texts.
  - Scriptural (formal), not colloquial.
  - The output of a small group of translators, not of a broader cross-section of the population.
  - 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 is the only way we know of to compare semantically equivalent (or nearly equivalent) clauses from multiple stages of English.

## 2.3 The database

- Database created in FileMaker Pro, containing all verses that:
  - contained either *will* or *shall* in the KJV, *or*
  - contained a verb in the future indicative or aorist subjunctive in the original Greek.<sup>4</sup>
- The KJV of each verse was duplicated as necessary to give a separate record for each relevant verb form.
- Each KJV record was linked to the corresponding verse in the other versions.
- Records were coded (once for all versions) for modal flavour (futate, volitional, conditional, etc.).
  - Coding was done primarily from the KJV, but doubtful cases were checked against all versions.
- **Result:**
  - 4538 total records.
  - of which 1118 were coded as futurate.
- These 1118 are the focus of our attention here.

The screenshot displays a database interface for Mark 11:2 across five different versions. At the top, search filters are set to 'Mr', '11:2', 'King James', and 'modal-bare-shall'. Below this, the King James Version (KJV) text is shown: 'And saith unto them, Go your way into the village over against you: and as soon as ye be entered into it, ye shall find a colt tied, whereon never man sat; loose him, and bring [him].'. The KJV record is coded as 'shall-pres.indic'. To the right, the Greek version is shown with the text: 'και λεγει αυτοις υπαγατε εις την κωμην την κατεναντι υμων και ευθως εισπορευομενοι εις αυτην ευρησατε πωλον δεδεμενον εφ ον ουδεις ουπω ανθρωπων εκαθισεν λυσατε αυτον και φερετε'. The relevant Greek word-form is 'ευρησατε' (eurēsete), with a gloss: 'to find (literally or figuratively)'. The Greek record is coded as 'Fut.ind.act'. Below the KJV, the Wycliffe (Purvey version) text is shown: 'and seith to hem, Go ye in to the castel that is ayens you; and anoon as ye entren there ye schulen fynde a colt tied, on which no man hath sete yit; vntie ye, and brynge hym.'. The Wycliffe record is coded as 'none-pres.indic'. Below the Wycliffe version, the Anglo-Saxon Gospels text is shown: 'And cwæþ to him, Faræþ to ðam castele ðe [ongēn] ine ys ; and gyt ðar sōna gemētaþ assan folan getigedne, ofer ðæne nān man gyt ne sæt ; untigeaþ hine, and to me gelædaþ.'. The Anglo-Saxon Gospels record is coded as 'none-pres.indic'. At the bottom, the Vulgate text is shown: 'et ait illis: Ite in castellum, quod contra vos est, et statim introeuntes illuc, inuenietis pullum ligatum, super quem nemo adhuc hominum sedit: solvite illum, et adducite.'. The Vulgate record is coded as 'Fut.ind.act'.

Figure 1: A sample view of the database, showing Mark 11:2 in all five versions

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

### 3 Results and discussion

#### 3.1 Overview of results

<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. periphr.	—	—	34	3.0%	—	—	—	—	—	—
<b>Total future</b>	<b>990</b>	<b>88.6%</b>	<b>981</b>	<b>87.7%</b>	—	—	—	—	—	—
Imperf. sbjv.	—	—	18	1.6%	—	—	—	—	—	—
Pluperf. sbjv.	—	—	9	0.9%	—	—	—	—	—	—
Perf. indic.	—	—	5	0.4%	—	—	—	—	—	—
<b>Total past</b>	—	—	<b>32</b>	<b>2.9%</b>	—	—	—	—	—	—
Pres. indic.	39	3.5%	29	2.6%	784	70.1%	48	4.3%	7	0.6%
Pres. syncr. <sup>5</sup>	—	—	—	—	104	9.3%	16	1.4%	—	—
Pres. sbjv.	3	0.3%	43	3.8%	60	5.4%	23	2.1%	—	—
<b>Total present</b>	<b>43</b>	<b>3.8%</b>	<b>72</b>	<b>6.4%</b>	<b>948</b>	<b>84.8%</b>	<b>87</b>	<b>7.8%</b>	<b>7</b>	<b>0.6%</b>
<i>may/magan</i>	—	—	—	—	5	0.4%	—	—	—	—
<i>sball/scealon</i>	—	—	—	—	4	0.4%	911	81.5%	824	73.7%
<i>sould</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%	—	—	—	—
<b>Total modal</b>	—	—	—	—	<b>24</b>	<b>2.1%</b>	<b>943</b>	<b>84.3%</b>	<b>1111</b>	<b>99.4%</b>
Other	86	7.7%	33	3.0%	146	13.1%	88	7.9%	—	—

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

#### Key observations:

- Greek and Vulgate → majority **future tense**.
- Anglo-Saxon Gospels → majority **present tense**.
- Purvey’s version of the Middle English Wycliffe Bible → majority *sball*.
- King James Version → majority *sball*, but *will* gaining ground.

**An example:** The three English translations of Luke 13:24, shown in (6), illustrate the progression nicely.

- (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.*

- In (6a), present indicative *sēcaþ* and *magon* are both used with future time-reference.
- In (6b), *seken* is ambiguous between present indicative and subjunctive; *schulen not mowe* uses *shall* to express futurity, with *mowe* (> MnE *may*) in the infinitive, which by EMnE was no longer possible.
- In (6c), both clauses contain a modal expressing futurity.

5. Many 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.

A **general confirmation** of the initial hypothesis:

- lack of contrastive (i.e. grammatical) MODALITY correlates with a wider range of meanings for simple “present” tense.
- range narrows with the rise of modals as a syntactically distinct class.

(Remaining question: Why does *shall* predominate in Purvey?)

### 3.2 The initial state: Old English

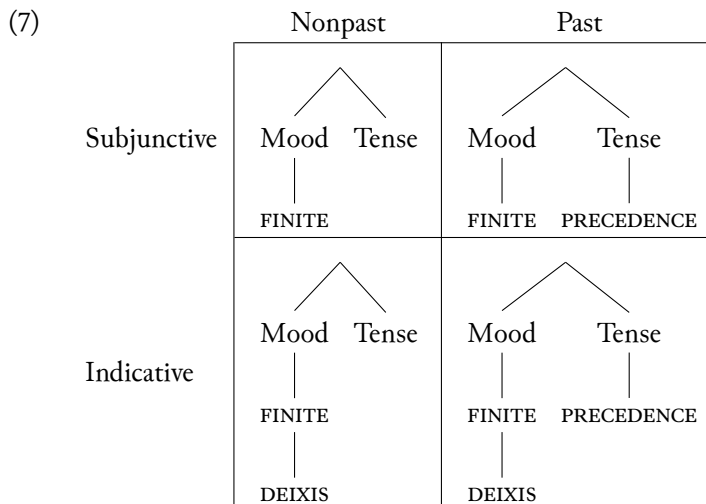
In sentences expressing futurate meanings, there is no evidence for a contrastive feature MODALITY in the Anglo-Saxon Gospels.

- Finite clauses in Old English could be either indicative or subjunctive, and both could be used to express future meaning.
- The indicative/subjunctive distinction was already in decline at this point, with many syncretic forms. Unambiguously subjunctive forms appear only 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.

n=1118	ASG	
Pres. indic.	784	70.1%
Pres.syncr.	104	9.3%
Pres.sbjv.	60	5.4%
<b>Total present</b>	<b>948</b>	<b>84.8%</b>
<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%
<b>Total modal</b>	<b>24</b>	<b>2.1%</b>
Other	146	13.1 %

Table 2: Future-referring clauses 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 were thus characterized by the feature dependencies in (7). 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.



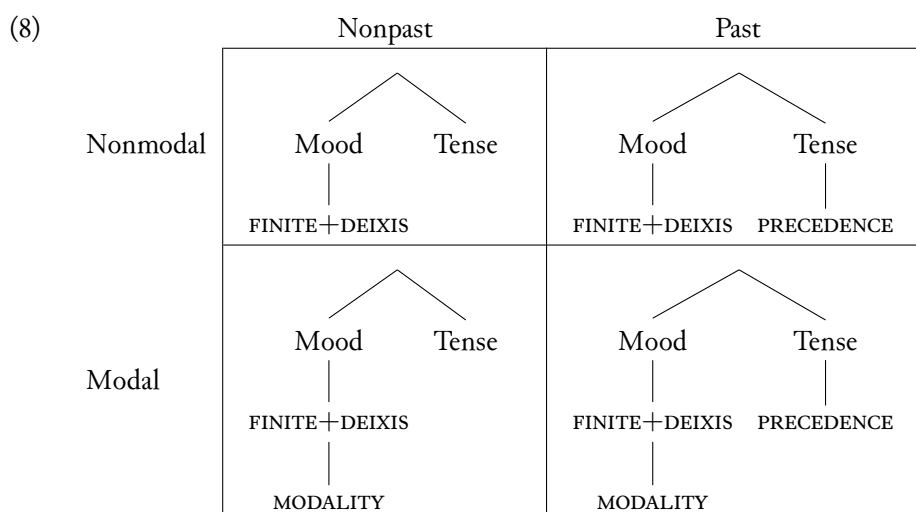
### 3.3 The end state: Early Modern English

In the King James Version, the modals *shall* and *will* are categorically used to express futurity.

n=1118	KJV	
<b>Pres. indic.</b>	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%
<b>Total Modal</b>	<b>1111</b>	<b>99.4%</b>

- To some extent, this is a consequence of how the database was built: after all, we started by finding KJV verses with these modals.
- However, the inclusion of other verses with future indicative or aorist subjunctive in the original Greek does not substantially alter the picture.
- *Shall/should* predominates, but *will/would* is also fairly robust.
- By this stage 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 containing MODALITY. Early Modern English finite clauses were characterized by the feature dependencies in (8).

Table 3: Future-referring clauses in the King James Version



### 3.4 Interim summary: The beginning and end of the change

- The main prediction is borne out:
  - In the King James version, future clauses are categorically expressed with modals.
  - In the Anglo-Saxon Gospels, they are categorically expressed with present-tense forms.
- This supports the account proposed by Cowper & Hall (2013a):
  - MODALITY was not part of the inflectional system of Old English. Present-tense forms were thus **not** contrastively non-modal.
  - By the early 17th Century, MODALITY was part of the system of contrasts in English. Present-tense forms were contrastively non-modal, and were not used in future clauses.
- **Next:** the transition through Middle English

## 4 The transitional stage: Middle English

If ME is an intermediate stage between the complete lack of MODALITY in OE and its fully contrastive role in EMnE, then we expect to find a smaller proportion of future-referring clauses with modals in ME than in EMnE. While this true for *will*, it is not for *shall*, which is used more often in Purvey than in the KJV. Why is *shall* used so exclusively in the Middle English version?

### 4.1 *Shall* as a matter of editorial policy

#### A possible answer:

- Since the texts were translations, this could reflect a deliberate stylistic choice or editorial policy on the part of the translators, rather than the typical range of future-referring forms in ME.
- If so, we might expect different proportions of *shall* vs. other forms depending on which verb form was used in the Vulgate source.

#### And indeed:

- 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* are still very common in Purvey, but much less categorically used.

n=1118	Purvey	
Pres. indic.	48	4.3%
Pres. syncr.	16	1.4%
Pres. subjv.	23	2.1%
<b>Total present</b>	<b>87</b>	<b>7.8%</b>
<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%
<b>Total modal</b>	<b>943</b>	<b>84.3%</b>
Other	88	7.9%

Table 4: Future-referring clauses in Purvey

	Vulgate fut. indic. n = 896		Vulgate fut. periph. n = 34		Vulgate syncretic n = 51		Vulgate present n = 72		Vulgate past n = 32		Vulgate other n = 33	
<i>shall/should</i>	<b>846</b>	<b>94.4%</b>	17	50.0%	29	56.9%	21	29.2%	18	56.3%	4	12.1%
<i>will/would</i>	2	0.2%	1	2.9%	—	—	—	—	3	9.4%	2	6.1%
present	15	1.7%	—	—	<b>18</b>	<b>35.3%</b>	<b>49</b>	<b>68.1%</b>	—	—	<b>5</b>	<b>15.2%</b>
other	33	3.7%	16	47.1%	4	7.8%	2	2.8%	11	34.4%	22	66.7%
Total non- <i>shall</i>	50	5.6%	17	50.0%	22	43.1%	51	70.1%	14	43.7%	29	87.9%

Table 5: Renditions of Latin future-referring forms in Purvey

- While future indicatives are almost always translated with *shall*, other Latin forms show more variation.
- 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; the present tense was, at that stage, still fairly robustly used to express the future.

#### The range of meanings of futurate presents in Middle English

- If the use of modals is optional, we would expect the present tense to be used to express the full range of future meanings. In particular, we expect to find present-tense matrix clauses expressing simple predictions.



- There are 87 present-tense clauses with future time-reference in Purvey.
  - Of the 87 examples, 38 were clearly predictive futurate clauses, like the first conjunct in Luke 13:24 ((9), repeated from (6)). These would require an overt expression of MODALITY in PDE.

- (9) 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.*

- There were also 26 examples where the clause in question was in a relative clause, a purpose clause, a temporal adjunct clause, or some other dependent construction. These were invariably rendered in KJV with a modal, but in PDE would generally be in the present. (10) shows an example from Luke 9:26:

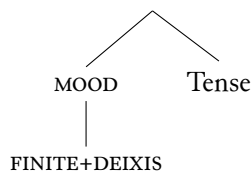
- (10) a. ASG: [...] *ðone mannes sunu forsyhþ, ðonne he cymþ on his mægen-þrymme, and hys fæder, and hālegra engla.*  
 b. Purvey: [...] *mannus sone schal schame hym, whanne he cometh in his maieste, and of the fadris, and of the hooli aungels.*  
 c. KJV: [...] *of him shall the Son of man be asbamed,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

- The other examples were fairly heterogeneous; some had a conditional flavour, others could be interpreted as futures or as generic, timeless statements.
- 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 is also reasonable to suppose that in vernacular texts, where no translation conventions applied, we might find a higher proportion of futurate clauses in the simple present; however, it's not at all clear how to test this conjecture.

## 4.2 The grammar in transition

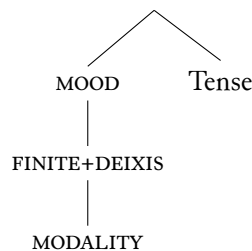
- How can this intermediate stage be represented in speakers' grammars?
- Several options for the status of a feature MODALITY in the late 14th century:
  1. MODALITY is an **optional** feature of T (cf. the adjunct features of Wiltschko, 2008). Its absence is not contrastive.
  2. Competing **grammars**: speakers control multiple versions of Infl. One (conservative) lacks MODALITY as a grammatical feature; another (innovative) does have such a feature. The relevant parts of the OE and EMnE systems coexisted for some part of the ME period.

(11) Conservative:

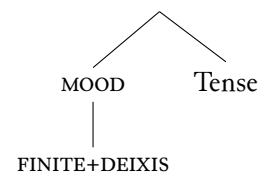


(12) Innovative:

a. Modal:



b. Nonmodal:



3. Competing **realizations**: the feature MODALITY is fully contrastive in Infl by Middle English, but its **morphological realization** depends on a choice between conservative and innovative vocabulary items.
  - ME has the Infl system shown in (12), but MODALITY is overtly spelled out only when INNOVATIVE is present. (See Cowper & Hall 2003 on a role for register in a late-insertion model of morphology.)
  - The vocabulary items *shall/should* and *will/would*, rather than MODALITY itself, are restricted to INNOVATIVE contexts.
- The second and third possibilities should have different consequences for the syntax of Infl in Middle English more broadly. These remain to be explored.

## 5 A new transitional stage? Present-Day English

- Modals were used in EMnE in a wider set of contexts than they are in PDE.
- In particular, they were required in future-referring **adjunct** clauses (e.g. *when, if*), where they are no longer possible. Thus, as Visser (1963–73: §1519) notes:<sup>6</sup>

“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.”

- (13) 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)

- Is MODALITY **losing ground** in PDE as a contrastive feature of Infl?
- Tagliamonte & 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.
- If MODALITY is indeed in the process of being lost as a contrastive feature of Infl, then we should find present tense forms **again expanding their range of use**.
- **And indeed**: we note a novel expansion in the range of the future-referring simple present, exemplified in (14).
  - 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.<sup>7</sup>

---

6. See also Biberauer & Roberts (2015).

7. We have not conducted any formal study or survey, but two of the coauthors on this paper reject the examples in (14), while the other three coauthors find them fully grammatical. The examples were collected by one of the authors for whom they stand out as ungrammatical.

(14) **5 new contexts for futurate present in PDE:**

- a. In the consequent of a future-oriented conditional:<sup>8</sup>  
*If I don't tell Patty about Katie, the clients **lose** the case.* (*Damages*, Season 1, ep. 1)
  - 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*, Season 7, ep. 19)
    - 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*, Season 7, ep. 14)
  - 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*, Season 6, ep. 9)
  - 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*, Season 7, ep. 2)
  - e. Clefts:  
*That's why the other guy **wins**.* (said months before the election) (*The West Wing*, Season 7, ep. 8)
- It seems that the presence of an appropriate operator (question or modal), either adjoined to the clause or in a higher clause, makes overt realization of MODALITY optional in a future-referring clause.

**The course of this change:**

- In EMnE (represented by the KJV), modals such as *will* and *shall* appear to have been **obligatory in all future-referring clauses**, including temporal and conditional adjuncts.
- At some point in the intervening centuries, the modals became **more restricted**, no longer being possible in temporal and conditional adjunct clauses (as Visser and others noted).
- Now, for some contemporary speakers of PDE (represented by the attested examples above), modals are **yet further restricted**, becoming optional in the scope of a broader range of operators.
- This might indicate that the status of MODALITY is now changing, from a contrastive feature of the Infl paradigm to an optional modifier feature.
  - Alternatively, it could be that MODALITY is becoming a contrastive feature of Comp, associated with various operators and adjuncts, or licensed by higher verbs. This would be consistent with the frequent observation that grammatically significant elements come to occupy higher and higher positions in the structure over time.

## 6 Conclusion

- In **Old English**: no contrastive modality in the Infl system
- In **Middle English**: MODALITY rising as part of the Infl system, possibly specified in some way as innovative.
- In **Early Modern English**: MODALITY fully contrastive within the Infl system → all future-referring clauses require a modal.
- ...and in **Present-Day English**: decline of MODALITY as contrastive feature of Infl (possibly becoming a contrastive feature of Comp).

---

8. We 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."

## References

- Biberauer, Theresa & Ian Roberts. 2015. The significance of what hasn't happened. Handout, University of York.
- Bobaljik, Jonathan David & Höskuldur Thráinsson. 1998. Two heads aren't always better than one. *Syntax* 1.1: 37–71.
- Bosworth, Joseph & George Waring (eds.). 1874. *The Gothic and Anglo-Saxon Gospels in parallel column with the versions of Wycliffe and Tyndale*. London: John Russell Smith, 2nd edn. URL <http://www.archive.org/details/gothicanglosaxon00ulf>. Contributed by Princeton Theological Seminary Library.
- Cinque, Guglielmo & Luigi Rizzi. 2010. The cartography of syntactic structures. In Bernd Heine & Heiko Narrog (eds.), *The Oxford handbook of linguistic analysis*, 51–65. Oxford: OUP.
- Closs, Elizabeth. 1965. Diachronic syntax and generative grammar. *Language* 41.3: 402–415.
- Cogliano, Dan (ed.). 2004. *The King James Version of the Holy Bible*. DaVince. URL [www.davince.com/bible](http://www.davince.com/bible).
- Cowper, Elizabeth. 2005. The geometry of interpretable features. *Language* 81.1: 10–46.
- Cowper, Elizabeth & Daniel Currie Hall. 2003. The role of register in the syntax–morphology interface. In Sophie Burelle & Stanca Somesfalean (eds.), *Proceedings of the 2003 Canadian Linguistic Association*, 40–49. Montréal: Cahiers Linguistiques de l'UQAM.
- Cowper, Elizabeth & Daniel Currie Hall. 2013a. A neoparametric approach to variation and change in English modals. Presented at GLOW 36, Lund University, April 2013. To appear in *Linguistic Variation*.
- Cowper, Elizabeth & Daniel Currie Hall. 2013b. Reductiō ad discrimen: Where features come from. Conference on Features in Phonology, Morphology, Syntax, & Semantics, University of Tromsø, October 2013. To appear in *Nordlyd*.
- Dresher, B. Elan. 2009. *The contrastive hierarchy in phonology*. Cambridge: CUP.
- van Gelderen, Elly. 2004. *Grammaticalization as economy* (Linguistik Aktuell 71). Amsterdam: John Benjamins.
- Hall, Daniel Currie. 2007. *The role and representation of contrast in phonological theory*. Ph.D. thesis, University of Toronto.
- Heaton, W. J. 1913. *Our own English Bible: Its translators and their work*. London: Francis Griffiths.
- Hetzenauer, P. Michael (ed.). 1914. *Biblia sacra vulgatae editionis Sixti V Pont. Max. iussu recognita et Clementis VIII auctoritate edita*. Sacredbible.org. URL <http://www.sacredbible.org/vulgatae1914/version.htm>.
- Huddleston, Rodney & Geoffrey K. Pullum. 2002. *The Cambridge grammar of the English language*. Cambridge: CUP.
- van Kemenade, Ans. 1992. Structural factors in the history of English modals. In Matti Rissanen, Ossi Ihalainen, Terttu Nevalainen & Irma Taavitsainen (eds.), *History of Englishes: New methods and interpretations in historical linguistics*, 287–309. Berlin: Mouton de Gruyter.
- Lakoff, George. 1971. Presupposition and relative well-formedness. In Danny D. Steinberg & Leon A. Jakobovits (eds.), *Semantics: An interdisciplinary reader in philosophy, linguistics and psychology*, 329–340. Cambridge: CUP.
- Lightfoot, David. 1979. *Principles of diachronic syntax*. Cambridge: CUP.
- Purvey, John. n.d. *John Wycliffe's translation: Later version by John Purvey*. Nampa, ID: The Wesley Center Online. URL [http://wesley.nnu.edu/fileadmin/imported\\_site/biblical\\_studies/wycliffe/](http://wesley.nnu.edu/fileadmin/imported_site/biblical_studies/wycliffe/).
- Roberts, Ian. 1985. Agreement parameters and the development of English modal auxiliaries. *Natural Language & Linguistic Theory* 4.1: 21–58.
- Tagliamonte, Sali A. & Alexandra D'Arcy. 2007. The modals of obligation/necessity in Canadian perspective. *English World-Wide* 28.1: 47–87.
- Vetter, David C. 1973. Someone solves this problem tomorrow. *Linguistic Inquiry* 4.1: 104–108.
- Visser, Fredericus Theodorus. 1963–73. *An historical syntax of the English language*. Leiden: Brill.
- Ward, Norman. 1950. *The Canadian House of Commons: Representation*. Toronto: University of Toronto Press.
- Warner, Anthony. 1993. *English auxiliaries*. Cambridge: CUP.
- Westcott, Brooke Foss & Fenton John Anthony Hort (eds.). [1881] n.d. *The New Testament in the original Greek*. qBible.com. URL <http://www.qbible.com/greek-new-testament/>.
- Wiltschko, Martina. 2008. The syntax of non-inflectional plural marking. *Natural Language & Linguistic Theory* 26.3: 639–694.

## Appendix: Absence of translation effects in ASG and KJV

- Neither the Anglo-Saxon Gospels nor the King James Version shows evidence of a categorical translation policy analogous to Purvey's use of *shall* to translate the Latin future indicative.

### In the Anglo-Saxon Gospels:

- Larger numbers of “other” forms (such as ‘be to VERB’) are found when the Vulgate has something other

than future indicative or syncretic forms. E.g., in Luke 9:31, ASG follows the structure of the Latin more closely than the later translations do:

- (15) a. Vulgate: ...*quem completurus erat in Ierusalem* ('which he **was to complete** in Jerusalem')  
 b. ASG: ...*ðe he to gefyllenne wæs on Hierusalem* ('that he **was to fulfill** in Jerusalem')  
 c. Purvey: ...*which he schulde fufille in Jerusalem*  
 d. KJV: ...*which he should accomplish at Jerusalem*

- However, for all Latin future-referring forms, the present tense is a robustly attested option in ASG.

	Vulgate fut. indic. <i>n</i> = 896		Vulgate fut. periphr. <i>n</i> = 34		Vulgate syncretic <i>n</i> = 51		Vulgate present <i>n</i> = 72		Vulgate past <i>n</i> = 32		Vulgate other <i>n</i> = 33	
modal	8	0.9%	10	29.4%	—	—	1	1.4%	3	9.4%	2	6.1%
present	<b>813</b>	<b>90.7%</b>	8	23.5%	<b>47</b>	<b>92.2%</b>	<b>59</b>	<b>81.9%</b>	8	25.0%	13	39.4%
other	75	8.4%	<b>16</b>	<b>47.1%</b>	4	7.8%	12	16.7%	<b>21</b>	<b>65.6%</b>	<b>18</b>	<b>54.5%</b>

Table 6: Future-referring forms in the Vulgate and their correspondents in the Anglo-Saxon Gospels

#### In the King James Version:

- The KJV overwhelmingly uses modals to translate all Greek future-referring forms.
- While the proportions of different modals vary somewhat across the different Greek sources, and *shall* is consistently the most common overall, no Greek form is so consistently mapped onto a single KJV translation as the Latin future indicative is to *shall* in Purvey

	Greek fut. indic. <i>n</i> = 861		Greek aor. sbjv. <i>n</i> = 129		Greek present <i>n</i> = 59	
<i>may/magan</i>	—	—	—	—	—	—
<i>shall/scealon</i>	661	76.8%	104	80.6%	34	57.6%
<i>should</i>	3	0.3%	12	9.3%	11	18.6%
<i>willan/nyllan</i>	189	22.0%	12	9.3%	13	22.0%
<i>would</i>	2	0.2%	1	0.8%	1	1.7%
<i>wurðan</i>	—	—	—	—	—	—
<b>Total modal</b>	<b>855</b>	<b>99.3%</b>	<b>129</b>	<b>100.0%</b>	<b>59</b>	<b>100.0%</b>
Pres. ind.	6	0.7%	—	—	—	—
Pres. syncr.	—	—	—	—	—	—
Pres. sbj.	—	—	—	—	—	—
<b>Total present</b>	<b>6</b>	<b>0.7%</b>	<b>0</b>	<b>0.0%</b>	<b>0</b>	<b>0.0%</b>
Other	—	—	—	—	—	—

Table 7: Translations of Greek future-referring forms in the King James Version

→ In neither the ASG nor the KJV do we see the kind of systematic correlation to the specific form of the source (Greek or Vulgate Latin) that we find in the Middle English Purvey translation.