



RESEARCH ARTICLE

On the rise of be having to in English: a cognitive-functional account

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(Received 20 January 2025; revised 22 April 2025; accepted 24 April 2025)

Abstract

While literature on English modality has usually focused on traditional modal and semi-modal verbs, to our knowledge, no attention has ever been given to the emerging be having to (BHT) construction. Through corpus analysis conducted on GloWbE, ICE, BNC and CLMET, this article investigates the semantic differences between have to and BHT that make them distinct in the English construction. We demonstrate that BHT conveys meanings of contingency, reluctance and inchoativity, and propose that its recent emergence may stem from a specific functional gap within the English modal system. While have to appears to be gradually grammaticalizing with future-oriented functions, BHT seems to be renewing the original (and less grammaticalized) dynamic functions of have to. Finally, we explore the productivity of the construction across different English varieties and the reasons for its lower frequency in postcolonial varieties. The hypothesis of negative retentionism proposes that a feature that was absent in the lexifier language at the time of contact may indeed be found to be less frequently used in the contact variety at a later stage due to colonial lag.

Keywords: be having to; progressive aspect; modality; inchoativity; negative retentionism

I. Introduction

Previous research on English modality has focused extensively on traditional modal and semi- modal verbs (e.g. can, could, may, might, must, will, would, etc.). Notable among the heterogeneous studies on the topic are works such as Palmer (1990), Lyons (1995), Collins (2009a) and Narrog (2012), illustrating research often rooted in grammaticalization theory. More recently, attention has shifted towards analysing these modals through the lens of Construction Grammar, as seen in Hilpert et al. (2021). However, to our knowledge, no study has so far been conducted on the emerging be having to (BHT) construction comparing it with the semi-modal have to, shown in (1) and (2), respectively.

(1) Professor Hills found that poor pensioners and families *are having to* spend an extra £1.1billion a year in total on heat because they often live in poorly-insulated, cold and draughty homes. (GloWbE, GB: General, 20 October 2011)

¹ The emphasis in all examples presented in this article is our own.

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- (2) Speaker A: I haven't the faintest idea what you're talking about. Speaker B: Well you have to listen to the tape then. (ICE-GB:S1A-085)

Building on the assumption that no two constructions can be exactly 'equivalent' semantically or pragmatically in a construction (Leclercq & Morin 2023), we intend to investigate how the functions of have to and BHT vary and the need for the emergence of the latter in a modal system where the progressive aspect usually has no reason to exist. Traditional accounts of modality, such as van der Auwera et al. (2009: 287), claim in fact that since core modal verbs originate historically from expressions of might, knowledge – or possession, in the case of have to – they are stative and therefore incompatible with the progressive.

In the article, the following three Research Questions (RQs) will be addressed:

- **RQ1.** How does the semantic pole of BHT vary from that of have to?
- **RQ2.** What triggered the emergence of BHT?
- RQ3. Why is BHT more productive in British English than in postcolonial varieties of English?

Section 2 will provide a brief account on past studies on *have to* and its diachronic evolution. Section 3 will describe the corpora and the methodology used for the analysis of the data. Section 4 will present the results of the corpus investigation through statistical analyses comparing the distribution of the two constructions, and section 5 will open a discussion aimed to answer our RQs. First, we will focus on what distinguishes BHT semantically from *have to*, while also considering ongoing changes in the aspectual meaning of the progressive itself. Second, we propose the hypothesis that the emergence of BHT may be motivated by a functional gap in a modal system wherein highly grammaticalized modal constructions are overtaking less grammaticalized dynamic meanings. Third, the hypothesis of *negative* retentionism (Ziegeler 2024) is presented to elucidate the restricted use of BHT in data from postcolonial varieties of English. Section 6 concludes the article.

2. Have to: a historical account

It is generally claimed that in present-day English *have to* conveys meanings related to obligation and necessity. Numerous studies have aimed to investigate how lexical *have* came to acquire modal meanings historically (e.g. Krug 2000; Łęcki 2010). One of the earliest accounts on the topic can be found in van der Gaaf (1931: 180–4), who identifies three diachronic stages corresponding to a gradual reanalysis of *have* from possession to obligation. In stage A, the verb still retains a meaning of possession, with a noun phrase (NP) functioning as its direct object, as shown in (3). At this point, the infinitive following the construction is dependent on the NP and serves as an adjunct. In stage B (4), *have* co-occurs with the infinitive, leading to both a possession and obligation interpretation. In stage C, *have* has lost its original lexical meaning and now expresses only obligation and duty, as in (5), where the fact of buying something cannot entail its possession. *Have to* + V operates as a sole construction conveying a sense of obligation, with the original NP functioning as the argument of the infinitive. The semantic reanalysis ultimately leads to a word order change with the infinitive verb preceding the object NP (cf. also Basile 2024: 72).

- (3) He **had** non heir **to** succeed. (Visser 1969: 1474)
- (4) Alexander the king, that Scotland *haid to* steyr and leid. 'Alexander the king, that Scotland had to rule and govern'. (Visser 1969: 1474)
- (5) You will *have to* buy your own bedding. (GloWbE, GB: General)

Van der Gaaf suggests that, although these three uses were already productive in Old English times, the shift in word order leading to a post-infinitival object did not emerge until Middle English (ME) times (1931: 184). This assumption was later challenged by Mitchell (1985), Brinton (1991) and Fischer (1994), who argue that the examples van der Gaaf used to demonstrate the three stages are 'indistinguishable on the surface' (Fischer 1994: 138). Later accounts sought indeed to offer more fine-grained analyses, addressing both the motivations behind the word order change and its semantic consequences. Fischer (1994, 1997), for instance, supports a syntactically led grammaticalization hypothesis. She argues that the word order shift from SOV to SVO in ME times resulted in the placing of have next to the infinitive, thus triggering further the semantic reinterpretation from possession to necessity (Fischer 1994: 137, as cited in Basile 2024: 73). Ziegeler (2010) offers an alternative perspective by suggesting a semantically driven grammaticalization hypothesis. She contends that Fischer's explanation falls short of clarifying why the older word order, as seen in examples (3) and (4), remains possible in modern usage. If the shift in word order were responsible for the modal interpretation of have to, it is unclear why this pattern did not apply generally to all constructions involving have and to. Drawing on Bybee et al. (1994), Ziegeler argues (2010: 51) that the sense of obligation in languages typically arises either from sources related to negative permission or from lexical contexts contributing to a specific interpretation (what she calls 'lexical optimality'). Lexical optimality, for example, contributed to the emergence of modal ought to (cf. Dekeyser 1998). Ziegeler dismisses the negative permission hypothesis, which typically involves a shift from negative possibility/permission to necessity in increasingly negative environments – a pattern not reflected in her data. This is further supported in Brinton (1991), who notes that negative constructions with have to, such as those in (6), have preserved the original SOV word order in modern English rather than undergoing change. Ziegeler (2010: 52) views lexical optimality as a better explanation, since the construction began to express meanings of possession linked to social duty well before the shift in word order occurred. This is demonstrated in examples (7) and (8) (both from van der Gaaf 1931: 183), where the writer conveys 'a generic or habitual modal reading' associated with 'ongoing customs and duties' and not simply to possession (Ziegeler 2010: 52). This interpretation is clear in example (7), where the subject (the vicar) cannot possess the souls of the parishioners. Instead, he has a duty to fulfill, making the concept of future accomplishment central to the meaning.

- (6) Pe men [...] ne *hadden* nan more *to* gyven. 'The men [...] had no more to give'. (1137, *Anglo-Saxon Chronicle* (Peterb.); Ziegeler 2010: 40)
- (7) We sall pray especially for be person or for be vikar of bis kirke bat has 3 oure saules for to kepe.
 'We shall pray especially for the parson or the vicar of this Church that has your souls to keep'. (1370–1450, Bidding Prayer III in Lay Folks Mass Book, 68.21; Ziegeler 2010: 52; translation is ours)
- (8) We sall pray [...] for bame bat has bis cite for to govern. 'We shall pray [...] for those that have this city to govern'. (1370–1450, Bidding Prayer III in Lay Folks Mass Book, 69.19; Ziegeler 2010: 52; translation is ours)

However different, past accounts of *have to* all show that the construction originated from a meaning related to possession, which subsequently grammaticalized to express social duties and, eventually, obligation. Examples (7) and (8) show that after the original meaning of possession, *have to* started to be used in ambiguous contexts, conveying the meaning of

customary and social duty/necessity. The source of necessity, in this case, lies external to the subject referent, who has to accomplish something due to general conditions, making the reading associated with 'dynamic' modality. The category of dynamic modality, built upon Palmer (1990), Collins (2009a) and Basile (2024), corresponds indeed to those contexts where the speaker/writer does not impose any obligation. It also 'tend[s] to have generic subjects [...] [and has] to do with circumstances, rules, regulations, physical or natural laws, etc.'; it may also 'refer to internal need dictated by external conditions as long as there is no deontic source involved' (Basile 2023a: 285). Another example is in (9), where the accomplishment of the state of affairs is not imposed on the subject referent by any deontic source. The described necessity refers instead to a general situation or circumstance, which – accordingly – does not have a future-projecting value.

(9) The same thing happens to those who are confined to wheelchairs, or who *have to* spend long periods in bed. (ICE-GB:W2B-022; Collins 2009a: 63)

Similarly to *must* in the history of English, *have to* subsequently grammaticalized to 'deontic' and later 'epistemic' functions (cf. Gregersen 2020; Basile 2024, *inter alia*). Deontic modality is 'concerned with influencing actions, states or events and expressing what Searle (1983: 166) calls "directives" (Palmer 1990: 6). Differently from dynamic modality, the time reference is future-projecting, as the necessity behind the realization of the state of affairs is to be read with a future perspective from the moment of utterance (cf. Bybee *et al.* 1994: 185). An example is given in (10) below, where the speaker imposes their will and directs the subject referent to act in order to realize the state of affairs in a more or less close future.

(10) P.S. It's your fault that I'm so homesick, if I hadn't had such a good holiday I would have been glad to get back to Uni PPS Since it's your fault, you *have to* fix it and that means lots of LETTERS and/or PICTURES (as the case may be) xox. (ICE-AUS:W1B-015; Collins 2009a: 61)

Epistemic modality (i.e. the kind of modality that conveys the degree of probability of the truth of a proposition) associated with *have to* is more recent. The *Oxford English Dictionary (OED*; s.v. *have*, v., VII.ii.45) dates its first occurrence (11) back to approximately 1829. Denison (1998: 172) provides some examples, such as (12), from the second half of the twentieth century. Nevertheless, epistemic readings of *have to* remain infrequent in present-day English, with *must* supplying the most common epistemic alternative (see Palmer 1990; Krug 2000; Collins 2009a, 2009b).

- (11) Let us get forward, Emma... This *has to* be a sad night for more souls than us. (1830, J. Myers, *Remains*, *OED*)
- (12) It *has to* be easier with two of them. (1961, Brown Corpus, Press Reportage 139:26; Denison 1998: 172).

As will be shown in the following sections, this historical evolution and grammaticalization of *have to* lays the groundwork for investigating the productivity and functional competition of BHT, i.e. its progressive counterpart.

3. Data and methods

The first stage of our investigation aimed to assess the productivity of the overlooked BHT construction and shed light on its origins. The main analysis was conducted using the Corpus

of Global Web-based English (henceforth GloWbE; Davies 2013; Davies & Fuchs 2015), a collection of about 1.9 billion words of texts retrieved from web pages and blogs.² The corpus is made of 20 subcorpora each for a different variety of English. Since our study also aimed to statistically quantify the frequency of BHT geographically (RQ3), analyses were carried out on two of Kachru's (1986) 'inner-circle' varieties (i.e. British English and US English) and on three 'outer-circle' or postcolonial varieties (i.e. Singapore English, Hong Kong English and Indian English). These subcorpora differ in size, so the results on the general frequency of BHT in each variety were normalized per 10,000 words to ensure comparability.

BHT was found to be particularly productive in British English (see section 5), making this variety the central focus of our investigation. However, the sheer number of occurrences in GloWbE made it impractical to perform a qualitative analysis within such a large corpus. To overcome this challenge, we turned to the *British National Corpus* (BNC 1995), a more manageable dataset compiled between the 1980s and 1990s, consisting of 100 million words across various genres. For the analysis of *have to* in the same variety, we used the first 180 texts from the spoken subsection of the *International Corpus of English – Great Britain* (ICE-GB), which was compiled around the same time as the BNC and comprises approximately 360,000 words. Additionally, to explore the historical productivity of BHT in British English during the period 1710–1920, corresponding to the colonization period of regions such as India, Singapore and Hong Kong, we analysed the *Corpus of Late Modern English Texts* (CLMET, version 3.1; De Smet, Flach, Diller & Tyrkkö 2011; cf. Diller *et al.* 2011), which includes roughly 34 million words.

Finite occurrences of have to and of BHT (in the forms am/is/are having to) were retrieved and categorized semantically, using the text analysis software available at English-corpora.org and Sketch Engine (version 2.36.5; Kilgarriff et al. 2014). The purpose was to examine the functional competition between BHT and have to as modal candidates. Non-finite forms such as (13) and instances in past or future tenses (e.g. had to, was/were having to or will be having to/will have to) were thus also excluded.

(13) He makes me so happy and I feel like I can't give up on him because I know how strong he is. Am I crazy? I am too young to *be having to* deal with this? (GloWbE, GB: General)

This exclusion was driven by the observation of the comparatively smaller rates of productivity of BHT in such contexts (e.g. less than 0.003 occurrences of were having to per 100,000 words in GloWbE-GB).

Each modal occurrence was annotated according to three groups of variables, aiming to identify statistically significant trends between the two constructions. First, we annotated the type of functional category expressed by the construction (i.e. dynamic, epistemic, deontic), each being a potential indicator of a more or less advanced level of grammaticalization, as shown in section 3. Second, we coded the grammatical subject (i.e. *I*, you, he, she, it, we, they). Modal constructions with first- or second-person subjects are in fact often said to reflect greater personal involvement and imposition (i.e. deontic readings) compared to those with other types of subjects (cf. Leech et al. 2009: 114). Third, we annotated whether the semantic reference to the expressed subject was generic (G) or non-generic (NG). Non-generic reference invokes a specific, identifiable entity or set of entities, rather than an abstract category, as in (10) above, where the noun NP serving the function of subject

² While GloWbE offers extensive data coverage across different varieties of English, its web-based nature raises issues of validity, representativeness and author identity. The speakers or writers of entries are often unknown and may not be native users of the variety in question. Findings based on this corpus should therefore be interpreted with caution.

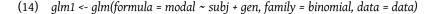
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(i.e. you) refers to a specific and concrete entity. On the contrary, generic reference invokes the whole class of entities in general, without indexing one entity in particular. In (9), the subject has generic reference as it denotes the generic group of people who are confined to wheelchairs, from which the speaker does not distinguish any submembers. The semantic category of dynamic, as we will see, tends to prefer subjects with generic reference. It is, in fact, hard to generate deontic modality with a subject that conveys some generic reference (cf. Basile 2024: 133).

4. Results

The analysis of the geographical components of GloWbE reveals a significantly different distribution of BHT across regions, as illustrated in figure 1. The figure suggests that the use of BHT is more productive in the data from inner- than outer-circle varieties of English. The higher frequency of production of the construction in British English is easily recognizable, being almost 2.5 times as frequent as in the US English data, where the construction has a frequency of 0.02 per 10,000 words. British English seems therefore to have a leading role. Nonetheless, the frequency of BHT in British English remains much lower than that of *have to* (0.02 instances per 10,000 words for BHT in the BNC, compared to 7.2 instances per 10,000 words for *have to* in ICE-GB).

The annotation of the examples of BHT in the BNC suggests that all the occurrences of this construction express dynamic modality, and 54 per cent of the total have generic subject reference. With the aim of comparing BHT with *have to* as modal contestants, a binary regression model was computed, following the formula in (14).



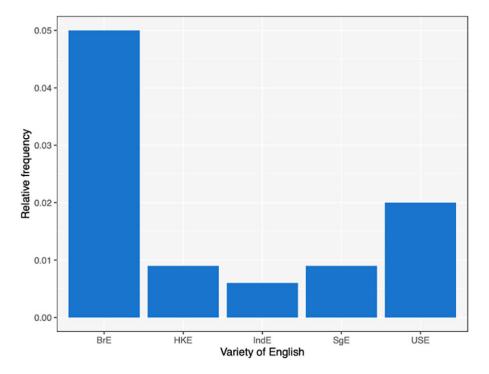


Figure 1. Frequency (normalized per 10,000 words) of BHT in GloWbE

The formula calculates the impact of subject type (i.e. I, you, he, she, it, we, they) and subject reference (i.e. 'gen' in glm1) on the choice of BHT and have to. The variable of functional category was not included, considering the exclusivity of dynamic modality associated with BHT, as observed in the manual annotation. The model's explanatory power is substantial (Tjur's R2 = 0.36). The model's intercept, corresponding to subj = he/she and gen = G (i.e. generic), is at -0.42 (95 percent CI [-1.17, 0.32], p = 0.268). The results of the logistic regression model are shown through a forest plot in figure 2. The plot illustrates significant patterns as far as the choice of different subject types is concerned. The logits suggest indeed that first and second person subjects (i.e. you, I, and we) are significantly more often associated with have to. BHT, on the contrary, seems to be associated more frequently with third person plural subjects, including full NPs (with generic reference in 75 per cent of cases according to the annotation).

Examples of generic *they* subjects are given in (15) where the category of librarians serves the function of subject, and (16), where the writer refers to a generic sub-group of people, namely 'men and women discharged from hospital'.

(15) Although the online catalogue finally emerged incorporating the card catalogue model, it soon became apparent that the new 'form' had much more potential than the automated housekeeping tool originally envisaged. In implementing today's online catalogues, librarians are having to make complex decisions about catalogue user behaviour and needs. (1989, The online catalogue: developments & directions. London: Library Association Pub. Ltd, BNC)

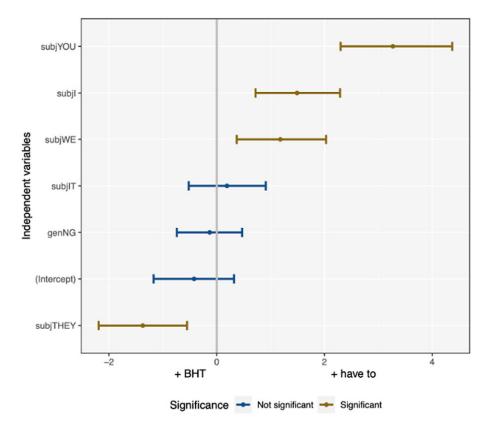


Figure 2. Log odds for using have to in opposition to BHT according to the independent variables of subject type and subject reference (data for BHT: BNF, data for have to: ICE-GB)

	Coefficient	95 per cent	_
Predictor	(β)	CI	p-value
Subj[l]	1.49	[0.72, 2.29]	<0.001
Subj[you]	3.27	[2.30, 4.37]	<0.001
Subj[we]	1.18	[0.37, 2.03]	0.005
Subj[they]	−I.37	[-2.19, -0.55]	<0.001

Table 1. Statistical results of the statistically significant predictors in glm1

(16) In other cases people don't even have homes to lose. Men and women discharged from hospital with nowhere to live, or released from prison back into the community, *are having to* sleep rough or doss down wherever they can find a willing friend. It is hard for those wanting to make a fresh start, maintain good health and stay off drugs. (1990/91, *ACET Annual Review*, BNC)

The results of the significant observations of *glm1* are summarized in table 1.

A diachronic analysis was also conducted to determine when BHT first emerged in the history of British English. According to the *OED* (s.v. have, v., VII.i.42.a), (17) constitutes the first registered example of BHT, dating back to 1871.³ In the example, the writer – J. Darby – describing life in the countryside, reports that rafters, intended as a third-person-plural subject with generic reference tied to the phrase 'a flat roof', have to carry a heavy weight when it snows. The functional category associated with the modal occurrence is dynamic as the necessity is presented as a fact that arises in general circumstances. The use of an inanimate subject with the construction appears as an exception in the data for BHT. As a result, it is likely that the author attempts to personify the subject for stylistic effects (cf. 'the rafters are suffering').

(17) A flat roof, practically viewed, is a source of almost as much discomfort as a peevish wife. When it snows, you are ever in a worry about the excess of weight the rafters *are having to* carry. You cannot help fearing, as you lie snugly in bed on a stormy night, that there may be accumulating just a little more than the builders allowed for. When the snow melts, or the long rains come on, you know that shingles are rotting, and that rafters are suffering; or, if the roof be of tin, you have to calculate the amount of paint each storm costs you. (1871, J. Darby, *Odd Hours of a Physician, OED*)

The CLMET dataset registers only one occurrence of BHT from 1920, shown in (18). The limited productivity of BHT during that time frame further suggests that the appearance of BHT should be regarded as a recent phenomenon.

(18) Therefore, unless and until an international Communist revolution becomes possible we must expect that any other nation following Russia's example will have to pay an even higher price than Russia has had to pay. Now the price that Russia *is having to pay* is very great. (1920, B. Russell, *The practice and theory of Bolshevism*, CLMET)

 $^{^3}$ A reviewer suggests that earlier examples of BHT can be found in *The Corpus of Historical American English* (COHA; Davies 2010), dating back to the 1830s. However, these instances (e.g. 'and you know, when there were two of us, we never liked David's having to pass through our room to get to his', 1837) involve non-finite gerundial constructions and do not include the verb be. As such, they differ syntactically from the earliest attested finite examples, e.g. the 1871 rafters' example cited in the main text.

5. Discussion

Based on the results of the corpus investigation, this section aims to address the central research questions of the present study.

RQI. How does the semantic pole of BHT vary from that of have to?

The BHT construction stands out for its formal combination of a modal root and the marking of the progressive aspect (i.e. be V-ing), a pairing that is atypical for modal constructions in English. Aside from have to, our data exploration suggests there are few – if any – other modal or semi-modal constructions within the English domain of necessity that are typically used in the progressive. A quick search on GloWbE for progressive forms like are needing to + V reveals an extremely low frequency – fewer than 0.05 occurrences per million words. 4

Cross-linguistically, van der Auwera *et al.* (2009) claim that when an acquisitive verb grammaticalizes into a (necessity) modal, it may carry with it the meaning of temporariness that an original modal verb is lacking, since modal verbs are permanent statives in the first place. It may be fairly assumed then that the use of the progressive with an acquisitive verb such as *have* makes the BHT construction doubly loaded with a sense of temporariness.⁵

The incorporation of the progressive in the BHT construction seems to reinforce the aspectual feature that is under the scope of the modal verb, while simultaneously enhancing the modal meaning of necessity with shades of intensity (cf. Brisard & De Wit 2013). It is in fact not uncommon to encounter in the data examples like (19) which incorporate adverbs of intensity such as *really*. These uses seem to emphasize the lack of control that the subject has over the state of affairs and their potential unwillingness. The agents, often represented by third-person-plural subjects (as indicated by the logistic regression analysis), feel obliged to comply with external necessities, despite their reluctance.

(19) The injection site is quite uncomfortable it is red and tender but worst of all it is itchy. I *am* really *having to* fight the urge to scratch. (GloWbE, GB: General)

This is also manifest in examples including lexical verbs that would usually entail that the subject has control over a situation, as with the verb *decide*. Example (20) shows that the choice the subject referent has to make is still in contrast with their desires. The very fact of being forced to choose between the two scenarios (turning the heat on or buying shoes for their children) is a result of external circumstances that are outside of their control. It is therefore not surprising that, as discussed in section 4, all the retrieved occurrences of BHT in the data convey a sense of dynamic and not deontic necessity.

(20) Do you think the parents who *are having to* decide whether to turn the heat on or buy shoes for their kids are saying 'well its [sic] all relative'. It really isn't. It sucks. More money equals more choice. (GloWbE, GB: General)

⁴ An anonymous reviewer suggests the possibility of a blending analysis (cf. Fauconnier & Turner 2002) to explain the difference between *have to* and BHT. While we agree that the use of BHT is not merely a composition of *have to* and the progressive, and that the specific properties that make (the semantics of) BHT special might be properties associated with the blended space rather than either input spaces or a generic space, we are unable to explore this theory further in the present paper due to space constraints.

⁵ As noted in Ziegeler (2017: 328) and Lenoble (2021: 11), the fact that the verb *have* is a polysemous light verb makes it prone to be used with different aspectual forms.

This is not necessarily the case for *have to*. As Sweetser claims (1990: 54), *have to* typically conveys a type of obligation that is 'resistible', enabling the production of utterances such as (21), where the speaker decides to prioritize their desires over the imposed necessity.

(21) I have to get this paper in, but I guess I'll go to the movies instead. (Sweetser 1990: 54)

The sense of control over the realization of the state of affairs conveyed by *have to* is absent in BHT. In fact, using BHT in (21) would most likely sound odd. A more illustrative contrast between *have to* and BHT in this sense is given in (22).

(22) [...] One in five of us will be over 65 by 2020 – even more, as the decades pass [...]. If these pensioners can rely more on their families and less on the state to see them through the final phase of their life, that's a huge bonus – especially now that there are fewer young people to pay into the pension pot. Nursing-home costs are high: 800 a week. Many of the elderly *are having to* sell their homes to finance their last years; the rest *have to* rely on the state to do so. (GloWbE, GB: General, posted by *The Telegraph*, 4 June 2012)

In this example, the two modal constructions seem to express different levels of necessity. The use of BHT suggests that selling their homes is a requirement that is being imposed against the pensioners' will. The use of *have to* appears instead to be more general and neutral. The modality expressed is also dynamic, but its use seems to entail that relying on assistance provided by the state is not as burdensome as the act of selling their properties.

BHT appears to be associated with a combination of three potential semantic features, that is, (a) inchoativity, (b) contingency (in Comrie's 1976 terms) and (c) adversity.

- (a) *Inchoativity*. This term corresponds to the morphological expression of elements indicating the beginning of a situation or entrance into a state (Bybee 1985: 147–50). In (22), for example, the subject referents ('the elderly') are faced with a situation that they wish they could escape, especially since they find themselves having to do something that they did not have to do before. Such a change of state is overtly expressed in the previous context by the adverbial *now*, which is itself reinforced by the intensifier *especially*. The internal point of view of the imperfective in BHT can be seen as reorienting the typical future-projecting obligation of *have to* to the present. Hence, the functional need expressed by BHT in (22) to suggest that the present pension system, which used to be efficient, is not anymore.
- (b) *Contingency*. Relying on Comrie (1976), who posits that imperfectivity subsumes habituality, continuousness and progressivity, the progressive marker in BHT is, among other features, indicative of a potential duration (1976: 41–4). Comrie (1976: 38) notes that the basic aspectual meaning of the progressive would be better defined as the denotation of a contingent situation, which itself comprises progressiveness, 'temporary (contingent) states' and contingent habitual situations. Comrie clearly seems to equate the meaning of the adjective *contingent* with that of *temporary* (see also Comrie 1976: 50).⁶ Referring to a personal communication by Lyons, the same author tentatively speculates that the dynamicity of the progressive might as well convey a meaning of unexpectedness, surprise or even unreality (Comrie 1976: 37, 49).

⁶ It is worth highlighting that De Wit *et al.*'s (2020) interpretation of contingency diverges somewhat from Comrie's concept of temporariness (cf. also De Wit 2017). For De Wit *et al.* (2020: 505, 509–10), the progressive marks real but incidental situations – occurrences that are neither structural nor necessary, in contrast to those conveyed by the simple present. The progressive is thus for them understood as a marker of modal contingency. The jury is still out on the issue at stake.

- (c) *Adversity*. As shown in (19) above, the BHT construction signals a lack of agentive control, in contrast to *have to* in (21). This absence of control may be linked to meanings of adversity often associated with the use of stative verbs in other progressives (cf. Ziegeler 2017: 331 and Ziegeler & Lenoble 2020: 240, 256). Given that BHT is associated with the start of new situations (inchoativity) and that the unfolding of these states of affairs is beyond the control of the subject referent, it is not surprising that occurrences of BHT are often accompanied by a sense of inevitability or adversity. Example (23) further shows the strong link between inchoativity/adversity and BHT, with the contrast between the simple past ('created') and the progressive, along with the adverb *now* reinforcing the inchoative meanings and demonstrating the change of state that the referent is made to comply with.
- (23) This is her problem, not mine. She created her own sullen persona, and <u>now</u> she's *having to* deal with it. (GloWbE, GB: Blog)

Interestingly, the emergence of BHT may also provide evidence of the diachronic shift from durativity meanings (in Old English) to meanings of temporariness in present-day progressives (Ziegeler 1999: 84–5). The extension in question has been recurrently addressed in the literature with a special focus on semantic domains such as temporariness (Comrie 1976; Smith 1983; Huddleston & Pullum et al. 2002), markedness (Smith 1991), vividness (Smith 1983), semantic shifts (Hirtle & Bégin 1991), waxing and waning cases (Huddleston & Pullum et al. 2002), tentativeness (Huddleston & Pullum et al. 2002), colloquialization, conventionalization and hedging (Mair 2012), cognitive construals of situations (Langacker 2002), and the persistent ongoing grammaticalization of the progressive is scrutinized separately within the class of statives (cf. Martínez-Vásquez 2018; Rautionaho & Fuchs 2021, among others). A notable example is the McDonald's slogan, *I'm loving it*, which is the focus of the latter scholar's paper. This example appears to reflect the contingency of the situation in Comrie's terms, rather than encoding non-obviousness or subjectivity, as suggested by De Wit et al. (2020: 502).

The present article thus argues that the temporariness inherent in the meaning of the progressive underlies its extended, but still aspectual, uses with stative verbs, habitual progressives, but also adversative meanings: a grammatical marker expressing temporariness focuses on the limited duration of a new (inchoative) situation of adversity (cf. also Ziegeler & Lenoble 2020: 256; Lenoble 2021: 11). The extension of the progressive to (semi-) modal constructions, such as BHT in British English, illustrates just how far the use of the progressive with statives has grammaticalized. The contrast with the normal state of affairs that the progressive generally indicates is undeniably a defining feature of BHT as well.

Table 2 summarizes some of the traits that seem to set BHT and have to apart. On the one hand, BHT appears to enhance the modal meaning of necessity with nuances of

	Functional category	Potential agent's control	Pragmatic effect	Affected temporal sphere
have to	dynamic/ deontic	+	neutral	Future-projecting
внт	dynamic	_	adversative	Reorientation to the reference time (generic)

Table 2. Summary of the main properties of have to and BHT

⁷ Ziegeler (2010: 60) also notes the dominance of adversative meanings in the early history of *have to*, which she attributes to an association with the modality of obligation alone (cf. Verstraete 2005).

temporariness and adversity. On the other hand, it incorporates the notion of inchoativity, transforming the future-oriented meanings associated with deontic *have to*, to focus instead on the modal necessity of the current situation. This reoriented obligation sense persists regardless of the subject's intention, indicating a state beyond their direct control.

RQ2. What triggered the emergence of BHT?

Building on the arguments made in the previous section, it can be concluded that BHT and have to differ not only in form but also in their semantic/pragmatic functions. This distinction follows the principle that there is no true equivalence within constructions, namely that 'each construction [in a construction] occupies a unique functional niche (be it at the semantic, pragmatic and/or social level)' (Leclercq & Morin 2023: 11), as if two constructions were semantically identical, their co-existence would lead to a 'level of redundancy that would be intolerable in any natural language' (Collins 2023: 8). The origins of BHT remain however unexplained, and more precisely what motivated the introduction of BHT in the English modal system.

Past studies on modality have shown that *have to* has been renewing the functions of the declining core modal *must* (cf. Krug 2000; Mair 2006, 2015; Collins 2009b; Leech *et al.* 2009; Leech 2013; Mair & Leech 2020, *inter alia*). The semi-modal has therefore gradually taken the functions that were previously typically associated with *must*, and specifically the expression of deontic modality. The gradual replacement of *must* with *have to* is likely to have triggered a reconfiguration of the modal *have to* in inner-circle varieties of English, leading to an acceleration of its grammaticalization. The historical reconstruction of the semi-modal in section 2 has shown that it has in fact grammaticalized from an original meaning of possession to dynamic and later deontic meanings, which, by definition, have future-projecting connotations. In this sense, it is possible to draw a parallel between the recruitment of *have to* for the expression of deontic meanings and the future tense in Latin. As Hopper & Traugott note (2003: 53), Latin used to have synthetic constructions that conveyed information about the person, the number, and the tense, including one construction for the future. This construction was, however, gradually replaced by a periphrastic future construction made of an infinitive alongside a conjugated form of the verb *habeo* 'to have' in the present tense, as in (24).

(24) Haec **habeo** cantare. these have-1sg:pres sing-INF 'I have these things to sing.' (Hopper & Traugott 2003: 53)

In a similar fashion to *have to*, before undergoing further grammaticalization, *habeo* served as a transitive verb, denoting possession or mere belonging. It would also fulfil future-projecting functions of obligation in certain contexts, possibly influenced by the Latin gerundive, which diachronically also used to convey a sense of obligation (Hopper & Traugott 2003: 53). Example (25) shows this possible double interpretation. Indeed, the fact of owning a house may actually involve the need for its maintenance in the relatively near future.

(25) Aedem *habuit* tuendam.
house had look:after-ger
'He had a house to look after'.
(c. 40 BC, Cicero, *Ver.* 11.1, 130, cited in Pinkster 1987: 208; Hopper & Traugott 2003: 53)

⁸ Not all linguists agree with this claim. For instance, Benveniste (1974) argues that the infinitive + *habēre* construction originally conveyed a sense of predestination, or 'what is to be', rather than obligation (cf. also Bybee *et al.* 1994: 261).

The future projection meanings became more prominent with time and contributed to the reinterpretation and reanalysis of the construction. This lies at the root of the future tense in Romance languages, as in the French form *je chant-e-r-ai* ('I will sing') that lost the original periphrastic properties of Latin (cf. also Gisborne 2017).

The grammaticalization of a verb denoting possession into a marker of future tense is not unique to Latin. As Heine & Kuteva (2002: 242–3) point out, *have*-type predicative possession is also used to indicate future tense in other languages, including Godié & Nyabo (cf. Marchese 1986). In Bulgarian, for instance, the verb *ima* functions both lexically and grammatically, as illustrated in examples (26) and (27).

- (26) Toj *ima* kniga. he have:3:sg:pres book 'he has a book'. (Heine & Kuteva 2002: 243)
- (27) Ima da xodja.
 have:3:sg:pres part go:IMPFV:1:sg:pres
 'I will go'. (Heine & Kuteva 2002: 243)

As discussed in section 2, much like Latin, the English have to progressed from a former lexical meaning of possession to a derived deontic meaning of necessity and obligation. Since, by definition, deontic modality has been considered to be strongly related to the realization of an event in the future, the future meaning remains pragmatically implied in the construction. This construction may undergo a further transformation, shifting from primarily expressing obligation to functioning as a proper future marker. The ongoing reanalysis of the construction could be intensified by the formal properties it exhibits. In English, the preposition to is commonly associated with purposive meanings, which can also carry future implications (cf. Haspelmath 1989). Notably, when these purposive meanings are bleached the notion of futurity becomes more salient (Hopper & Traugott 2003: 3). This pragmatic implicature leading to the 'presupposition of a future event' (Hilpert 2008: 109) has in fact also been identified as one of the factors contributing to the reanalysis of going to as a marker of futurity in English (Hopper & Traugott 2003: 3). The fact that the agent is moving on a path towards a goal enables its reinterpretation as a future tense (Bybee et al. 1994: 268) also leading to a pragmatic inference of prediction (cf. Budts & Petré 2016). Accordingly, the historical reinterpretation of have to driven by grammaticalization might follow the trajectory shown in (26) (cf. also Basile 2023b).

(28) (A) possession of a physical entity > (B) possession of a duty > (C) general dynamic necessity > (D) obligation > (E) future tense

Faced with the acceleration of the grammaticalization of *have to* strengthened by the renewal of the functions of *must*, the emergence of BHT might be explained as a systemic strategy to 'reinforce' (cf. Lehmann 2015) the declining dynamic functions of its counterpart *have to*, with a construction that is in fact unambiguously dynamic (C), and – at least in our datasets – never deontic (D). Yet it is essential to approach this argument with caution. The emergence of BHT is a relatively recent phenomenon, and fine-grained investigations based on the productivity of *have to* as a pure future marker bleached of much of its obligation meaning necessitate further attention in the years to come.

RQ3. Why is BHT more productive in British English than in postcolonial varieties of English?

A final question concerns the observed different distribution of the construction in British English compared with other varieties. Examples (17) and (18) above show that the emergence of BHT is recent and most likely subsequent to the colonization period of areas such as India, Singapore and Hong Kong. The lack of input containing BHT from British settlers in these areas at the time may thus account for the minimal production of BHT in Singapore English, Indian English and Hong Kong English today. This hypothesis follows the notion of 'negative retentionism'. This is a term introduced in Ziegeler (2024) essentially to explain the converse of what has been variously described in the literature as 'colonial lag' (see Marckwardt 1958; Trudgill 1999; Hundt 2009), 'retention' (usually of the positive kind) (Siemund 2004; Pietsch 2009) and 'feature retention' (Fuchs 2022). In the (positive) description of retentionism, it is the case that a feature which was once used in the history of the model lexifier language (in our case, colonial English), but has become obsolete in the grammar of the original lexifier, continues to be used in the contact variety until the present day. Examples include the Irish English medial perfect (e.g. Pietsch 2009), the auxiliary do in habitual aspect in Atlantic creoles (cf. Ihalainen 1991), Kortmann (2004), and the retention of an archaic conjunction in Indian English (Fuchs 2022), all of which have been argued to be also influenced by local substrate languages. In terms of grammaticalization, it may be argued that for one reason or another, the retained feature has grammaticalized further in the colonial lexifier language than in the contact varieties, where it stays frozen in time.

In the case of *negative* retentionism, there is a clear correlation shown between the frequency of a form in a particular variety of English, and the time at which it began to appear in *any* variety, so that the more recently it is reported as having emerged in an innercircle variety, the less frequently it is seen to be distributed across other, outer-circle varieties, as we can see with BHT as shown in figure 1 above. Negative retentionism suggests, then, that if a feature was not present in the input English varieties at the time of contact, it will lag behind in its later uptake in outer-circle varieties. The evidence for this has already been shown in Ziegeler *et al.* (2019) and Ziegeler (2024) in the case of the sentence-final additive adverb *either*, which appears with much less frequency in Singapore English than in British English. The infrequent use of the adverb was partly attributed to its infrequency in the ancestral, input dialects at the time of historical contact, when, although its use was not absent altogether, it was infrequent in the scope of negation.

While not linking her results with the phenomenon of retentionism at all, Hansen (2018) provides the most salient evidence for negative retention in the English modal domain. She refers to Mufwene's (1996, 2001) 'Founder Principle', in which the formation of a creole is ultimately associated with the input dialects of the lexifiers at the time of contact. The present approach also accords with this principle as an important factor explaining the differences in frequency of BHT, but with the additional proviso that features appearing in the source dialects later than the time of contact will be adopted more slowly in dialects distant from the varieties in which they evolved. Hansen's study of Singapore English, Indian English and Hong Kong English reveals that although the older necessity modals she studied, such as must and have to, showed little difference across the dialects, the more recently emerging ones such as have got to and need to were less frequent in postcolonial varieties than in British English, and, significantly, that their epistemic meanings were less grammaticalized than in British English as well, due to their more recent grammaticalization in the source variety. Her evidence points to a possible 'epicentral' approach to change across international varieties of a single language (discussed at greater length in Collins 2020, for example). But more important is the fact that it was grammaticalization stages that were subject to 'colonial lag', and that the pace of gradual diffusion of grammaticalizing items across spatial domains can be clearly measured in the gradualness of diachronic stages.

Negative retention regards Hansen's (2018) results as demonstrating the preservation of the actual *state* of the language system at contact time, and not simply a specific feature, so that what was absent at contact time will be also absent or less frequently attested at later times in the dialect's development.

6. Conclusion

This article has aimed to shed more light on a previously overlooked modal construction and its emergence in the English modal system. Several key findings have emerged in the analysis. BHT stands out due to its incorporation of the progressive aspect, which affects its modal meaning, emphasizing contingency, intensity and a marked lack of control over the situation. It often conveys a sense of external necessity, imposed upon the subject, who must comply despite reluctance or a desire to resist. In contrast, have to expresses a more neutral form of obligation, often leaving room for the subject's personal agency or choice. We have also shown that the progressive aspect in BHT introduces an element of inchoativity, signalling a transition or change in circumstances – often involving an undesirable or challenging situation. This reorients the temporal focus of obligation: whereas have to typically projects necessity into the future, BHT anchors it in the present, creating an immediate and ongoing sense of urgency. Crucially, these semantic features do not seem to be the result of a mere compositional process involving the progressive and have to. As mentioned in section 5, applying the progressive to other semi-modal constructions (which is itself rare in the data, cf. with need to) does not yield comparable readings of inchoativity, adversity, or contingency – underscoring the non-compositional nature of BHT.

A historical dimension has also been included in the study. We have argued that emergence of BHT may be linked to the accelerated grammaticalization of *have to*. Diachronically, *have to* has shifted from expressing possession to encompassing both dynamic and future-projecting deontic modal functions. This trajectory mirrors similar developments in other languages, such as Latin and French, where verbs initially signifying possession have transformed into future tense markers and gives food for thought to the destiny of English *have to* in the future.

The corpus investigation has also suggested that British English is the birthplace of this emerging construction, while other varieties of English are lagging behind in adopting it. This delay has been explained by the phenomenon of negative retentionism, which posits that because BHT emerged after the period of colonization, it was not present in the input varieties during the initial stages of language spread, resulting in limited use in these regions.

This research only scratches the surface of a complex linguistic phenomenon. BHT, being a relatively recent development, requires further investigation to fully understand its role and evolution in the English modal system. In fact, while this article provides a foundational understanding of BHT and its relationship to *have to*, there is still much to explore. Our study hopes to inspire future research into this neglected construction and its implications for the evolving English modal and progressive systems.

References

Basile, Carmelo Alessandro. 2023a. Necessity modal development in Singapore English: An investigation of substratist and contact-grammaticalisation approaches. *English World-Wide* 44(2), 276–302.

Basile, Carmelo Alessandro. 2023b. Modality in contact: Necessity and obligation in New Englishes. PhD dissertation, Université Paris Cité.

Basile, Carmelo Alessandro. 2024. Modality in contact: Necessity and obligation in New Englishes. Berlin: Mouton de

Benveniste, Émile. 1974. Problèmes de Linguistique Générale, vol. 2. Paris: Gallimard.

Brinton, Laurel J. 1991. The origin and development of quasimodal *have* to in English. Presented at the workshop on the origin and development of verbal paraphrases, 10th International Conference on Historical Linguistics (ICHL 10), Amsterdam, 16 August 1991. Available online at https://blogs.ubc.ca/laurelbrinton/on-line-papers/the-development-of-have-to/ (accessed 24 April 2025).

Brisard, Frank & Astrid De Wit. 2013. Modal uses of the English present progressive. In Marín-Arrese *et al.* (eds.), 201–20. BNC = *The British National Corpus.* 1995. Version 1.0. BNC Consortium/Oxford University Computing Services.

Budts, Sara & Peter Petré. 2016. Reading the intentions of *be going to*: On the subjectification of future markers. *Folia Linguistica Historica* 37, 1–32.

Bybee, Joan L. 1985. Morphology. A study of the relation between meaning and form. Amsterdam: John Benjamins.

Bybee, Joan L., Revere D. Perkins & William Pagliuca. 1994. *The evolution of grammar: Tense, aspect and modality in the languages of the world.* Chicago: University of Chicago Press.

Collins, Peter. 2009a. Modals and quasi-modals in English. Amsterdam: Rodopi.

Collins, Peter. 2009b. Modals and quasi-modals in World Englishes. World Englishes 28(3), 281–92.

Collins, Peter. 2020. Comment markers in world Englishes. World Englishes 41(2), 244-70.

Collins, Peter. 2023. Modals and quasi-modals in English world-wide. Journal of English Linguistics 51(3), 1–29.

Comrie, Bernard. 1976. Aspect. Cambridge: Cambridge University Press.

Davies, Mark. 2010. The Corpus of Historical American English (COHA). Available online at www.english-corpora.org/coha/ (accessed 24 April 2025).

Davies, Mark. 2013. Corpus of Global Web-Based English. Available online at www.english-corpora.org/glowbe/ (accessed 8 October 2024).

Davies, Mark & Robert Fuchs. 2015. Expanding horizons in the study of World Englishes with the 1.9- billion-word Global Web-based English corpus (GloWbE). English World-Wide 36(1), 1–28.

De Smet, Hendrik, Susanne Flach, Hans-Jürgen Diller & Jukka Tyrkkö. 2011. The Corpus of Late Modern English Texts, version 3.1. Available online at https://fedora.clarin-d.uni-saarland.de/clmet/clmet.html (accessed 24 April 2025).

De Wit, Astrid. 2017. The present perfective paradox across languages. Oxford: Oxford University Press.

De Wit, Astrid, Peter Petré & Frank Brisard. 2020. Standing out with the progressive. Journal of Linguistics 56(3), 479–514

Dekeyser, Xavier. 1998. The modal auxiliary ought: From 'possession' to 'obligation'. In Johan van der Auwera, Frank Durieux & Ludo Lejeune (eds.), English as a human language. To honor Louis Goossens, 109–19. Munich: Lincom Europa.

Denison, David. 1998. Syntax. In Suzanne Romaine (ed.), *The Cambridge history of the English language*, vol. IV: 1776–1997, 92–329. Cambridge: Cambridge University Press.

Diller, Hans-Jürgen, Hendrik De Smet & Jukka Tyrkkö. 2011. A European database of descriptors of English electronic texts. *The European English Messenger* 19, 21–35.

Fauconnier, Gilles & Mark Turner. 2002. The way we think: Conceptual blending and the mind's hidden complexities. New York: Basic Books.

Fischer, Olga. 1994. The development of quasi-auxiliaries in English and changes in word order. *Neophilologus* 78, 137–64.

Fischer, Olga. 1997. On the status of grammaticalisation and the diachronic dimension in explanation. *Transactions of the Philological Society* 95(2), 149–87.

Fuchs, Robert. 2022. Colonial lag or feature retention in postcolonial varieties of English. In Paula Rautionaho, Hanna Parviainen, Mark Kaunisto & Arja Nurmi (eds.), Social and regional variation in World Englishes: Local and global perspectives, 113–38. New York: Routledge.

Gisborne, Nikolas. 2017. Defaulting to the new Romance synthetic future. In Nikolas Gisborne & Andrew Hippisley (eds.), *Defaults in morphological theory*, 151–81. Oxford: Oxford University Press.

Gregersen, Sune. 2020. Early English modals: Form, function and analogy. Amsterdam: LOT, Netherlands Graduate School. Hansen, Beke. 2018. Corpus linguistics and sociolinguistics. A study of variation and change in the modal systems of World Englishes. Leiden: Brill.

Haspelmath, Martin. 1989. From purposive to infinitive – a universal path of grammaticalization. *Folia Linguistica Historica* 10(1–2), 287–310.

Heine, Bernd & Tania Kuteva. 2002. World lexicon of grammaticalization. Cambridge: Cambridge University Press.

Hilpert, Martin. 2008. Germanic future constructions: A usage-based approach to language change. Amsterdam: John Benjamins.

Hilpert, Martin, Ilse Depraetere & Bert Cappelle (eds.). 2021. Modality and Diachronic Construction Grammar. Amsterdam: John Benjamins.

Hirtle, Walter & Claude Bégin. 1991. Can the progressive express a state? Langues et Linguistique 17, 99–137.

Hopper, Paul J. & Elizabeth Closs Traugott. 2003. Grammaticalization, 2nd edn. Cambridge: Cambridge University Press.

Huddleston, Rodney & Geoffrey K. Pullum et al. 2002. The Cambridge grammar of the English language. Cambridge: Cambridge University Press.

Hundt, Marianne. 2009. Colonial lag, colonial innovation, or simply language change? In Gunther Rohdenburg & Julia Schluter (eds.), One language, two grammars? Differences between British and American English, 13–37, Cambridge: Cambridge University Press.

ICE-GB: International Corpus of English - Great Britain. http://ice-corpora.net/ice/ (accessed 24 April 2025).

Ihalainen, Ossi. 1991. Periphrastic do in affirmative sentences in the dialect of East Somerset. In Peter Trudgill & J. K. Chambers (eds.), Dialects of English: Studies in grammatical variation, 148–60. London: Longman.

Kachru, Braj B. 1986. The alchemy of English. Urbana: University of Illinois Press.

Kilgarriff, Adam, Vít Baisa, Jan Bušta, Miloš Jakubíček, Vojtěch Kovář, Jan Michelfeit, Pavel Rychlý & Vít Suchomel. 2014. The Sketch Engine: Ten years on. *Lexicography* 1, 7–36.

Kortmann, Bernd (ed.). 2004. Dialectology meets typology. Berlin: Mouton de Gruyter.

Krug, Manfred. 2000. Emerging English modals: A corpus-based study of grammaticalization. Berlin: Mouton de Gruyter. Langacker, Ronald W. 2002. Concept, image and symbol: The cognitive basis of grammar. Berlin: Mouton De Gruyter.

Łęcki, Andrzej M. 2010. Grammaticalisation paths of have in English. Frankfurt am Main: Peter Lang.

Leclercq, Benoît & Cameron Morin. 2023. No equivalence: A new principle of no synonymy. *Constructions* 15(1), 1–15. Leech, Geoffrey. 2013. Where have all the modals gone? An essay on the declining frequency of core modal auxiliaries in recent standard English. In Marín-Arrese *et al.* (eds.), 95–115.

Leech, Geoffrey, Marianne Hundt, Christian Mair & Nicholas Smith. 2009. Change in Contemporary English: A grammatical study. Cambridge: Cambridge University Press.

Lehmann, Christian. 2015. Thoughts on grammaticalization, 3rd edn. Berlin: Language Science Press.

Lenoble, Christophe. 2021. Stative progressives in Inner and Outer circle varieties of English. World Englishes 40(3), 318–32.

Lyons, John. 1995. Linguistic semantics: An introduction. Cambridge: Cambridge University Press.

Mair, Christian. 2006. Twentieth century English: History, variation and standardization. Cambridge: Cambridge University Press.

Mair, Christian. 2012. Progressive and continuous aspect. In Robert Binnick (ed.), *The Oxford handbook of tense and aspect*, 803–27. Oxford: Oxford University Press.

Mair, Christian. 2015. Cross-variety diachronic drifts and ephemeral regional contrasts. An analysis of modality in the extended Brown family of corpora and what it can tell us about the New Englishes. In Peter Collins (ed.), *Grammatical change in English world-wide*, 119–46. Amsterdam: John Benjamins.

Mair, Christian & Geoffrey Leech. 2020. Current changes in English syntax. In Bas Aarts, April McMahon & Lars Hinrichs (eds.), The handbook of English linguistics, 2nd edn, 249–76. Malden, MA: Wiley-Blackwell.

Marchese, Lynell. 1986. Tense/aspect and the development of auxiliaries in Kru languages. Arlington, TX: Summer Institute of Linguistics and University of Texas.

Marckwardt, Albert H. 1958. American English. New York: Oxford University Press.

Marín-Arrese, Juana I., Marta Carretero, Jorge Arús Hita & Johan van der Auwera (eds.). 2013. English modality, core, periphery, and evidentiality. Berlin: Mouton de Gruyter.

Martínez-Vásquez, Montserrat. 2018. I'm loving it! A corpus-based study of the progress of love. Journal of English Linquistics 46(2), 1–27.

Mitchell, Bruce. 1985. Old English syntax, vol. 1: Concord, the parts of speech, and the sentence. Oxford: Clarendon Press. Mufwene, Salikoko. 1996. The founder principle in creole genesis. Diachronica 13(1), 83–134.

Mufwene, Salikoko. 2001. The ecology of language evolution. Cambridge: Cambridge University Press.

Narrog, Heiko. 2012. Modality, subjectivity, and semantic change: A cross-linguistic perspective. Oxford: Oxford University Press.

OED = Oxford English Dictionary online. Oxford: Oxford University Press. www.oed.com (accessed 24 April 2025).

Palmer, Frank R. 1990. Modality and the English modals, 2nd edn. London: Routledge.

Pietsch, Lukas. 2009. Hiberno-English medial-object perfects reconsidered: A case of contact induced grammaticalization. Studies in Language 33(3), 528–68.

Pinkster, Harm. 1987. The strategy and chronology of the development of future and perfect tense auxiliaries in Latin. In Martin B. Harris & Paolo Ramat (eds.), *The historical development of auxiliaries*, 193–223. Berlin: Mouton de Gruyter.

Rautionaho, Paula & Robert Fuchs. 2021. Recent change in stative progressives: A collostructional investigation of British English in 1994 and 2014. *English Language and Linguistics* 25(1), 35–60.

Searle, John. 1983. Intentionality, an essay in the philosophy of mind. Cambridge: Cambridge University Press.

Siemund, Peter. 2004. Substrate, superstrate, and universals. Perfect constructions in Irish English. In Kortmann (ed.), 401–34.

- Smith, Carlota. S. 1983. A theory of aspectual choice. Language 59(3), 479-501.
- Smith, Carlota. S. 1991. The parameter of aspect. Dordrecht: Kluwer Academic.
- Sweetser, Eve E. 1990. From etymology to pragmatics: Metaphorical and cultural aspects of semantic structure. Cambridge: Cambridge University Press.
- Trudgill, Peter. 1999. A window on the past: 'Colonial lag' and New Zealand evidence for the phonology of nineteenth-century English. *American Speech* 74(3), 227–39.
- van der Auwera, Johan, Petar Kehayov & Alice Vittrant. 2009. Acquisitive modals. In Lotte Hogeweg, Helen de Hoop & Andrej Malchukow (eds.), *Cross-linguistic semantics of tense, aspect and modality*, 271–302. Amsterdam: John Benjamins.
- van der Gaaf, Willem. 1931. Beon and habban connected with an inflected infinitive. English Studies 13, 176-88.
- Verstraete, Jean-Christophe. 2005. Scalar quantity implicatures and the interpretation of modality. Problems in the deontic domain. *Journal of Pragmatics* 37(9), 1401–18.
- Visser, Fredericus Theodorus. 1969. An historical syntax of the English language, vol. 3, 1: Syntactical units with two verbs. Leiden: Brill.
- Ziegeler, Debra. 1999. Agentivity and the history of the English progressive. *Transactions of the Philological Society* 97, 53–101.
- Ziegeler, Debra. 2010. Semantic determinism and the grammaticalization of have to in English. Journal of Historical Pragmatics 11(1), 32–66.
- Ziegeler, Debra 2017. Historical replication in contact grammaticalisation. In Daniel Van Olmen, Hubert Cuyckens & Lobke Ghesquiere (eds.), Aspects of grammaticalization: (Inter)subjectification, analogy and unidirectionality, 311–52. Berlin: Mouton de Gruyter.
- Ziegeler, Debra. 2024. The influence of the lexifier: Beyond grammaticalization in Singapore English. Berlin: Mouton de Gruyter.
- Ziegeler, Debra & Christophe Lenoble. 2020. The stative progressive in Singapore English: A panchronic perspective. In Paloma Núñez-Pertejo, María-José López-Couso, Belén Méndez-Naya & Javier Pérez-Guerra (eds.), Crossing linguistic boundaries: Systemic, synchronic and diachronic variation in English, 239–66. London: Bloomsbury Academic.
- Ziegeler, Debra, Eric Mélac & Volker Gast. 2019. The rise of right-periphery either in English. Language Sciences 75, 15–34.

Cite this article: Basile, Carmelo Alessandro, Lenoble, Christophe and Ziegeler, Debra. 2025. On the rise of *be having* to in English: a cognitive-functional account. *English Language and Linguistics* 1–18. https://doi.org/10.1017/S1360674325100348