

Modals and Quasi-Modals of Obligation and Necessity in Indian and Canadian English

Carlos Soriano-Jiménez
University of Málaga

Abstract. This paper explores the differences of the distribution and use of the modals and quasi-modals which convey deontic and epistemic obligation and necessity in Canadian and Indian English. More precisely, *must* and *ought* to are compared to their counterparts and their semantically related quasi-modals *have got to* and *be supposed to*. The aim of this paper is to provide new insights into the patterns of distribution between these pairs of modals and quasi-modals and to outline some possible reasons for the existing differences. For this purpose, the online *Corpus of Global Web-Based English* has been employed (Davies, 2013).

Keywords: Modals, obligation, necessity, quasi-modals, Canadian English, Indian English.

1. Introduction

Modality is a grammatical category which refers “to the status of the proposition that describes the event” (Palmer, 2001, p. 1). Modals express modality, which encompasses a variety of different situations, for example, “possibility, necessity, ability, obligation, permission, and hypotheticality” (Collins, 2009, p. 11). There has not been a general agreement among linguists over which verbs should be classified as modals. Quirk and Greenbaum’s classification (1990, p. 39) includes all of the mostly accepted modals: *can*, *could*, *must*, *may*, *will*, *would*, *might*, *shall*, *should*, *ought to*, *need*, *dare* and *used to*, even though Collins and Hollo’s (2017, p. 87), for example, do not consider the last one to be a modal verb.

In terms of syntax, Present-Day English (henceforth PDE) modals behave differently from ordinary verbs. They never appear in the bare infinitive form, only in a finite form, and they are followed by the bare infinitive form of a verb. They do not change form to agree with the subject (Huddleston & Pullum, 2005, p. 39). Interestingly, double modal constructions were accepted in Middle English (for example, *shall may*) (Nagle, 1995, p. 209), but nowadays they appear (in most cases) in complementary distribution (Adger, 2003, p. 158). As for their position in the sentence, they can appear before some sentence-medial adverbs and sentential negation *not* (Heycock, 2018, p. 4).

Quasi-modals¹ include many semantic notions similar to those of modals. Even though there has been a long-standing debate among linguists over their characteristics, Collins (2009) indicates that there is a general consensus over their “suppletive roles” (p. 15). They substitute modals when there is no specific morphological or infinitival form for a specific modal. For example, the modal

¹ Collins (2009, p. 15) draws a distinction between “quasi-modals” and “semi-modals”, whereas Smith (2003) only employs the term “semi-modals” (p. 241). For the purpose of this study, the terms “semi-modals” and “quasi-modals” are used indistinguishably.

must does not morphologically inflect for the past tense form and *had to* can be used instead. Westney's criteria (1995, p. 11) for fixing certain complex verbs as quasi-modals (or "periphrastic", as he calls them) is more extensive. Firstly, he states that they should be semantically related to its corresponding central modal² (for example, the pair *must / have to*). Secondly, quasi-modals should have a different meaning from the meanings of each of their constituents (idiomaticity). The third criterion is grammaticalization, that is, they should be part of a distinct group which shares common semantic and syntactic features. However, quasi-modals do not hold a categorial status.

This paper explores modals and quasi-modals which convey deontic and epistemic obligation and necessity: *must*, *ought to* (modals), *have got to* and *be supposed to* (quasi-modals). Scholars generally agree that linguistic categorization of modals is divided into four main groups: epistemic, deontic,³ dynamic and evidential (Palmer, 2001, pp. 8-9; Portner, 2009, p. 133), although this study assumes, as Collins's does (2009), that epistemic modality encompasses evidential modality (p. 22). The examples below illustrate how the modal *must* and the quasi-modal *have got to* represent differently deontic, epistemic and dynamic necessity.

(1) Thomas *must* be in London now.

(2) Susan *must* arrive in time.

(3) The printer *has got to* have the drivers installed, otherwise it will not work.

In sentence (1), *must* has an epistemic flavour. Epistemic modality "relates to the speaker's knowledge concerning a situation" (Collins & Hollo, 2017, p. 88). In this example it can be considered that the speaker shows a deductive interpretation (e.g., "If Thomas left an hour ago, he must be in London now"). However, in the second sentence, the use of *must* should be considered an example of deontic modality, which is related to "some kind of external authority [...] who lays an obligation" (Palmer, 2001, p. 10), in this case, on Susan. Dynamic modality (3) expresses obligation or necessity intrinsically imposed by the individual or subject. It is needless to say that all modals and quasi-modals from this study represent deontic, epistemic and even dynamic meanings in varying degrees and that there are strong regional differences. Analyzing them is beyond the scope of this study and little research has been conducted on this issue, being perhaps Collins' study (2009, p. 37) of American, British and Australian English the most comprehensive one.

A much more significant amount of scientific work has shed light on the broad differences in terms of the distribution of modals and quasi-modals in the different varieties of English (Collins, 2013, p. 155; Leech, 2013, p. 95, for example). Even though, according to Quirk and Greenbaum (1990, p. 4), there are five different types of English varieties, we will only focus on the regional

² The distinction between "central" and "marginal" modals is done by Quirk and Greenbaum (1990, p. 39). The verbs *will*, *would*, *can*, *could*, *must*, *shall*, *should*, *might* and *may* are described as "central modals", whereas *need*, *ought to*, *dare* and *used to* are "marginal modals".

³ Deontic modality is also referred as "root modality" by Coates (1983, p. 10).

varieties, which are also commonly referred to as “dialects”. Despite the fact that English is spoken in more than a hundred countries (Schneider, 2011, p. 2), it is not the mother tongue in all of them. English is the second language (L2) in many others. In countries where “English has little or no official function” (Jenkins, 2009, p. 4), second language speakers use English as a Foreign Language (EFL). In this case, English is not an institutionalized second language. Thus, one of the first classifications which can be made of all the English varieties is in terms of whether they are used as native, second or foreign language (Jenkins, 2009, p. 2).

This paper examines the differences with respect to the distribution and use of the modals (*must* and *ought to*) and quasi-modals (*have got to* and *be supposed to*) of obligation and necessity in Canadian and Indian English through a corpus-based study using the *Corpus of Global Web-Based English*. Canadian and Indian English are two varieties of the World Englishes which are “localized and indigenized” (Schneider, 2011, p. 2) varieties of English. As the British Empire sprawled in the seventeenth century and later, different varieties slowly emerged in the Commonwealth colonies, which were influenced by their unique cultures and the indigenous tribes and immigrants (Crystal, 2018, pp. 101, 107). The choice of these two varieties, which is based in the theoretical framework of Kachru’s Three Circles of English (2009, p. 569), is explained in the next section.

2. Literature review

The World Englishes have been conceptualized differently by scholars. One of the dominant models in the literature which groups the English varieties has been Kachru’s Three Circles of English, i.e., the Inner Circle, the Outer Circle and the Expanding Circle (2009, p. 569). These circles show “(1) the *types of spread* of English, (2) the *patterns of acquisition*, and (3) the *functional domains* in which English is used internationally” (Bolton, 2006, p. 292, original emphasis). They indirectly refer to two diasporas widely discussed in the literature which took place from the seventeenth century onwards. In the first diaspora, there was a migration of mother-tongue speakers of the British Isles to North America and Australia (Jenkins, 2009, p. 6). Countries where English is the native language belong to the Inner Circle. They are the United Kingdom, Ireland, Canada, Australia, New Zealand and the United States (Crystal, 2018, p. 113). For Kachru, the Inner Circle can be described as the “trunk of the English language tree” (2020, p. 447). In the second diaspora, which gave birth to the so-called “New Englishes”, large territories of Asia and Africa were colonized. The Outer Circle includes most of the countries of South Asia, South-East Asia, South Pacific, all the countries from the former colonial Africa and South Africa. India, Singapore, Ghana, Kenya are examples for each of these subregions. In terms of population, “the users of English in the Outer and Expanding Circles outnumber the users of the Inner Circle” (Kachru, 2020, p. 453).

The number of English speakers is more difficult to determine in the Expanding Circle. Unlike in the Inner and Outer Circles, there is no strong correspondence between the English speakers and the total population of the countries that conform it. The Expanding Circle involves countries where English has “no special status in their language policy” (Crystal, 2018, p. 113), but English

is the most important foreign language. Examples include China and Thailand (Kachru, 2009, p. 569).

Section 2.1 describes what has been written about the use of modals in Canadian and Indian English, which belong to the Inner and Outer Circle, respectively.

2.1. Changes in modals and semi-modals in Canadian and Indian English

There is a consensus among scholars that the frequency of central English modal verbs is declining (Leech, 2011, p. 547; Leech, 2013, p. 95; Nokkonen, 2014, p. 63). Millar's study (2009) of modals in the *TIME Magazine Corpus of American English* is perhaps the dissenting voice, as he argues that the frequency of the modal verbs of necessity and obligation *must* and *should* is decreasing, but not that of *may*, *can* and *could*, which express ability or permission (p. 215).

Scholars have hypothesized about the possible reasons of this decrease. One of them might be the acceptance of grammaticalization among speakers. Grammaticalization can be defined as a process whereby a “periphrastic lexical unit is transformed into a lexical one, and typically involves syntactic simplification, phonological weakening and semantic bleaching and generalization” (Collins, 2009, p. 18). This leads to lexical expressions of modality. Colloquialization is argued to be another reason for this decline. This process is the spread of linguistic speech features to other registers (Collins, 2013, p. 155). In turn, colloquialism might be viewed as a wider movement of the democratization of language. Smith (2003, p. 253) claims that this stylistic change in which expressions of authority are less frequent in the discourse might explain the decrease in frequency of the modal of obligation *must*. Fairclough (1992) links this removal of “overt power markers” (p. 203) with the perceived rise of informal discourse. Regarding this issue, he finds that the boundary between spoken and written texts is becoming more blurred, in the sense that written discourse is being influenced by spoken discourse.

The decline in frequency of modals has been different in Canadian and Indian English. Modals of obligation and necessity (*must*, *should*, *ought to*, *need*) have undergone a dramatic change in the past years in Canadian English. Tagliamonte and D'Arcy's study (2007, p. 82) based on the 1.5-million-word corpus of the *Toronto English Archive* indicates that *must* has lost ground to the semi-modals such as *have got to* and *have to*. Even though this decline has been observed in most of the Inner Circle varieties, it has not been studied in so much depth in Outer Circle varieties.

As for Indian English, these changes seem to be less noticeable. Loureiro-Porto (2019, p. 122) contends that the evidence is conclusive: if we assume that *must* is being currently replaced by semi-modals such as *have got to*, *have to*, *need to* and *want to*, the rate of replacement in Indian English is the slowest compared to other varieties of the Outer Circle (Hong Kong English, Singapore English and Philippine English). She also confirms that semi-modals are less grammaticalized in Indian English than in British English and Hong Kong English (2016, p. 143). Collins' cross-varietal study (2013, p. 161), where he examines the distribution of quasi-modals both in varieties of the Inner Circle (British, American, Australian and New Zealand Englishes) and varieties of the

Outer Circle (Philippines, Singapore, Kenyan, Indian and Hong Kong Englishes), indicates that the frequency of *have got to* in many Outer Circle varieties doubles the frequency in Indian English (the data of this study was obtained from the *International Corpus of English*, the *Barbara Corpus of Spoken American English* and the *Frown Corpus*). Loureiro-Porto (2016) opposes this viewpoint and states that “*have got to* [...] is too infrequent in the OC [Outer Circle] varieties to draw any firm conclusion” (p. 167, original emphasis).

Many linguists have proposed different theories to explain the reasons behind the cross-varietal differences. Collins (2013, p. 156) considers that these differences have been shaped by socio-historical aspects and extralinguistic factors. He draws upon Schneider’s Dynamic Model for explaining how English varieties have evolved differently into five stages: (1) foundation, (2) exonormative stabilization, (3) nativization, (4) endonormative stabilization, and (5) differentiation (Schneider 2007, p. 56). Canadian English has undergone all these stages and is currently in phase 5. Indian English, by contrast, is still in phase 3, although Schneider argues that it could be progressing to phase 4. However, in order to reach phase 5, as Schneider (2007) puts it, English must be “a carrier of [...] a national identity” and the language is not “accessible to a major portion of society” in India (p. 171). Historical factors also have a significant influence. During India’s colonization, the main objective of the colonial power was to ensure that the members of the Indian political system spoke English, but not the rest of the Indian citizens in the lower strata of society. Schneider (2011) has noted that, as a result, its use also has political connotations, as it is preferred by the social elites (p. 151). This process did not occur in Canada.

2.2. Modals and quasi-modals under study

The modals and semi-modals of necessity and obligation can be further divided into two large groups depending on their modal strength: strong forms such as *must*, *have to*, *have got to*, *need*, *need to*, *be bound to* and *be to*; and the medium strength forms *should*, *ought to*, *be supposed to* and *had better* (Collins, 2009, p. 33). Within the vast different types of meanings that modals and semi-modals convey, this paper studies two pairs which express strong forms of necessity and obligation: *must* and its counterpart *have got to* and the medium strength forms *ought to* and *be supposed to*. This section provides a general picture of the research done so far on these modals and quasi-modals.

There are minor semantic differences between *must* and *have got to*. *Must* is a central modal which expresses obligation and logical necessity (Quirk & Greenbaum, 1990, pp. 61-62). In Mair and Leech’s analysis (2006) of four reference corpora (*Brown*, *Frown*, *Lancaster-Oslo-Bergen* and *Freiburg-Lancaster-Oslo-Bergen Corpus*), they show that there has been a decline of 29% and 34% in the use of *must* in British and American English, respectively (p. 327). Leech (2013) corroborates their viewpoint and states that “the canonical core modal *must* is less common than [...] *have got to*” (p. 111, original emphasis). *Must* has been discussed in-depth in the literature, whereas *have got to* has not received much individual treatment (only Coates, 1983, p. 52). The most noticeable semantic difference perhaps would be the fact that *must* is not used when there is an external necessity (Palmer, 1990, p. 116). *Have got to* is rarely

used in formal contexts and preferred in conversational English (Palmer, 1990, p. 114; Collins, 2009, p. 68) perhaps due to the “censure of *got* by prescriptivists [...] throughout the IC [Inner Circle], and variably across the OC [Outer Circle] Englishes” (Collins, 2013, p. 164, original emphasis). In the *Longman Corpus of Spoken American English* the difference is even greater, being *have got to* ten times more frequent than *must* (Mair & Leech, 2006, p. 328).

Have got to and *have to* are sometimes analyzed together (Westney, 1995, p. 103), but this paper makes the case that they should be treated separately. Despite their semantic similarities, *have got to* and *have to* differ both syntactically and in terms of style. *Have got to* shares some of the common characteristics of all modals, whereas *have to* behaves as a lexico-modal, in the sense, for instance, that it can occur with modals (*He may have to eat tomorrow* / **He may have got to eat tomorrow*) and that it can appear in finite forms.

Ought to is a marginal modal which does not resemble the rest of the modals and quasi-modals mentioned so far. This is mainly because it is a medium-strength modal of obligation and necessity which is more closely associated with *should* (Palmer, 1990, p. 122; Collins, 2009, p. 52). It is quite striking that the frequency of *ought to* is falling rapidly in PDE if compared to the central modal *should*. Harris’ study (1986) sheds some light on the reasons why *have to* has risen in popularity and *ought to* has not. He states that one of the causes of the decline is that *ought to* is usually constructed with the *to*-infinitive (for example, *you ought to do as the teacher says*) and has not evolved to share some of the syntactic characteristics of *have to*, that is, to become a lexico-modal. Even though some varieties have attempted to “turn *ought to* into a main verb [...] such structures have not been admitted as standard on either side of the Atlantic” (p. 355, original emphasis). *Be supposed to* and *ought to* have very similar meanings, as they both convey objective obligation and necessity which arise from an external source (Collins, 2009, p. 81). Recent studies suggest that the use of *be supposed to* is on the rise (+6.3% in British and American English) (Mair & Leech, 2006, p. 328), and this increase might be in detriment of *ought to*.

3. Methodology

One of the main aims of this study is to examine the difference between the use of modals and quasi-modals of necessity and obligation in two types of English varieties: on the one hand, a variety spoken in a specific country where English is the native language of anglophone citizens, and on the other hand, a variety from a country where English is not the mother tongue of their citizens. Following the taxonomy of Kachru’s Three Circles of English (2009, p. 569), firstly, Canadian English has been selected as representative of a variety of the Inner Circle.

Canadian English, being part of the Inner Circle, shows many similarities with American English, to a point where in some cases it seems that Canadian English and American English are indistinguishable. In terms of vocabulary, Canadian English is heavily influenced by French as well (Crystal, 2018, p. 101). Even though, as referred before, Canadian English belongs to the Inner Circle, this does not mean that other languages are not spoken in Canada. In fact, “monolingual English speakers amount to only 56% of the Canadian population” (Dollinger,

2020, p. 52). For example, French is the official language in the region of Quebec in Canada. Some might argue, therefore, that the choice of Canadian English over other varieties which compose the Inner Circle can be quite debatable. However, only 2.7% of the population speaks the second official language outside Quebec (Dollinger, 2020, p. 52). Canadian English shares many characteristics with British English and American English due to the strong links that it retains from the former colonial power and the large border that Canada shares with the United States. Thus, it is safe to conclude that Canadian English serves as a good example of an Inner Circle variety.

The Indian English variety has been chosen so as to examine how modals and quasi-modals behave in a variety of the Outer Circle. Both Canada and India were colonized by the British Empire. However, the English language is perceived quite differently in India due to its political and social connotations (Schneider, 2007, p. 167). Its use is restricted to the government, the Judiciary and utilitarian or official domains (Schneider, 2007, p. 161).

The data collected comes mainly from the online *Corpus of Global Web-Based English* (GloWbE hereafter) compiled by Davies (2013). The main reason for the choice of this corpus is its free access and the vast number of words that it includes from websites, webpages and blogs, which amounts to 1.9 billion words from 1.8 million web pages. The chart below indicates the figures of this corpus for the varieties of this study (Davies & Fuchs, 2015, p. 18):

| Country | Websites | Webpages | Words |
|---------|----------|----------|-------------|
| Canada | 33,776 | 135,692 | 134,765,381 |
| India | 18,618 | 113,765 | 96,430,888 |

Table 1. Size of GloWbE.

Some of the functions available for searching are collocates, chart and keyword-in-context display (KWIC). The chart display has been used for collecting information about quantitative distribution of the modals and quasi-modals under study. The tables in Section 4 display the raw frequency of specific words, their normalized frequencies and the total number of words from the corpus. It is crucial to note that only taking into consideration the raw frequency will not provide an accurate analysis of the information because we are working with corpora of different sizes (Canada: 134,765,381 words; India: 96,430,888 words). GloWbE normalizes the frequency by dividing the raw frequency by the corpus size and multiplying it by 1,000,000. This study compares the instances of every modal and quasi-modal per million words.

GloWbE allows linguists not only to examine the regional distribution of modals and quasi-modals, but also to extract data of their distribution in terms of text types. Unfortunately, the range of analysis is quite limited (the corpus is only classified between blogs or general websites), but it can still provide some meaningful information. There are some differences in terms of register between both of them. The blogs, which make up 60% of the corpus, tend to have more informal language (Davies & Fuchs, 2015, p. 2), whereas general websites include other types of texts such as magazines or newspapers.

4. Analysis of results

This section explores the distribution of the modal verbs *must*, *ought to* and the quasi-modals *have got to* and *be supposed to* in Canadian and Indian English. The figures represented in the Tables 2 to 5 comprehend the raw frequency, the total number of words that comprise the corpus of each variety and the normalized frequency of the aforementioned modals and quasi-modals. The illustrations present the distribution of the modals and quasi-modals studied in general websites and blogs.

4.1. *Must vs. have got to*

The central meaning of *must* is deontic necessity, as shown in examples (4) and (5) below:

- (4) “Faculty *must* submit grades for courses with final exams five calendar days after exam date” (Canadian English, GloWbE, emphasis added).
- (5) “Another point is that if parents are going to convey Vedic culture and Dharma to their children, then the parent also *must* know what to say and how to explain things properly to them” (Indian English, GloWbE, emphasis added).

Epistemic *must*, which refers to what Huddleston and Pullum (2002) call “pragmatic weakening” (p. 181) is less common. In this case, *must* has a more subjective meaning which depends on the speaker’s attitude or confidence.

Have got to and *must* are semantically alike. They mainly express deontic necessity, as illustrated in examples (6) and (7):

- (6) “We *have got to* be better than that as a unit” (Canadian English, GloWbE, emphasis added).
- (7) “We’ve *got to* abandon the now universal, but originally Western, ethos of economic growth” (Indian English, GloWbE, emphasis added).

There are no cases in the data analyzed where *have got to* is used in the preterite form. This confirms Westney’s claim (1995, p. 148) that only *have to* and not *have got to* can be used with a past situation, as explained in Section 2.2.

The central modal is the most popular choice for expressing necessity and obligation in Canadian English (608.44 instances per 1,000,000 words over 586.36 per million words in Indian English), as shown in Table 2.

| | Canadian English | Indian English |
|---|------------------|----------------|
| Raw frequency | 81,997 | 56,543 |
| Number of words | 134,765,381 | 96,430,888 |
| Normalized frequency per million words | 608.44 | 586.36 |

Table 2. Frequencies of *must*.

As Table 3 illustrates, frequencies of *have got to* are higher in Indian English than in Canadian English. Indian English portrays 2.92 instances per every million words, whereas in Canadian English there are only 1.70 per 1,000,000 words.

| | Canadian English | Indian English |
|---|------------------|----------------|
| Raw frequency | 229 | 282 |
| Number of words | 134,765,381 | 96,430,888 |
| Normalized frequency per million words | 1.70 | 2.92 |

Table 3. Frequencies of *have got to*.

Figure 1 shows the dominance of *must* in general websites over blogs, both in Indian and Canadian English. Interestingly, there is a higher incidence of *must* in Indian informal blogs in comparison with the occurrences of this modal in Canadian blogs.

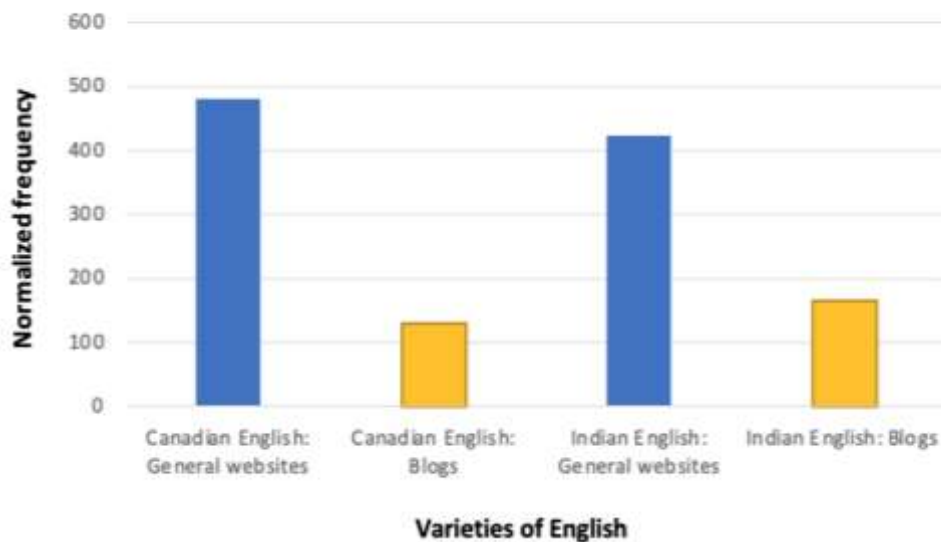


Figure 1. Distribution of *must* by text type (normalized frequency).

There seems to be a recognizable pattern in terms of the distribution of *must* and *ought to* by text type. *Have got to* also occurs more frequently in general websites than in blogs in both Indian and Canadian English, although the difference is more noticeable in Indian English, as Figure 2 demonstrates below.

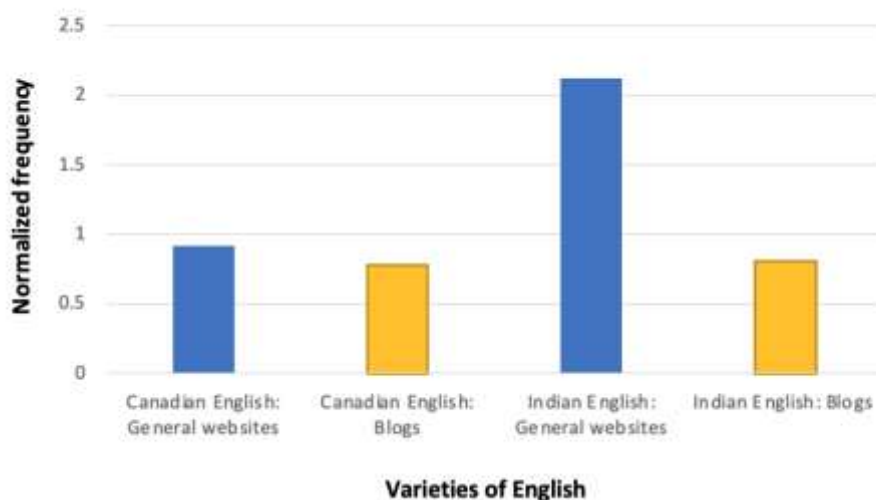


Figure 2. Distribution of *have got to* by text type (normalized frequency).

Have got to appears frequently in the corpora in its contracted form, as shown in example 7. This quasi-modal has been associated with the process of colloquialization. Collins (2013, p. 156) argues that colloquialism (see Section 2.1.) might be a significant factor for the rise of the frequency of quasi-modals, whereas Leech (2013, p. 108) believes that it does not explain the fall of the frequency of modals. Even though Internet language might be closer to spoken English and the Internet is considered a “mixed medium” (Crystal, 2011, p. 19), the data show that there is no evidence to prove that *have got to* is used more in informal contexts (blogs).

4.2. *Ought to* and *be supposed to*

As the samples from the corpora below show and as has been mentioned in Section 2.2, *ought to* is a marginal modal and should be classified as representative of “medium modality” in Huddleston and Pullum’s modal strength continuum (2002, p. 177). There are some instances where *ought to* expresses epistemic meanings, but they are scarce.

- (8) “Arbitration over when the school bell *ought to* ring brings “clock-punching” to a whole new level of absurdity” (Canadian English, GloWbE, emphasis added).
- (9) “A modern C/C++ IDE *ought to* have deep integration to popular version control systems” (Indian English, GloWbE, emphasis added).

The main meanings of *be supposed to* are either deontic or epistemic. Example (11) expresses epistemic modality as it is assumed that someone has done something (“it is thought that”), whereas example (10) could be interpreted to

have a deontic meaning, in the sense that someone is required or is under the obligation to do something.

- (10) “Also someone please tell Zoie Palmer her character *is supposed to* like women” (Canadian English, GloWbE, emphasis added).
- (11) “The tree *is supposed to* have been planted by either Hyder Ali or his son Tipu Sultan” (Indian English, GloWbE, emphasis added).

In this study, we have excluded some searches in GloWbE. Unlike other modal verbs, *ought to* is used with the *to*-infinitive and not with the bare infinitive (Harris, 1986, p. 347). One of the reasons why our GloWbE search has been *ought* instead of *ought to* is due to the fact that we must take into account that the uncontracted negative and contracted negative of this modal verb are *ought not to* and *oughtn't to*, respectively (for example: “It was my own fault, and I *ought not to* grumble” [Canadian English, GloWbE, emphasis added]). *Be supposed* gave some results which did not express modal meaning, as illustrated in the following example: “But this does not mean, as might logically *be supposed*, that they have a right to veto treatment that is in their best interests” (Canadian English, GloWbE) and therefore this search has been omitted.

The figures presented in Table 4 indicate that Canadian English shows a dispreference for *ought to* in comparison to Indian English. India has 31.20 instances per every million words, whereas Canada has 26.73 examples per 1,000,000 words. Collins’s opinion (2009) that it is “premature” to think that *ought to* is “moribund” (p. 56) is shared by Coates (1983, p. 70).

| | Canadian English | Indian English |
|---|------------------|----------------|
| Raw frequency | 3,602 | 3,009 |
| Number of words | 134,765,381 | 96,430,888 |
| Normalized frequency per million words | 26.73 | 31.20 |

Table 4. Frequencies of *ought to*.

Table 5 shows that, in quantitative terms, *be supposed to* is slightly more common in Canadian English than in Indian English. In addition, the data for the distribution of *be supposed to* and *ought to* suggest that the latter seems to be the preferred option in both varieties (see Tables 4 and 5).

| | Canadian English | Indian English |
|---|------------------|----------------|
| Raw frequency | 23 | 32 |
| Number of words | 134,765,381 | 96,430,888 |
| Normalized frequency per million words | 0.17 | 0.33 |

Table 5. Frequencies of *be supposed to* (*supposed to* preceded by all forms of the verb *be*).

The data by text type of *ought to* illustrated in Figure 3 indicate the predominance of *ought to* in general websites over blogs in both Canadian and Indian English.

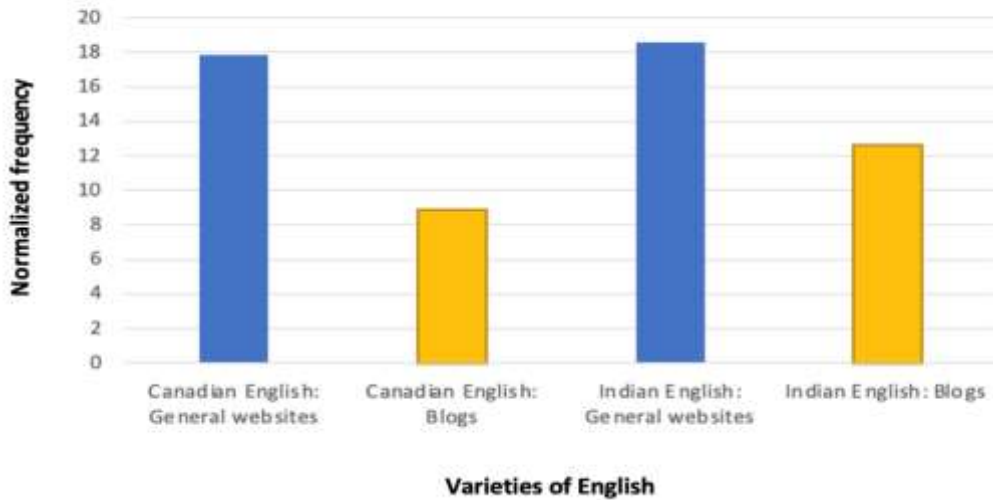


Figure 3. Distribution of *ought to* by text type (normalized frequency).

Despite the fact that the number of instances of *ought to* is higher in Indian English blogs than in Canadian English blogs (there is an 8% difference), *ought to* is more commonly used in general websites than in personal blogs in both varieties by a large difference.

The same distributional pattern exhibited in Figure 3 can be observed in Figure 4, even though the normalized frequency of *be supposed to* across all varieties and text types is smaller than that of *ought to*.

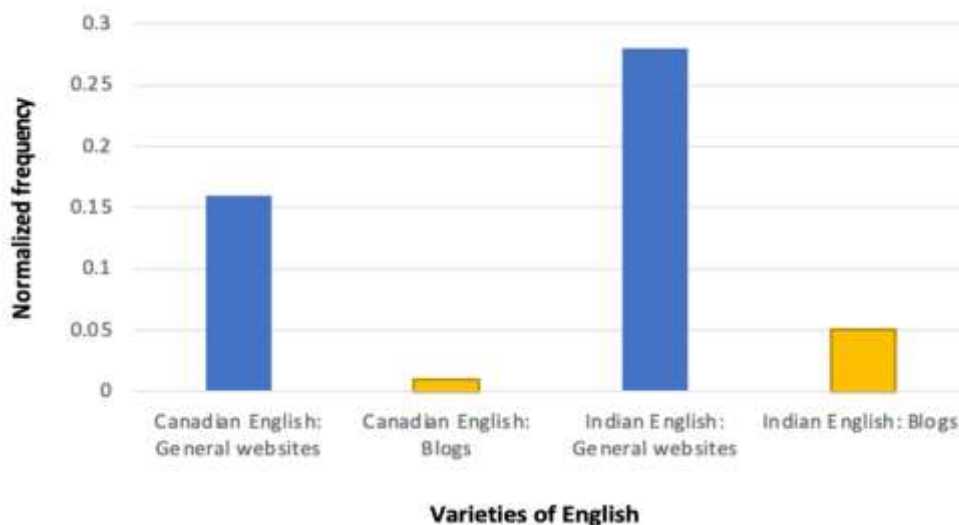


Figure 4. Distribution of *be supposed to* by text type (normalized frequency).

Collins (2009) has pointed out that the increase in the use of *be supposed to* “may well be [...] at the expense of *ought to*” (p. 80, original emphasis). However, according to the analysis of the results obtained in Figures 3 and 4, it seems that the use of this lexico-modal is marginal in both varieties.

5. Conclusions

The present paper has studied the frequency and distribution of modals *must* and *ought to* and quasi-modals *have got to* and *be supposed to* of deontic and epistemic obligation and necessity. They have been compared in a variety of Inner Circle (Canadian English) and in one of the Outer Circle (Indian English). Several conclusions can be outlined.

Firstly, it has been revealed that, as a general rule, the semi-modals studied tend to be more frequently employed in Indian English than in Canadian English. This fact does not seem to confirm the hypothesis exposed by Collins (2013, p. 166), who associates the higher frequency of semi-modals with language evolution. If prescriptivism has reduced the influence of colloquialism in postcolonial Indian English, the results show quite the opposite. In fact, Canadian English, which is in the ultimate phase of the evolutionary phases of the Dynamic Model proposed by Schneider (2007, p. 56), is, with regards to modals and semi-modals, more conservative than Indian English.

If we assume that blogs include texts written in less formal English, in terms of style and register, the data of the distribution of modals and quasi-modals in terms of text types have evinced a clear preference of language users for the modals under consideration in more formal general websites. This seems to tie in with Fairclough’s argument (1992, p. 205) that the wider movement of the democratization of discourse has led to written texts simulating spoken discourse,

yet the semi-modals studied tend to be less used in blogs across the two varieties (in a smaller degree), so the results of this study are still far from being conclusive regarding this question.

Speakers from both varieties favour the modals *must* and *ought to* for expressing medium and strong obligation and necessity if we compare their frequency with the rest of quasi-modals. It is worth mentioning that this study is not diachronic and the process of the decline of the use of modals as expounded by Leech (2013, p. 95), and Mair and Leech (2006, p. 326) cannot be observed. In addition, the data of this study are only from online resources, whereas theirs have been drawn from conversational corpora as well. These two factors alone are relevant for explaining how colloquialism might be less noticeable in written corpora and why the results seem to be contradictory. For instance, as it has been mentioned before, *have got to* is not frequent outside conversational English and therefore it is difficult to determine in a synchronic study whether the frequency of this quasi-modal will increase in the future.

The scope of this study is limited, in terms of the varieties chosen (only two, each of them being representative of an Inner and Outer Circle variety) and the modals and semi-modal verbs selected. The extent of analysis can be broadened by focusing on the lexico-modal *have to* and its relationship with the central modal *must*. This modal has received a lot of attention in the literature but continues to be largely unexplored in Asian varieties. What remains clear, at least from the findings of these online corpora, is that, in both Indian and Canadian English *have got to*, and especially, *be supposed to* cannot rival the modals *must* and *ought to*.

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