

The Modal and Quasi-Modal Verbs of Obligation and Necessity in Philippine and Singapore English

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Tässä pro gradu -tutkielmassa tarkastellaan Filippiinien ja Singaporen englannin modaalisia apuverbejä. Keskeiseksi kysymykseksi nousee amerikan- ja brittienglannin vaikutus kyseisiin varieteetteihin, sillä englannin kieli on päätenyt viralliseksi kieleksi näihin Kaakkois-Aasian valtioihin yksinomaan siirtomaavallan vaikutuksesta – Filippiineille Yhdysvaltojen ja Singaporen Iso-Britannian toimesta. Tutkimuksen kohteena ovat verbit *must*, *should*, *need*, *have to*, *have got to*, *need to*, *be supposed to*, *ought to* ja *had better*.

Tutkielmassa käytetään viittä eri korpusta: Filippiinien, Singaporen ja Iso-Britannian englantia tutkitaan kutakin *The International Corpus of English* -korpusten avulla. Nämä korpuksot sisältävät sekä puhuttua että kirjoitettua kieltä kultakin alueelta. Amerikanenglannin korpuksia on kaksi, *The Santa Barbara Corpus of Spoken American English*, joka koostuu puhutusta kielestä, sekä *The Freiburg-Brown Corpus of American English*, joka koostuu puolestaan kirjoitetusta amerikanenglannista.

Pääpaino on verbien deonttisen modaalisuuden frekvenssillä, mutta episteeminen modaalisuus otetaan myös huomioon niiden verbien kohdalla, joilla on mahdollista ilmaista episteemisiä lauseita. Episteeminen modaalisuus osoittautuu huomattavasti harvinaisemmaksi kuin deonttinen modaalisuus muiden verbien paitsi *must* kohdalla. Huomioon otetaan myös verbin aikamuodon vaikutus frekvenssiin, sekä subjektin sanaluokka.

Tutkielmassa osoitetaan, että kyseisistä verbeistä eniten käytetyt ovat kaikissa tutkituissa varieteeteissa *have to*, *should* ja *must*. Myös verbeillä *need to* ja *supposed to* on suhteellisen korkea frekvenssi. Mielenkiintoisimmaksi nousee verbien runsas käyttö Filippiinien ja Singaporen englannissa verrattuna amerikan- ja brittienglantiin. Tutkielmassa ehdotetaan, että syynä verbien korkeaan frekvenssiin Kaakkois-Aasiassa on aasialaisia kulttuureja leimaava hierarkia ja auktoriteettien totteleminen, joiden vuoksi velvollisuutta ilmaisevien verbien käyttö on sosiaalisesti hyväksyttävämpää.

Avainsanat: apuverbi, Filippiinit, modaalisuus, korpuslingvistiikka, Singapore

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1. Introduction

The influence and power of the English language is unquestionable. It is extensive, and it is continuously extending its functions and its role as an international lingua franca as well as a national, regional and local language. From its first spread into new areas, such as Wales, Scotland, Ireland, The United States, Australia, New Zealand and South Africa, English has sought and found new ground in East Africa, India, Sri Lanka, Jamaica, Fiji, and the South-East Asian countries of the Philippines and Singapore. Despite its indisputable economic and international value, the choice of English as the official language has been criticised of destroying the national identity provided by a native language in many of the above mentioned countries.

This study focuses on the English spoken in the Philippines (PhiE) and Singapore (SinE). English was introduced to the inhabitants of both of these countries through the medium of education. This choice was motivated by the urge to integrate the Philippines and Singapore into the western world and international markets, but it has later been criticised for deteriorating the culture of the native languages of these countries.

PhiE and SinE have developed into their own varieties on the basis of American (AmE) and British English (BrE), respectively. The Philippines became the first and only colony of the United States in 1898, while Singapore was colonised by Britain in 1819. Both countries are now independent and use English as one of their official languages. The introduction of English to the areas was not an easy task, however, as the people of both countries speak several other languages. It can therefore be assumed that the “new” Englishes have not only retained some features of the original Englishes, but that they have also developed new patterns of use. These patterns are of

interest, as the use of PhiE and SinE has been studied fairly little compared to their donor languages.



Map 1. The Philippines, Singapore and their neighbouring countries
(Relief Web 1996)

This study aims to examine the use of PhiE and SinE through modal and quasi-modal verbs, or more precisely, those of obligation and necessity. The modal and quasi-modal verbs of obligation and necessity include such verbs as *must*, *have to*, *should*, *ought to*, *need*, *had better* etc, and they are widely used in both varieties. The study of these verbs not only offers us interesting information on how English has been modified in South-East Asia, but also on the power relationships in these two cultures: the use of a modal of obligation entails authority over the recipient, and the choice of a certain verb over another has its consequences. Some verbs of obligation are stronger and more precise than others, and it is therefore possible to make tentative and preliminary deductions on what sort of obliging is acceptable in a certain

culture on the basis of the use of these verbs. To conduct a thorough investigation, the following research questions will be answered:

1. How are the auxiliary verbs of obligation and necessity used in PhiE and SinE?
2. Do these uses differ from those of AmE and BrE?
3. If there are differences in the uses, what are they and how can they be explained?

The linguistic data are collected from five corpora – one from each English-speaking area mentioned above and two from the USA: *The International Corpus of English* (ICE) corpora are used for the study of PhiE, SinE and BrE and *The Santa Barbara Corpus of Spoken American English* (SBC) and *The Freiburg-Brown Corpus of American English* (Frown) for the study of AmE. The auxiliary verbs will be presented with their semantic properties and their frequency across the corpora. In addition, some aspects of the history and the current situation of PhiE and SinE will be discussed.

2. Data and Methodology

An *auxiliary verb* is a ‘helping verb’, which is used to form *tenses*, *moods* and *voices* from other verbs (Warner 1993, 1). *Modal auxiliary verbs* are used to form different moods, and they express, for example, permitting (e.g. *can*, *may*), directing (e.g. *must*) and undertaking (e.g. *shall*) (Huddleston 1988, 79). This study focuses on the expression of *obligation* and *necessity* in PhiE, SinE, AmE and BrE. These two dimensions of language can be expressed with such modal auxiliaries as *must* and *should*, or with the help of some lexical verbs used as auxiliaries, i.e. *quasi-modals*, such as *have to* and *need to*. The following illustrates the modals and quasi-modals of English chosen for the study:

modals	quasi-modals
<i>must</i>	<i>have to</i>
<i>should</i>	<i>have got to</i>
<i>need</i>	<i>need to</i>
	<i>be supposed to</i>
	<i>ought to</i>
	<i>had better</i>

To find out how these modals and quasi-modals are used in the varieties, the following research questions need to be answered: first and foremost, what is the frequency of the above verbs in these varieties? Which verb is the most frequent, and which ones are used only marginally? To conduct a thorough investigation, the overall frequency of the auxiliary verbs in each corpus is taken into consideration. Both positive and negative counterparts of the verbs have naturally been included and both full and contracted forms were taken into consideration. Written and spoken corpus materials are also separated for analysis so that differences between the written and spoken media can be detected. Most importantly, a closer analysis was conducted to

detect differences between the *meanings* of the modal auxiliaries, i.e. their *modalities*. Corpus subcategories were used for the study of modality and the linguistic environment of the auxiliary verbs (see 2.5.–2.7.). The linguistic environment refers primarily to the properties of the subject of the verb and its nominal categorisation. As regards the properties of the verb itself, tense will be the main focus.

The reason for including the study of AmE and BrE along with PhiE and SinE lies in the history of the Philippines and Singapore. The Philippines was colonised by the United States and Singapore by Great Britain, and there should therefore be similarities in the languages spoken in the old and the new countries. There should also be differences, as the geographical and cultural distance between the Philippines and the USA, as well as between Singapore and Great Britain, is considerable. To explain the possible similarities and differences I shall refer to the history of English usage in the Philippines and Singapore and some cultural aspects.

The data were retrieved from five electronic corpora using Word Smith Tools 4.0 concordance program: the ICE components of PhiE, SinE and BrE, the SBC and the Frown corpus. Electronic corpora are without a doubt the quickest, the most user-friendly and the simplest way to retrieve information regarding specific features of language, as they are extensive and versatile in their number and types of texts. The ICE corpora contain both spoken and written language, while SBC consists of spoken language and the Frown corpus of written language only. The corpora are presented more closely below (see 2.5.–2.7.).

2.1. Mood and modality

To define the semantic nature of modal verbs, it is important to make a distinction between *mood* and *modality*. According to Huddleston (1988, 79–80) the difference between these is similar to the difference between *tense* and *time*, or *gender* and *sex*.

The clearest distinction can be made according to the opposition between grammar and semantics in general: *mood* is a grammatical category of the verb, such as tense, while *modality* is a semantic dimension of the statement, such as time. Therefore, mood traditionally refers to a category which is expressed in verbal morphology (Palmer 1986, 21). Quirk et al. (1985, 149) add that as it is the task of tense to indicate the time scale of a predication, it is the task of mood to indicate the factual, nonfactual or counterfactual status of the predication. Indeed, as Nelson (2001, 93) says, *mood* essentially refers to “distinctions in the form of a verb phrase that express the speaker’s attitude towards what is said”.

In English, three types of mood are distinguished: the *indicative mood*, which is the unmarked mood used to express statements in general, the *imperative mood*, which is used to express directive speech acts such as commands, and the *subjunctive mood*, which is used to express wishes and recommendations (Quirk et al. 1985, 149). There are three sentence types which illustrate the realisation of these categories, namely *declarative* (1–2), *interrogative* (3) and *imperative* (4) (Quirk et al. 1985, 803):

- (1) Pauline gave Tom a digital watch for his birthday. (indicative mood)
- (2) I insist that you do this. (subjunctive mood)
- (3) Did Pauline give Tom a digital watch for his birthday? (indicative mood)
- (4) Listen to me! (imperative mood)

Huddleston and Pullum (2002, 172) note however, that in the case of English, the question of the relationship of mood and modality is more problematic than in languages such as Latin, French and German, for example, as mood is not expressed within the verbal morphology in English. Mood has simply been lost from the inflectional system by historical change. Huddleston and Pullum argue that the main

mood system of English is therefore analytic rather than inflectional, because mood is marked by the presence or, in contrast, by the absence of distinct *modal verbs*.

Modality on the other hand refers to the expression of one's opinion on, or attitude towards the situation at hand (Declerck 1992, 351). It is primarily a semantic category, which in English is realised by modal verbs. Huddleston & Pullum (2002, 173) specify that a declarative clause such as *he wrote it himself*, is regarded as *unmodalised*, as the speaker expresses no qualification or special emphasis on the factuality of the phrase. In contrast, the clause *he must have written it himself* is regarded as *modalised* because the speaker presents the proposition as something that is not directly known, but as something which is a result of inference.

Palmer adds (1986, 2) that modality does not only relate semantically to the verb in question, but to the whole sentence. Lyons (1977, 452) argues that although the scope of modality reaches every part of the sentence, it is nevertheless possible to distinguish the speaker's attitude or opinion from the actual proposition of the verb. Palmer mentions (1986, 14) that in some respect, this comes close to the distinction between a *locutionary act* used to *say* something, and an *illocutionary act* used to *do* something. The actual proposition of the verb then relates to what we *say*, and modality relates to what we *do* with our words – whether we permit, direct or undertake etc.

The scope of modality is indeed multifaceted. The following illustrates the multiple attitudes and opinions conveyed by modality and the range of modal verbs which are used to express them. (Quirk & Greenbaum 1975, 52–57):

(5) ability: He *can* speak English, but he *can't* write it very well. I never *Could* play the banjo.

(6) permission: *Can/May* I smoke in here?

(7) possibility: The road *may* be blocked. What you say *might* be true.

(8) willingness: *He'll* help you if you ask him.

(9) obligation: You *should* do as he says. You *ought to* start at once.

(10) logical necessity: They *should* be home by now. There *must* be a mistake.

The above list is by no means complete as regards the various dimensions of modality. The interest of this study, however, lies primarily in the uses conveyed by 9–10: obligation and logical necessity. All of the nine chosen verbs express obligation, but not all of them (*need to, be supposed to, ought to and had better*) express logical necessity.

Because of the lack of morphological marking of mood in English, the relationship between mood and modality seems to be somewhat vague. I agree with Palmer (1979, 5) in that although it is possible to describe each modal verb as one of the above moods of English, the distinction between moods as regards these verbs is neither very necessary nor useful.

2.2. The properties of modal auxiliary verbs

Modal auxiliary verbs are an extremely complex linguistic phenomenon. Nuyts (2002, 171) says that this complexity is demonstrated in their morphological, syntactic and semantic behaviour. As the semantic category of modality is the primary interest of this study, the morphological and syntactic properties of the modals are of secondary importance. A short examination of the morphology and syntax of modal verbs is nevertheless in place.

According to Palmer (1968, 21) all modal auxiliary verbs possess four formal characteristics, namely *negation, inversion, code* and *emphatic affirmation*, i.e. NICE-qualities. Firstly, *negation* implies that the auxiliary occurs with the negative particle

not (11), while the negative counterpart of full verbs is formed with the dummy auxiliary *do* (12):

(11) I *mustn't* eat sweets anymore.

(12) I *don't* love you.

Secondly, *inverting* the word order also provides proof on whether a verb is an auxiliary (Palmer 1968, 23). In these constructions, the auxiliary comes before the subject (13), while a full verb again requires *do* to complete the inversion (14):

(13) *Ought we* to ask them?

(14) *Do you like* chocolate?

The third characteristic, *code*, refers to the repetition of the auxiliary: this occurs when a full verb is picked up by an auxiliary later in the sentence (15). Again, Palmer (1968, 24–25) says that *do* is used with full verbs (16):

(15) We *must* go and so *must* you.

(16) I *like* it and so *do* they.

Finally, with *emphatic affirmation*, Palmer (1987, 21) refers to nuclear stress upon the auxiliary. This is used for affirmation of a doubtful statement or the denial of a negative:

(17) They '*should* come soon. ('I am doubtful about their arrival')

(18) I '*can* come. ('you are wrong to think I cannot')

2.3. Root and epistemic meanings

In this study, the semantics the modals of obligation and necessity are studied from the point of view of *root meaning* versus *epistemic meaning*, which brings us back to the relationship between the proposition and modality – what we *say* versus what we *do*. According to Collins (2005, 251), the root meaning of a modal auxiliary verb of obligation relates to the social world of duties and directives. This is often called

*deontic modality*¹. In other words, deontic modality conveys what is obligatory (19) or forbidden (20) (Palmer 1979, 3):

(19) *You'd better* ask him when he comes in. (Palmer 1979, 70)

(20) We *shouldn't* be imposing on you in vacation time. (Coates 1983, 63)

In addition, modals are also used to express the speaker's attitude towards the factuality or the likelihood of the action expressed (Declerck 1992, 351; Huddleston 1988, 78): *epistemic modality* is concerned with the speaker's assumptions or assessment of possibilities. In fact, as Huddleston (1988, 78) points out, the term *epistemic* derives from the Greek word *epistēmē* meaning 'knowledge'. As Papafragou (1998, 1) puts it, epistemic modality has to do with the "degree of speaker commitment to the truth of the proposition embedded under the modal". Nuyts (2002, 21) offers a similar, but a more specific definition. He defines epistemic modality as "(the linguistic expression of) an evaluation of the chances that a certain hypothetical state of affairs under consideration (or some aspect of it) will occur, is occurring or has occurred".

In other words, the speaker judges the event to be real, unreal, certain, probable or improbable (Bhat 1999, 64). Huddleston and Pullum (2002, 178) in turn state that the most prototypical difference between root and epistemic modality is that root modality concerns the attitude to the *actualisation* of a situation (21), while epistemic modality concerns the attitude to the *factuality* of a situation (22–23):

(21) You *must* pull your socks up.

(22) He *must* have been delayed.

(23) The next road on the left *should* be King Street. (Huddleston & Pullum 2002, 186)

¹ The term *deontic* was first introduced into modal logic by Georg Henrik von Wright in 1951 (see von Wright 1999, 27)

Papafragou (2002, 192) argues that epistemic interpretations presuppose the ability to reason, and supposedly also the capacity to assess the accuracy of mental representations. According to Papafragou this is also why epistemic items are parallel with verbs such as *think*, *know*, *forget* and *remember*.

Nuyts (2002, 172) adds that only some modals express epistemic modality, and epistemic usage is therefore secondary to root meaning, at least quantitatively. On the basis of the results of this study I must agree with Nuyts on this argument, as epistemic modals were scarce in PhiE, SinE, AmE and BrE, as will be pointed out in chapter 4. According to Warner (1993, 14) the term *root* may be used for nonepistemic modals in general when they are not subcategorised. Therefore, in this study, *root* will refer to all nonepistemic tokens.²

2.4. Subjectivity and objectivity

In addition to the categories of root and epistemic modality, other dimensions are also distinguished when analysing modalised phrases. One of these is *subjectivity* and *objectivity*. According to Collins (2005, 251), the speaker may impose an obligation on somebody which makes the speaker the source of the obligation. The necessity is then *subjective* and *internal*:

(24) Yeah so you really *have to* think about it uhm (ICE-PHI S1A-040 [A]: 206)

Huddleston and Pullum (2002, 173) add that although modality is mainly a matter of the speaker's attitude, it may apply by extension to the attitudes of those who are

² Another quite interesting use of the term *mood* must be noted in connection with deontic and epistemic modality. Bhat (1999, 8; 63) makes no distinction between *mood* and *modality*, and calls the categories of modality *deontic* and *epistemic moods*. Although it has been stated that the category of mood is almost non-existent in verbal morphology in English, I believe using these terms interchangeably is rather questionable.

referred to in the utterance: in *Kim thinks he must have written it himself*, it is Kim's attitude which is indicated, not the attitude of the speaker.

The obligation may also come from outside (Collins 2005, 251). In this case, the necessity is said to be *objective*, as the source of obligation is *external* to the speaker:

(25) Education Minister Tony Tan put his finger on it when, speaking on Tuesday night, he urged Singaporeans to ponder, in the cold, clear light of the cataclysmic events that have shaken the world, just what the General Election *ought to* be about. (ICE-SIN W2E-010: 29)

The question of subjectivity and its realisation will be referred to in the accounts of each modal verb, but their frequency in the case of PhiE, SinE, AmE and BrE is beyond the scope of this study, as the number of modalised phrases is quite high. I shall now turn to the sources of these modalised phrases, namely the five electronic corpora.

2.5. The International Corpus of English (ICE)

The International Corpus of English (ICE) project began in 1990 with the aim of collecting material of different varieties of English for the benefit of comparative studies (Greenbaum 1991b, 86; 91). There are research teams around the world preparing electronic corpora of their own variety of English, and interestingly, the ICE project is the first systematic investigation of the national variety for most of the participating countries. In addition to Great Britain, New Zealand and India, of which such corpora already exist, the countries involved in the project include East Africa (which includes Kenya, Tanzania and Zambia), Hong Kong, Jamaica and Sri Lanka, to mention a few (Greenbaum 1991a, 4; 1991b, 86–87). The population represented in the corpora are adults of at least 18 years of age who have received their education in English.

Each ICE corpus consists of one million words of spoken and written English which dates from 1990 or later. The text categories and the subcategories are identical in each ICE corpus, which makes comparison between different varieties easy (Greenbaum 1996, 5). The corpora include 500 texts of which 300 texts are spoken and 200 texts written English. The number of different text types is presented below (Greenbaum 1991a, 5; Nelson 1996, 29). The numbers in the brackets indicate the number of 2 000-word texts in each category:

Spoken (S) (300)	Dialogues (S1) (180)	Private (S1A) (100)	Conversations (90) Phone calls (10)
		Public (S1B) (80)	Class Lessons (20) Broadcast Discussions (20) Broadcast Interviews (10) Parliamentary Debates (10) Cross-examinations (10) Business Transactions (10)
	Monologues (S2) (120)	Unscripted (S2A) (70)	Commentaries (20) Unscripted Speeches (30) Demonstrations (10) Legal Presentations (10)
		Scripted (S2B) (50)	Broadcast News (20) Broadcast Talks (20) Non-broadcast Talks (10)
Written (W) (200)	Non-printed (W1) (50)	Student Writing (W1A) (20)	Student Essays (10) Exam Scripts (10)
		Letters (W1B) (30)	Social Letters (15) Business Letters (15)
	Printed (W2) (150)	Academic (W2A) (40)	Humanities (10) Social Sciences (10) Natural Sciences (10) Technology (10)
		Popular (W2B) (40)	Humanities (10) Social Sciences (10) Natural Sciences (10) Technology (10)
		Reportage (W2C) (20)	Press reports (20)

		Instructional (W2D) (20)	Administrative Writing (10) Skills/hobbies (10)
		Persuasive (W2E) (10)	Editorials (10)
		Creative (W2F) (20)	Novels (20)

Table 1. ICE text categories

Greenbaum (1990, 82) says that the ICE project is descriptive and it will not be involved in language planning. However, a year later, he added (Greenbaum 1991b, 91) that the project “will have implications for the teaching of English and in some countries will be applied to language planning”.

As regards the ICE corpora, two text types were chosen for the closer analysis of the modality and the subject types of the modals. These are S1A (private dialogue) and W2F (creative writing). These exact subcategories were chosen because conversation and fiction are considered the best to exemplify the possible independent developments in PhiE and SinE compared to AmE and BrE.

2.5.1. The ICE corpus of Philippine English (ICE-PHI)

ICE-PHI was compiled by Dr. Ma. Lourdes S. Bautista, Ms. Jenifer Loy Lising, and Dr. Danilo T. Dayag of the Department of English and Applied Linguistics at De La Salle University in Manila (ICE-PHI manual 2004, 3). The corpus was released in 2004. There is a small exception in the structure of the Philippine corpus as regards the other ICE corpora: a few spoken texts were not collected and the total number of spoken texts in ICE-PHI is therefore 278.

2.5.1.1. Aspects of the history of PhiE

The Philippines is the third largest English-speaking country in the world following the United States and the United Kingdom (Gonzalez 2004, 10). Its culture has been

influenced not only by Asian but also by European and American traditions. Interestingly, SarDesai (1997, 63) says that the degree of European religious and cultural influence was greater in the Philippines than anywhere else in Asia. Before Ferdinand Magellan claimed the country for Spain in 1521, the Filipinos traded with their Chinese and Japanese neighbours. The Spanish brought about the construction of European buildings and churches as well as the conversion from Islam and belief in animistic spirits to Christianity (SarDesai 1997, 65; 71). According to Wells (1982, 647), Spanish then became the language of wider communication. However, there was a succession of revolts against the European colonisers. In 1898 the United States declared war on Spain, mainly for economic reasons, but also because “the United States should not only defend but extend the blessings of its Western civilisation to the region” (SarDesai 1997, 156). The Spanish fleet was destroyed and the Philippine people thought they had finally won independence. At the end of the war in the Treaty of Paris in 1898, however, Spain sold the Philippines to the Americans for 20 million dollars. The rebellion against the colonisers continued, but with little success. In 1934 The Commonwealth of Philippines was established, and the first president, Manuel Quezon, was given the power to rule some internal affairs.

The Philippines was controlled by the Americans for over forty years, until Japan occupied the country in 1942 because of their growing interest in Philippine lumber, hemp and copra (SarDesai 1997, 162–163). The Americans responded with an oil embargo and in October 1944, the American general Douglas MacArthur began the liberation of the Philippine people. By the end of the year the country had been cleared of the Japanese in bloody battles. The republic of the Philippines was proclaimed on 4 July 1946.

2.5.1.2. The language situation in the Philippines

The American period introduced English as an official language in the Philippines, more or less replacing Spanish. The question of language has been contentious in the Philippines, as the natives speak a variety of languages. As was mentioned in 2.5.1.1. above, the Philippines is the third largest English-speaking country in the world: 44 million out of the total of 78 million inhabitants speak English (Gonzalez 2004, 10). It should be noted, however, that these are, for the most part, second language (L2) speakers, and that the number of native speakers of English in the Philippines is marginal. English and the Tagalog-based Filipino are the two official languages of the country. According to McFarland (2004, 65, 66) and Wells (1982, 647), over a half of the population speaks Tagalog, while the remainder speak such first languages (L1) as Ilokano, Panganisan and Kapampangan in the north, Hiligaynon, Bikol and Cebuano in the central islands, and Marano and Magindanao in the south. In fact, over a hundred languages are spoken in the Philippines (Ledesma 2005, 63). Martin (2004, 255) argues that Tagalog received its special status during the colonial era because of the speakers' concentration around the capital city Manila and because of their influence on society as administrators, lawyers and politicians. The profusion of languages inevitably leads to the preference of one language over another, and possibly even to the extinction of some languages. McFarland (2004, 73) mentions nevertheless that this may not be such a regrettable thing, as one of the big problems of the Philippines is the lack of a unifying language.

The English language was introduced in the Philippines through education. The Spanish colonisers never established a systematic program for education and it was not until year 1900 that the Americans established public schools. According to Bernardo (2004, 17–18) *The Letter of Instruction to the Philippine Commission*, issued by US

president William McKinley in 1900 favoured an English-only policy. The original order was to teach in the native languages of the people, but because there was no teaching material to be found in those languages, English was chosen as the language of education. This, according to Bernardo (2004, 18), was done to enable the American teachers to be more efficient, to unite the Filipinos who spoke a variety of languages, and finally, quite in keeping with the imperialistic attitude of the Western world, to provide Filipinos with access to civilisation. The policy attracted early criticism, for example from the Vice Governor General of the Philippines Islands, George C. Butte, who insisted in vain in 1931 that children in primary schools be taught in their native tongue (Bernardo 2004, 18). Education in Filipino was first encouraged in the 1940s, and in 1953 UNESCO insisted on using the mother tongue of the students to make the break between home and school less stressful.

The rise of anti-imperialist and anti-American movements in the 1960s contributed to the establishment of a bilingual policy even further (Bernardo, 2004, 20). *The Bilingual Education Policy* of 1974 ratified the use of English and Filipino in instruction in elementary and high schools: PhiE still remains the only language for the instruction of science and mathematics, while Filipino is used for other subjects, as English language competence is considered the best way to ensure economic growth and access to international markets. Ledesma (2005, 77) notes that while children may be taught in Filipino, the social status of English becomes indirectly evident to them through their social environment.

Nevertheless, PhiE is an L2 rather than an L1. According to Hall (1974, xiii) the English language was *nativised* in the Philippines. This entails that it was “taken over by a group of speakers who have previously used some other language, so that the new language becomes the native language of the group”. Hall (1974, xiv) adds that

nativisation does not necessarily involve *creolisation*, which occurs when two or more languages converge to form a new indigenous language. Although PhiE is different to AmE and even though it has adopted features from native Philippine languages, no extreme reduction or restructuring of English has occurred.

Wells (1982, 647) says that the Filipino are truly multilingual, as they use a vernacular at home, a lingua franca such as Filipino in transactions with other ethnic groups, and PhiE in such official situations as business, industry, academia, and wider communication. Interestingly, according to Otones and Sibayan (1969, cited in Gonzalez 2004, 11), prayers and dreams are in the vernacular language of the home, but letters are written mostly in English. According to Dayag (2004, 41), English is the dominant language of print media, while broadcast media, such as TV and radio stations, show a rapid expansion of the domain of Filipino. Indeed, Gonzalez (1991, 360) adds that when a language is learned through a colonial education system, its domains are often limited, especially when there is a competing indigenous language.

Gonzalez (2004, 12) adds that PhiE is a *monostylistic* variety: speeches are formal in style and tone, and there is a tendency to speak as one writes. This may sometimes create a rather comical effect, if the speaker, for example, refers to him/herself as *yours truly*. Platt et al. (1984, 21) add that the pressure for an indigenous national language was evident after gaining independence. Gonzalez (2004, 12) notes also that the dominance of English has had a rather powerful effect on Philippine society:

In a Neo-Whorfian belief in the power of language in our perceptions, but likewise in our attitudes and behaviour, the continuing dominance of an indigenized variety of a post-imperialistic language is considered a stumbling block to the jelling of the people into a nation and to perpetuate a mentality of dependence which manifests itself ... in the dominance of the Western thought on the thinking of Filipinos and their failure to appreciate their own culture....

Standard Filipino English is the language of educated Filipinos. It is the type of English that is acceptable in educated Filipino circles, and it should therefore be distinguished from creolised forms of English, and the type of English which simply mixes Tagalog and English (Wells 1982, 647). Indeed, Platt et al. (1984, 147) say that educated speakers of PhiE use a mixture of Filipino and English, referred to as *mix-mix* in less formal situations, even if they could equally well speak English with each other. In this way, a certain level of informality is achieved where English would be too formal.

Bolton and Bautista (2004, 3) state that the use of English in the Philippines has been a source of concern to various sociolinguists: for example, Tollefson (1991, 141) says that language planning has a powerful impact on how economic resources are administered and how political power is divided. Tinio (in Bolton & Bautista 2004, 4) argues that Philippine people are not the only ones that have endured colonialism, but other countries have managed to survive it with a better mental health, as “they had the immune system of their own language”. Tupas (2004, 54; 56) adds that the study of PhiE today should take into consideration the economic and historical unfreedom of the people who speak it, so that social reform and change can take place. Bolton and Bautista (2004, 5) state that the challenge remains to provide an education which supports the use of national and regional languages while taking into consideration the sociolinguistic realities of the Philippine society, i.e. the need for the opportunity to receive an education in English.

2.5.2. The ICE Corpus of Singapore English (ICE-SIN)

The ICE-SIN corpus, released in 2002, also consists of one million words of spoken and written English. The number of the texts as well as the text types is the same as above (see Table 1.) The ICE research team in Singapore is based at the National

University of Singapore (ICE-SIN manual 2002, 3). The team consists of Professor Paroo Nihilani, Dr Ni Yibin, Dr Anne Pakir and Dr Vincent Ooi.

2.5.2.1. Aspects of the history of SinE

The original inhabitants on the small island at the end of Malay Peninsula were Malay fishermen, and by the 14th century, Singapore, at the time known as *Temasek* ('sea town'), had become a natural meeting point for Chinese and Indian vessels and even Portuguese battleships (Turnbull 1977, 2). In the 14th century, the island was also renamed *Singa Pura*, ('lion city'). In the 18th century, Sir Stamford Raffles established Singapore as a British trading station to protect the empire from the Dutch, who were becoming stronger in the region (Turnbull 1977, 10).

The population of the country grew rapidly, and free trade attracted merchants from as far as North America and the Middle East. The Japanese occupied the island in 1942 during World War II, but after the war, Singapore was established as a British Crown Colony. According to SarDesai (1997, 200), growing nationalism lead to self-government, but Dixon (2005, 27) contends that it was never the intention of Singapore to be an independent city-state. It became a part of Malaysia in 1963, but controversy over the rights of the Chinese citizens in the new united nation lead to Malaysia's expulsion of Singapore in 1965, which made the island an independent republic. MacDougall and Foon (1976, 296) argue that this lead to the abandonment of the promotion of Malay as the national language.

Today, Singapore is one of the most economically developed societies in the world. Its economic growth from a quiet fishing village to a technologically modern city has been more than rapid (Neher 1999, 39). One of the reasons is the country's location halfway between India and China, which enabled the nation to become integrated with the international capitalist system. Neher (1999, 42) adds that location

was not the only reason for the rapid expansion of wealth in Singapore: the overwhelming commitment of the public to continued stability of society, and the world-famous work ethic have both contributed to the success of Singapore.

2.5.2.2. The language situation in Singapore

English is one of the four official languages of Singapore. According to Singapore Department of Statistics (2000, in Dixon 2005, 26), 77% of the 4.2 million inhabitants are Chinese, 14% Malay and 8% Indian. The other official languages are thus Mandarin Chinese, Malay and Tamil. SinE was an L2 in Singapore for a long period of time, but it has expanded its functions and become a native or a near-native language for many speakers (Platt et al. 1984, 22). In fact, according to Dixon (2005, 28), a bilingual education policy, similar to that in the Philippines (see 2.5.1.2. above) was passed in 1965, making it obligatory for Singaporean students to study two of the four official languages: in practice, English and one of the other three, namely Chinese, Malay or Tamil.

According to Lee (2000, in Dixon 2005, 27) English was encouraged as the language for interethnic communication. Indeed, Ziegeler (2000, 110) says that in some respect, SinE has developed in similar ways to a creole, but it is not to be regarded as one, as it was primarily introduced through the medium of education. This was a needed approach, as the speakers of Chinese spoke ten different Chinese “dialects”, such as Hokkien, Teochew and Cantonese, which were not mutually intelligible (Chua in Dixon 2005, 26; Kuo 1978, 1067). In fact, Platt et al. (1984, 23) say that the main Chinese dialect spoken is Hokkien, but the official language is Mandarin, as the government considers it “a more suitable language than any of the southern Chinese dialects for the expression of Chinese values and culture”.

In addition, a minority of the Malay part of the population spoke also Javanese or Boyanese. Those of Indian descent also spoke a variety of languages from two language families, namely the Dravidian family (Tamil) and the Indo-European family (e.g. Punjabi, Gujarati and Bengali). The following table displays the division of ethnic groups and their home languages in 1990 and 2000. Interestingly, the predominant home language is in many cases English, even though there were virtually no English-speaking homes at independence (Singapore Department of Statistics 2000, cited in Dixon 2005, 30):

Ethnic group / language	Overall (%)	Overall (%)
	1990	2000
Chinese	100.0	100.0
English	19.3	23.9
Mandarin	30.1	45.1
Chinese dialects	50.3	30.7
Other	0.3	0.4
Malays	100.0	100.0
English	6.1	7.9
Malay	93.7	91.6
Other	0.1	0.5
Indians	100.0	100.0
English	32.3	35.6
Malay	14.5	11.6
Tamil	43.2	42.9
Other	10.0	9.9

Table 2. The ethnic groups and their home languages in Singapore

Ho and Platt (1993, 8) say that the features of the languages spoken by these various ethnic groups have influenced SinE, but the dominant substratum transference

comes from Chinese. This concerns syntax, semantics, and to a great extent, phonology. Ho and Platt continue to note that the influence of Malay is indirect, and works through more or less pidginised forms of Malay, while Tamil lexical items are not a feature of SinE, unless when religious festivals or special dishes of food are referred to. The other Indian languages mentioned have influenced SinE however, as many of the early English teachers in Singapore were recruited from India and Ceylon (now Sri Lanka).

The transition into English-medium education was first made in subjects like mathematics and science to ensure the country's access to international trade and Western technology. In fact, Dixon (2005, 25) mentions that Singaporean students are now top-ranked in mathematics and science in worldwide comparison. SinE has grown gradually in status, but in principle, any of the four official languages can still be chosen to be used in instruction. He continues to note that the government allocates the students' mother tongue based on their ethnicity disregarding their home language. Platt et al. (1984, 23) say that in reality, however, Tamil-medium education has vanished.

The success Singapore has experienced in educational outcomes through L2 instruction challenges the view of the pre-eminence of L1 instruction (Dixon 2005, 26). Kuo (1978, 1069) adds that mass media has also had an important effect on the rise of English, as it penetrates the lives of a large part of the population. Lim and Foley (2004, 6) say that English has in practice taken over as the language of communication between ethnic groups, as it is the language of administration, and it thus promises a higher status and a better career. They also argue that SinE is first and foremost emerging as the language of the young.

2.5.3. The ICE Corpus of British English (ICE-GB)

ICE-GB continues along the lines set for all ICE corpora in the number of words, text types and dates (see section 2.5.). The ICE-GB research team is based at the Survey of English Usage in University College, London with Professor Bas Aarts as director. Released in 1998, it is the oldest one of the ICE corpora used in this study (ICE-GB manual).

2.6. The Santa Barbara Corpus of Spoken American English (SBC)

The Santa Barbara Corpus of Spoken American English (SBC) parts I-IV will be used for the study of spoken AmE. Released in 2000–2005, SBC is a part of ICE representing the American Component. SBC is based on recordings of natural speech from all over the United States, which represent a variety of people of different regions, ages, occupations and social backgrounds (Chafe et al. 1991, 71; SBC manual). The four parts contain 60 speech files and 266 972 words of conversation. This number of words is based on stripping out all other material but orthographic words from the texts files. Part I (text files 1–14) was chosen for closer analysis, and it contains 69 557 words.

The difference between the size of SBC and the 600 000 word ICE corpora is considerable, but SBC is the only spoken AmE corpus available at the moment. The corpus was compiled by John W. DuBois, Robert Englebretson and associate editors Wallace L. Chafe, Charles Meyer, Nii Martey and Sandra A. Thompson for the Santa Barbara Center for the Study of Discourse, University of California.

2.7. The Freiburg-Brown Corpus of American English (Frown)

The well-known *Brown Corpus of American English* (BC) was compiled in 1964 and revised in 1979. By the early 1990s, there was a need for an updated version, the kind

that would represent the language of the time, and that would also match the *Lancaster-Oslo/Bergen* (LOB) corpus as well as the BC. Christian Mair began work on the *Freiburg-Brown corpus* (Frown) in 1992, and the one million word corpus was finally published in 1999. Unlike the ICE corpora, the Frown only includes written language. The corpus consists of 15 text categories, which are presented below (Frown manual 1999):

	Text Category	Number of texts
A	Press: Reportage	44
B	Press: Editorial	27
C	Press: Review	17
D	Religion	17
E	Skills, Trades and Hobbies	36
F	Popular Lore	48
G	Belles Lettres, Biographies, Essays	75
H	Miscellaneous	30
J	Science	80
K	General Fiction	29
L	Mystery and Detective Fiction	24
M	Science Fiction	6
N	Adventure and Western	29
P	Romance and Love Story	29
R	Humor	9

Table 3. Frown text categories

The text categories chosen for closer analysis include K (general fiction), L (mystery and detective fiction), M (science fiction), N (adventure and western) and P (romance and love story). These match the creative writing category of the ICE corpora.

In the accounts of each verb, SBC and Frown will be referred to together as US. The spoken part of this self-constructed US corpus refers to SBC and the written part to Frown.

3. Previous Corpus-Based Studies of Modal Verbs in AmE and BrE

In the domain of modal and quasi-modal verbs of obligation and necessity, previous research is presented in *The Longman Grammar of Spoken and Written English* (2000). The grammar includes a corpus study of *must*, *should*, *have to*, *had better*, *have got to*, *need to*, *be supposed to* and *ought to* in AmE and BrE, i.e. all the verbs under discussion in this study with the exception of modal *need*. The corpus used, *The Longman Grammar of Spoken and Written English Corpus*, (LSGWE) consists of approximately 5 million words in each register. The registers used in the study include conversation, fiction, news and academic prose (2000, 25).

The LSWGE study (2000, 488) shows that in conversation, many modals of obligation and necessity are more common in BrE than in AmE, especially *must*, *had better* and *have got to*. *Should* is used in conversation quite frequently in both varieties. In contrast, *have to* seems to be more common in AmE. In fact, *have to* is the only quasi-modal that is relatively common in conversation as well as in the written explanatory registers in AmE. In fiction, *must* and *should* are more frequent in BrE than in AmE. *Must* and *should* are also common in BrE academic prose. The study also shows that *had better* and *have got to* are infrequent in written language in both varieties (2000, 489). *Need to*, *ought to* and *supposed to* on the other hand are less common in all registers.

Peter Collins from the University of New South Wales in Sydney, Australia, conducted a similar study in 2005 using ICE-GB, the ICE corpora of Australian (ICE-AUS) and New Zealand English (ICE-NZ) and a self-constructed AmE corpus (C-US) which consists of 80 000 words from the Frown corpus completed with 29 text files from parts I and II of SBC (Collins 2005, 252). The modals studied include *must*, *have to*, *should*, *need to*, *have got to*, *ought to*, *need*, *had better* and *may/might as well*.

Have to is the most frequent auxiliary verb in ICE-AUS, ICE-GB and C-US, while *should* dominated the ICE-NZ corpus. These are followed by *must*, *need to* and *have got to*, which are considerably lower in frequency. *Ought to*, *need* and *had better* are all relatively rare. Unfortunately, *supposed to* is not included in the study (2005, 253):

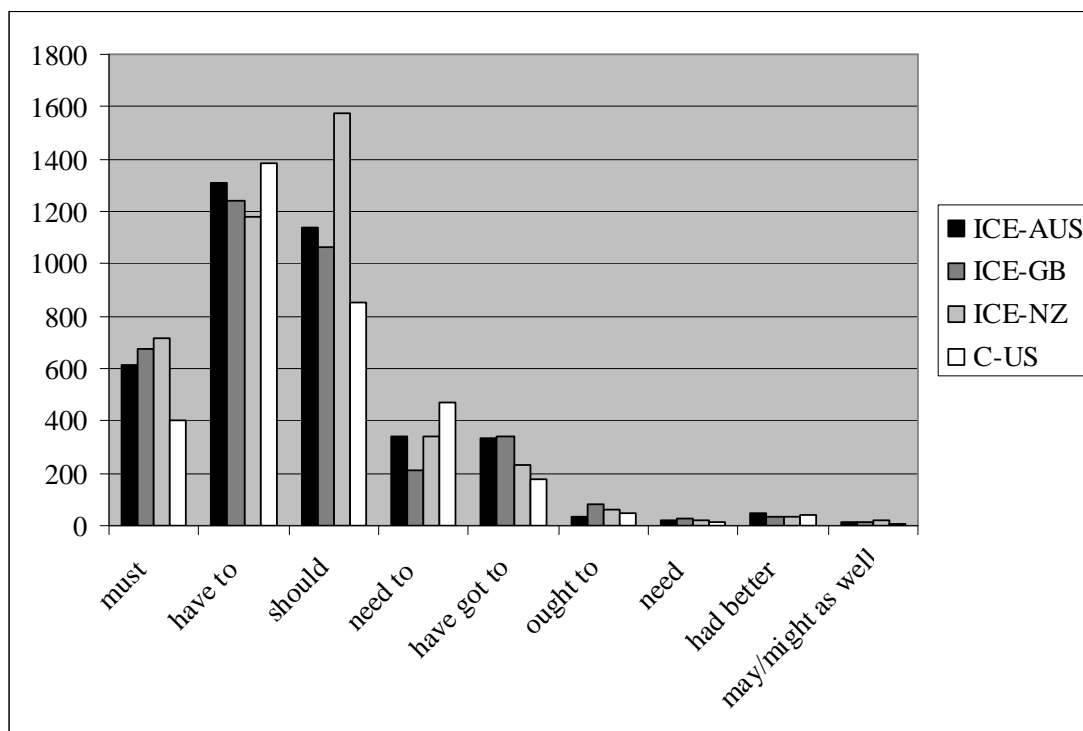


Figure 1. Modals and quasi-modals of necessity in Australian, British, New Zealand and American English

Collins (2005, 266–267) attributes the unpopularity of root *must* compared to root *should* and *have to* to the overt power and hierarchy which marks *must*: *should* and *have to* are more democratic in this respect as they are not as threatening. *Have got to* had a low frequency in the written register, and Collins mentions colloquialisation as a factor to the decline, as *have got to* still has a relatively high frequency in speech. With regard to preferring *need to* over *need*, Collins suggests that the syntactic flexibility of the former supports its use. This lack of flexibility also undoubtedly accounts for the low frequency of *ought to* and *had better*.

Collins (2005, 254; 256; 257; 261) adds that epistemic modality is notably more infrequent than root modality in the case of *should*, *have to* and *have got to*. It is only in the case of *must* that epistemic meaning reaches the same frequency as root meaning. In fact, in both spoken AmE and BrE (2005, 270), epistemic meaning is more frequent than root meaning (197.5 / 120.2 in AmE and 250.0 / 193.3 in BrE per one million words). In the written register, on the other hand, root modality is more frequent in both varieties.

4. Corpus Findings

This chapter introduces the semantics of the modal verbs and their frequencies across the corpora. The verbs will be presented in their order of frequency, from the most frequent to the least frequent. The frequency of each item is represented in a bar graph followed by several other illustrations of the properties of the verbs and their linguistic environment. Where it is mentioned that the numbers represent conversation and fiction, only the material in the subcorpora chosen has been analysed (see chapters 2.5., 2.6. and 2.7. for details). The figures have been normalised per one million words; see the appendix for both raw and normalised figures.

4.1. *Have to*

According to van Gelderen (2003, 39), modals and *to* are in complementary distribution. Therefore, verbal expressions such as *have to*, *have got to*, *need to* and *supposed to* cannot be modal. *Have to* is then classified as a lexical verb used as a modal, i.e. a *quasi-modal*.

Palmer (1979, 92) adds that the meaning of *have to* is simply that the ‘circumstances compel’. Coates (1983, 53; 57) says that the meaning of the verb is very similar to *must*, and that it expresses both root (26–27) and epistemic meaning (28). The latter, however, occurs rarely:

(26) We 've had some rock rocky times you know and uhm some things going on here but uh I 'm glad to say that we were able to work things out and uh in the end you know we all *have to* remember that we 're a team.
(ICE-PHI S1A-26 [B]: 66)

(27) But Malaysia *has to* beat Singapore by at least three goals to secure a silver medal. (ICE-SIN S2A-18 [A]: 19)

(28) No one else has read it so it *has to* be advisory doesn't it?
(ICE-GB S1A-68 [B]: 286)

Collins (2005, 256) adds that *have to* has a strong preference for objective root meaning (29) over subjective root meaning (30):

(29) ... they brood their eggs, they hatch their chicks, they brood their chicks, they feed their chicks, they molt, and then they're out to sea. So all of that *has to* happen within that six-month period. That's a pretty busy bird. (SBC III-39 [Kirsten]: 615)

(30) Right after we do this the next you'll *have to* do is that you *have to* remember this is to put all these pieces into a basin and you wash them with detergent or soap. (ICE-SIN S2A-058 [A]: 92)

Interestingly, Coates (1983, 53; 55) contends that root *have to* is never subjective in itself, but that it merely expresses the meaning 'it is necessary for'. In her words, the authority comes from no particular source, and the meaning is essentially objective. Collins (2005, 256) says that because of its preference for objective root meaning, *have to* is a more attractive option for those who seek a less authoritative modal expression than, for example, *must*, which implies strong obligation (see 4.3. below). *Have to* also has the past tense form *had to*, which adds to the versatility of the verb.

4.1.1. Frequency of *have to*

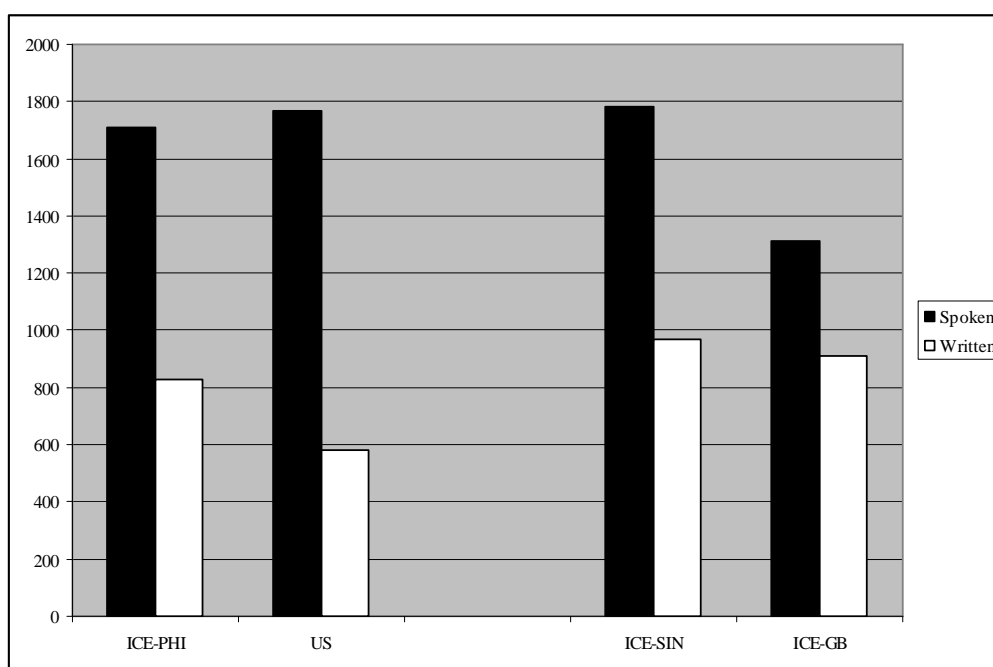


Figure 2. Frequency of *have to* in ICE-PHI, US, ICE-SIN and ICE-GB

In addition to first and second person present tense form *have to*, the third person present tense form *has to* and past tense form *had to* were investigated. The most likely reason for the high frequency of *have to* is its less threatening way to express obligation along with its versatility with regard to tense: the ability to express past and non-tensed events is unquestionably an important factor. Therefore, *have to* surpasses modals *must* and *should* in flexibility and in frequency. However, the fact that *have to* is quite notably less frequent in written language than in spoken proves that it is still regarded as somewhat colloquial, or something that belongs to spoken language rather than written texts.

The difference between spoken PhiE and AmE is quite small (1709 / 1768), which would indicate that AmE has influenced PhiE more than any other variety or factor in the use of *have to*. In written language, however, Filipinos seem to use the verb more frequently (808 / 582). It is overall surprising that the frequency of *have to* is so low in written AmE, i.e. in the Frown corpus, as the Longman study above (see chapter 3.) suggested that the verb is becoming more acceptable in the written register in AmE. Even the numbers in written ICE-GB exceed those in the written US corpus.

Surprisingly, SinE shows remarkable independence compared to BrE: *have to* is more frequent in ICE-SIN than in ICE-GB in both spoken (1776 / 1310) and written language (955 / 910). The high frequency of the use of *have to* in SinE must then be attributed to something else than the influence of BrE on SinE, perhaps to the influence of AmE.

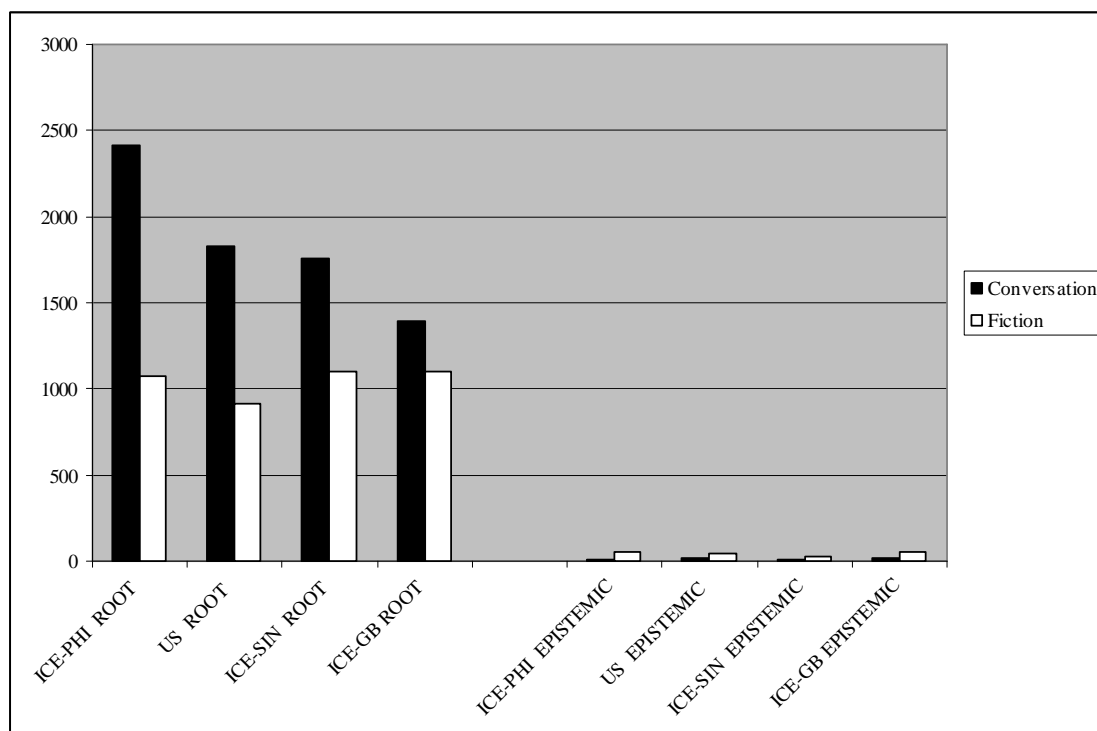
4.1.1.1. Root and epistemic *have to*

Figure 3. Frequency of root and epistemic *have to* in ICE-PHI, US, ICE-SIN and ICE-GB conversation and fiction

In private conversation, root *have to* is the most frequent in PhiE: it clearly exceeds the number in AmE conversation, i.e. the SBC (2418 / 1826). Root *have to* is also more frequent in PhiE fiction (1075 / 917), which mirrors the overall situation between PhiE and AmE regarding the written registers. The situation in SinE and BrE conversation is no different to spoken language in total, but root *have to* is slightly more frequent in BrE fiction than in overall written BrE (1100 / 910).

As was mentioned above (see 4.1.), epistemic *have to* occurs only rarely. The examination of PhiE and SinE does not alter this notion. There were only a few instances of epistemic *have to* in all of the varieties, and the epistemic use of the verb was found to be equally infrequent in conversation and in fiction. Interestingly, all of the epistemic tokens found in the corpora were instances of the form *has to*. Here are a few examples:

(31) But it *has to* be a miracle if health is given back to this festering belly.
(ICE-PHI W2F-9: 169)

(32) So I called her on the phone she said Oh I assume he *has to* do it I
already wrote to him you know (ICE-SIN S1A-15 [A]: 240)

(33) That brings the body count to a total of six young, affluent, well-
educated career people. Something *has to* be in that cocaine, and we have
to find it. (FROWN L-08: 94–96)

4.1.1.2. Present tense vs. past tense *have to*

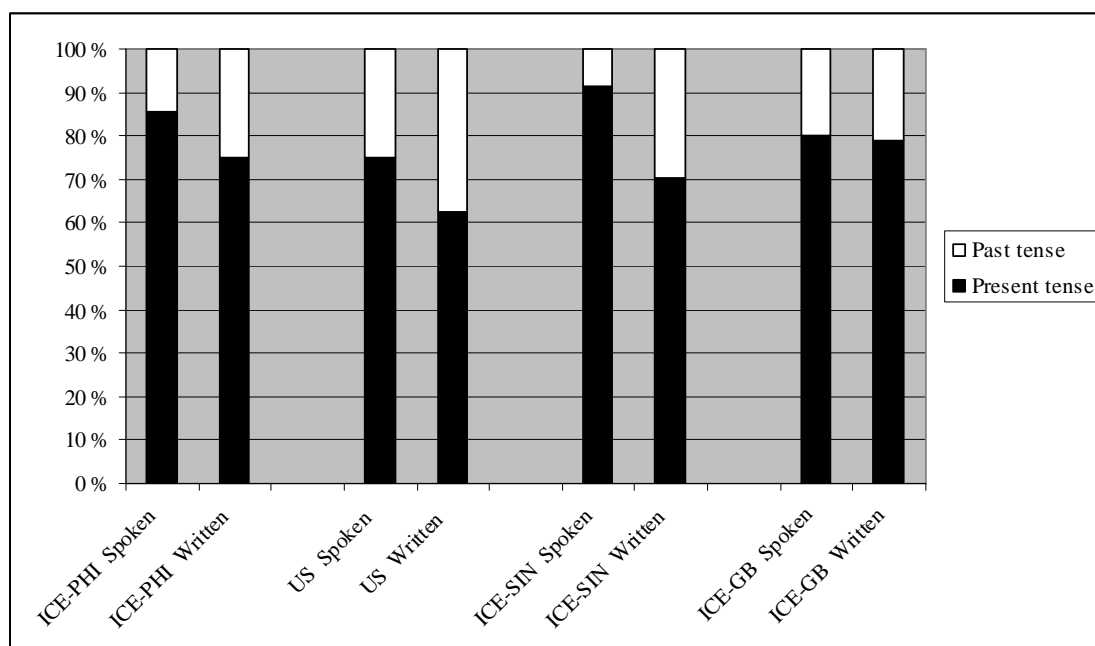


Figure 4. Present tense *have to* and *has to* vs. past tense *had to* in ICE-PHI, US, ICE-SIN and ICE-GB

One of the reasons for the high frequency of *have to* may be its potential to express past events. The results of the study show that the speakers of the four varieties take advantage of this potential. There were several tokens of past tense *had to* in all varieties, more so in the written register than the spoken one in every case. This is most likely due to the reporting nature of written language. The speakers of PhiE and SinE, however, have not adopted past *had to* quite as well as the speakers of AmE and BrE. Platt et al. (1984, 68) say that it is normal in both PhiE and SinE not to make a

distinction between present and past events. For example, it is possible to say *last year, I stay three months in Germany*. This may be part of the reason for the low frequency of past tense forms in the case of *have to* and other verbs below. Platt (1991, 382) adds that there are also differences in past tense marking in SinE according to the level of education: those who have completed above 4 years of secondary schooling are more likely to mark verbs for past tense.

The difference between PhiE and AmE is not greater than approximately 10 percentage units in both spoken and written language (14.5% / 25% in spoken, 24.3% / 37.6% in written), but the difference is larger between spoken SinE and BrE: (8.6% / 20%). The situation in written language is the opposite: in written SinE, *had to* is quite frequent, with a remarkable difference to spoken SinE, while the percentage in written BrE is lower (29.6% / 21.2%).

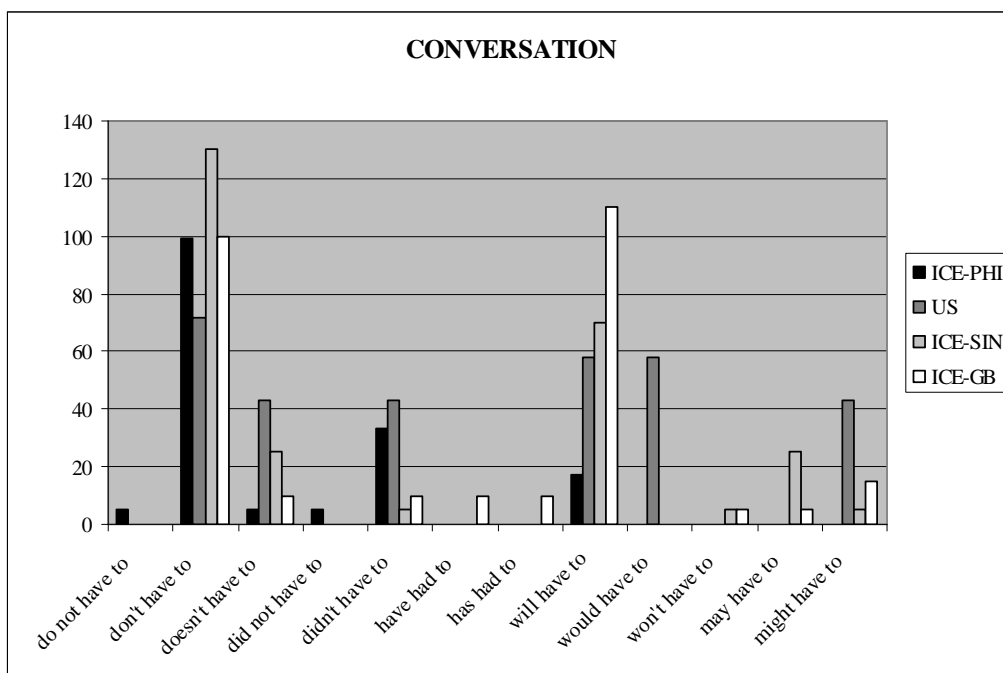


Figure 5. Positive and negative verb forms of *have to* in ICE-PHI, US, ICE-SIN and ICE-GB conversation

The different forms of *have to* according to tense and person were not frequent in conversation or in fiction. This was rather surprising, as the versatility of *have to*

could have been better represented. Full negative forms are nearly non-existent in speech, and the most frequent forms seem to be the contracted negative forms *don't*, *doesn't* and *didn't have to*, and the forms *will have to* and *might have to* which refer to future activity. In addition, present and past perfect forms are marginal as well. However, it must be noted that the number of tokens of these verb forms was quite low.

In speech, PhiE users seem to use fewer forms of *have to* compared to AmE speakers. This could be due to simplification that may have occurred in PhiE, especially considering the total number of *have to*, which was higher in ICE-PHI. The situation between SinE and BrE is more complicated: ICE-SIN had higher frequency in the case of *don't have to*, *doesn't have to* and *may have to*, while ICE-GB had more tokens of other forms.

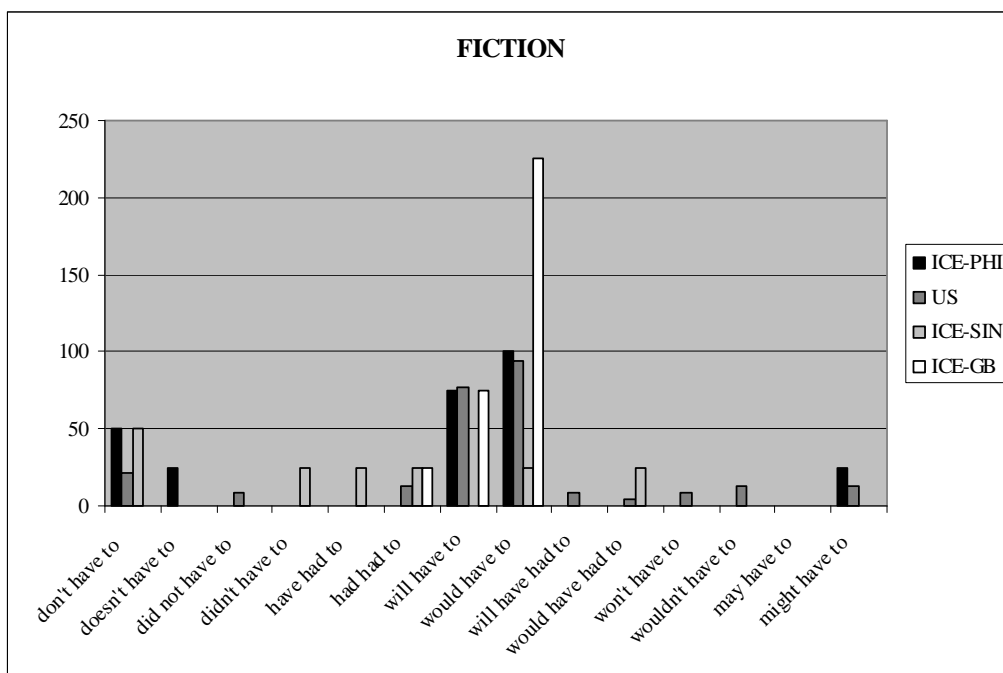


Figure 6. Positive and negative verb forms of *have to* in ICE-PHI, US, ICE-SIN and ICE-GB fiction

The numbers of the verb forms in fiction are quite different to those in conversation. There are fewer instances of contracted negative forms in all varieties,

which is quite expected. The verb forms in PhiE seem to continue along the lines of spoken language, i.e. there do not seem to be many forms which are frequent in PhiE. However, in the case of those forms which are used the most (*don't have to*, *will have to* and *would have to*) the frequency in ICE-PHI is almost the same as in US.

The frequencies of the different forms of *have to* in written SinE are low, even though there are various different forms. These forms, some of which were not found in ICE-GB, include the perfect forms *have had to* and *would have had to*. SinE fiction may be said, then, to be quite innovative in its use of *have to*. There were only three verb forms used in BrE, these were *had had to*, *will have to* and *would have to*, the last of which had a surprisingly high number of tokens.

4.1.1.3. Subjects of *have to*

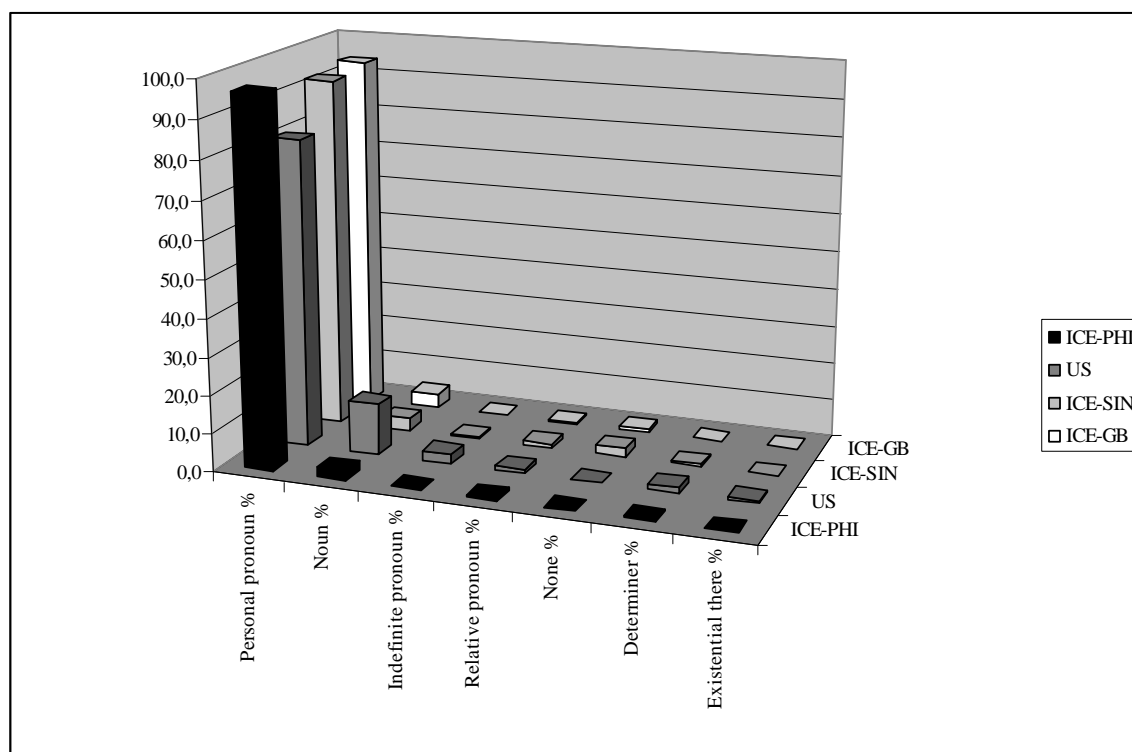


Figure 7. Subjects of *have to* ICE-PHI, US, ICE-SIN and ICE-GB conversation and fiction

ICE-PHI	Personal pronoun %	Noun %	Other %	Total %
Conversation	97.7 (N=431)	1.4 (N=6)	1.0 (N=4)	100 (N=441)
Fiction	82.2 (N=37)	13.3 (N=6)	4.4 (N=1)	100 (N=45)
US				
Conversation	93.0 (N=119)	3.9 (N=5)	3.1 (N=4)	100 (N=128)
Fiction	74.1 (N=166)	18.8 (N=42)	7.2 (N=16)	100 (N=224)
ICE-SIN				
Conversation	93.5 (N=330)	2.8 (N=10)	3.7 (N=13)	100 (N=353)
Fiction	86.7 (N=39)	6.7 (N=3)	6.6 (N=3)	100 (N=45)
ICE-GB				
Conversation	96.4 (N=271)	1.8 (N=5)	1.9 (N=5)	100 (N=281)
Fiction	80.4 (N=37)	17.4 (N=8)	2.2 (N=1)	100 (N=46)

Table 4. Subjects of *have to* in ICE-PHI, US, ICE-SIN and ICE-GB conversation and fiction

As the frequency of *have to* is high, there is also variation in the type of the subject. Personal pronouns were the most frequent subject type of *have to* in all varieties and registers. This is not surprising, as obliging is usually directed at a person. The individual who obliges someone generally has an informal relationship with the addressee, which indicates that the use of personal pronouns such as *you* is acceptable. It can be noted that the speakers of PhiE favour personal pronouns over other subjects more than speakers of AmE. It could therefore be assumed that PhiE is more restricted in its use of subjects. In contrast, SinE speakers use mainly personal pronouns as well, but their use of other subjects is more versatile than that of BrE speakers.

The other types, namely indefinite and relative pronouns, determiners and existential *there* were less common. By *determiners* I refer to all determiners, but most instances of determiners in the study were demonstratives *that* and *this*. There were also instances where there was no subject, especially in ICE-SIN. These were mostly cases of ellipsis of the personal pronoun. These are the main reason for the higher frequency of other subjects in SinE:

(34) My father had an accident last year a motorbike accident. So the leg got hurt *had to* screw uh the bones. (ICE-SIN S1A-077 [A]: 206–207)

Platt (1984, 117–118) and Zhiming (2001, 277)³ say that this phenomenon is not at all rare in SinE: there is a tendency to imply the subject pronoun rather than state it, as the subject is usually clear from the context. In fact, Platt also says that replies like *sorry, don't have* are common in Singapore shops.

Personal pronouns as subject were less frequent in fiction. In fact, nouns were considerably more common as subject in written registers than spoken registers in all varieties, especially in AmE. There is also more diversity in the choice of subject in the written corpora, which complies with the notion that written texts are used for reporting obligations rather than directing them.

4.2. *Should*

Should is quite a versatile modal verb. According to Papafragou (1998, 3), the root meaning of the verb encodes tentative necessity, while Coates (1983, 59) adds that “at its strongest, *should* takes on the meaning of moral obligation or duty ... [and] at its weakest, it merely offers advice, if subjective, or describes correct procedure, if objective”. Davis (1977, 102) also says that *should* indicates that an action is advisable or desirable.

Huddleston and Pullum (2002, 186) state that *should* expresses medium strength modality in its most frequent use. Coates (1983, 58) and Collins (2005, 258) add that *should* can be used in four ways: the two most important ones are the root meaning (35) and the epistemic meaning (36):

(35) Well we *should* ask him later just to be sure. If not I don't know what will happen. (ICE-PHI S1A-012 [C]: 144–144)

³ In fact, Zhiming (2001, 277; 300–303) argues that the evolution of the system of empty categories in SinE is due not only to the influence of the substrate language Chinese, but also to the changes in parameter settings under the pressure of Universal Grammar.

(36) That, she thought, *should* add some excitement, some unpredictability into their lives. (ICE-SIN W2F-002: 60)

Should is also sometimes used as a quasi-subjunctive, and according to Huddleston and Pullum (2002, 187), this use of *should* appears with low-degree modality. In the following examples, *should* represents *mandative*, *conditional* and *emotive* subjunctive respectively. In the first type, the term *mandative* is based on the element *-mand*, which is found in such words as *demand* and *mandatory* (Huddleston & Pullum 2002, 174; 995). The meaning of the mandative *should* then involves the strong necessity or desirability of an actualisation:

(37) It is perhaps inevitable that the Scottish Arts Council *should* be held responsible for the fact that art galleries in Edinburgh have been closing at an alarming rate. (ICE-GB W2E-006: 27)

Huddleston and Pullum (2002, 186) add that *conditional should* expresses “slightly greater doubt than the non-modal counterpart”, i.e. a construction with *if*. Compare the following example with the expression *if she “accidentally” dropped her pen*:

(38) *Should* she “accidentally” drop her pen, he would surely notice. (ICE-PHI W2F-018:130)

Finally, *emotive should* can be found in main-clause interrogatives used as rhetorical questions, or with predicative lexemes which indicate surprise or evaluation (Huddleston & Pullum 2002, 188):

(39) I don't see why he *should* mind. (ICE-SIN S1A-062 [A]: 58)

(40) Looking back at all the signals coming out of Moscow in recent months, the only surprise about the coup against Mr Mikhail Gorbachev is that anyone *should* have been surprised at all. (ICE-SIN W2E-004: 43)

Collins (2005, 259) also says that “*should* is also used as a first person variant for hypothetical would, as in *I should imagine so, I should say so*”:

(41) A fair old walk you know. That 's a good ten minutes I *should* think. (ICE-GB S1A-023 [A]: 213–214)

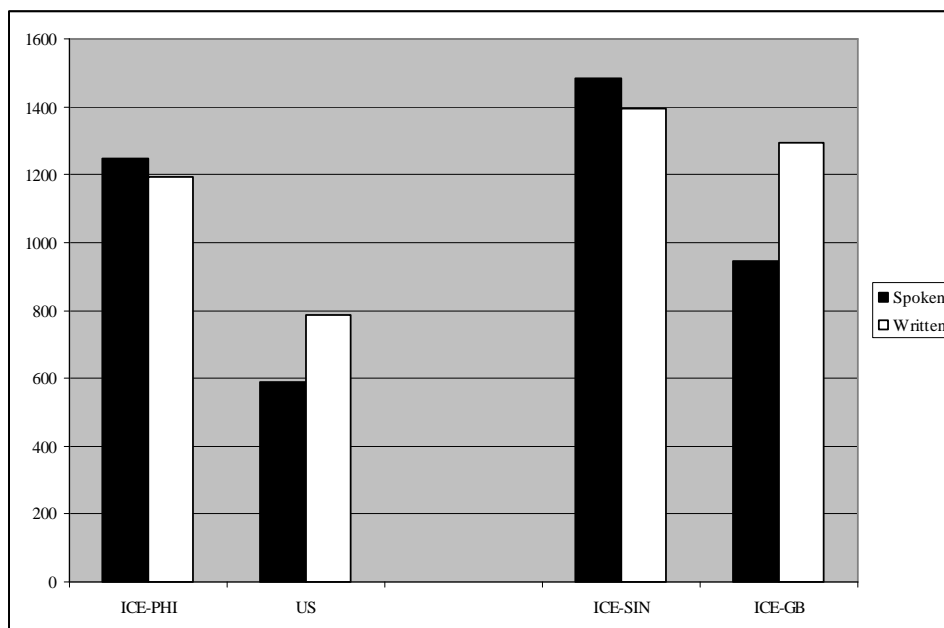
4.2.1. Frequency of *should*

Figure 8. Frequency of *should* in ICE-PHI, US, ICE-SIN and ICE-GB

Should is the second most frequent modal verb in all four corpora. This is most likely because *should* is a polite way to express obligation and necessity, i.e. it offers advice or merely describes correct procedure. In this way, the speaker does not threaten the independence of his/her interlocutor, nor does a writer necessarily impose ideas on readers, but merely presents them as favourable options.

Should is slightly more frequent in spoken than written language in both ICE-PHI (1248 in spoken / 1195 in written) and ICE-SIN (1482 / 1395), but the differences are so small that it can be stated that *should* belongs to both spoken and written language. PhiE in comparison with AmE uses *should* drastically more. In fact, *should* has a surprisingly low frequency in spoken AmE (588). It can then be argued that the rest of the English-speaking world may have affected the Philippines more than the USA in the use of *should*.

SinE seems to have the highest frequency of *should* in both spoken and written registers. In contrast, the number of occurrences in spoken BrE is surprisingly low

(945), while the number in written BrE (1295) is almost as high as in SinE. The fact that PhiE and SinE speakers have adopted *should* into spoken language, while AmE and BrE speakers have not done so, is an example of colloquialisation in the new varieties.

4.2.1.1. Root and epistemic *should* and other uses

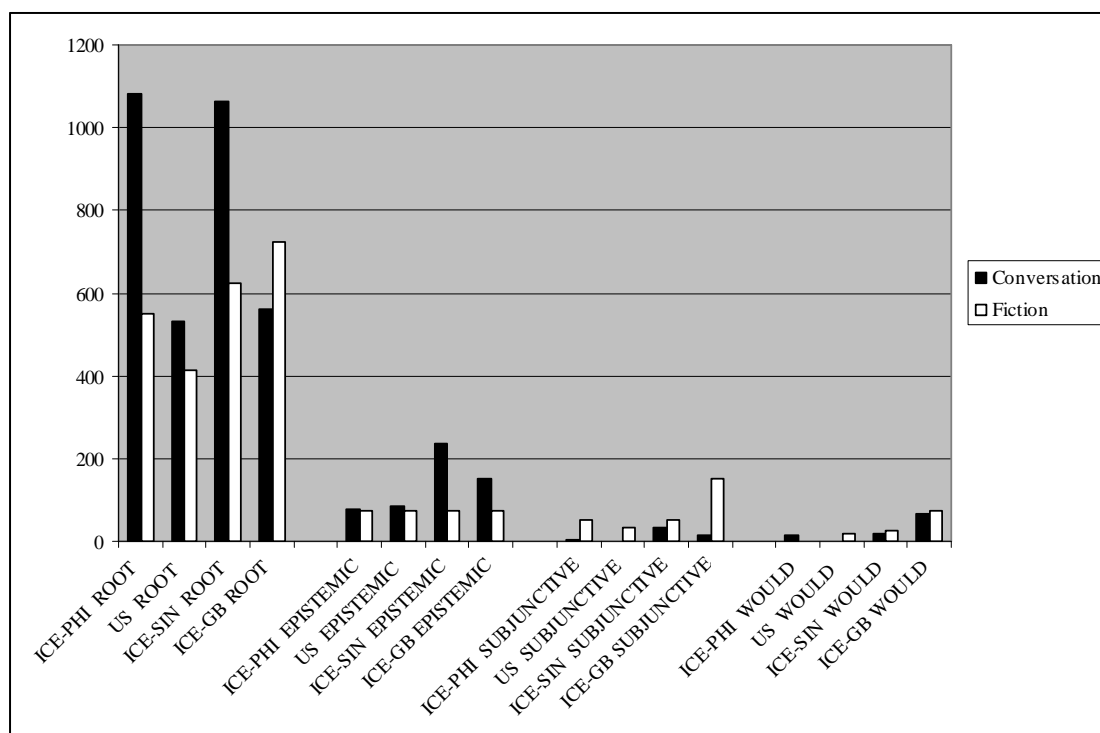


Figure 9. Frequency of *should* in ICE-PHI, US, ICE-SIN and ICE-GB conversation and fiction

Epistemic *should* is, as expected, less frequent than root *should*, but not at all rare. There were instances of epistemic *should* in all varieties, mainly in spoken language, and most of all in SinE (236), followed by BrE (150). The numbers were slightly lower in PhiE (77) and AmE (86). The other two uses of *should*, namely the subjunctive and *would* are marginal, and the subjunctive seems to be restricted to written language. These two marginal uses are nevertheless still alive in BrE, but they have not been adopted into SinE in the same amount.

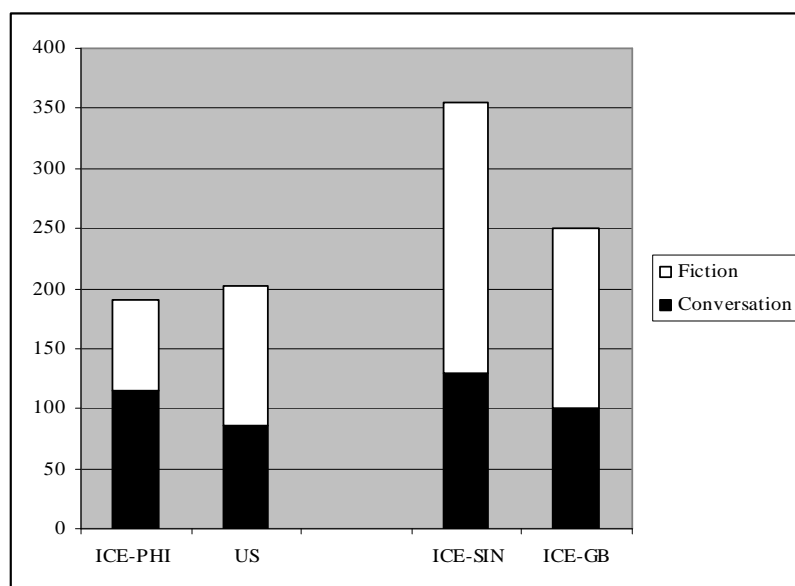
4.2.1.2. *Should have* and unfulfilled activity

Figure 10. *Should have* and *should've* in ICE-PHI, US, ICE-SIN and ICE-GB conversation and fiction

Should has no past tense form, but it is possible to express past obligation in backshifted environments of *shall* with the perfect form *should have*. In fact, Close (1962, 121) says that *should have been* suggests unfulfilled activity. This seems not to be a very popular approach, but there was a considerable amount of tokens nevertheless. There is no large discrepancy between PhiE and AmE in conversation (115 / 86) or in fiction (75 / 116). The perfect form is more frequent in PhiE conversation than in AmE conversation, while the situation is the opposite in fiction. SinE, on the other hand, shows independence in the high frequency of *should have* compared to BrE. The difference is small in conversation (130 / 100), but SinE fiction seems to favour *should have* considerably more than written BrE (225 / 150). One must note, however, that the difference between the actual number of tokens is only 3 (6 tokens in ICE-SIN / 9 tokens in ICE-GB). Here are a couple examples:

(42) Why don't why didn't you just uhm spit it out like you *should have* run for th for the ladies ' room. (ICE-PHI S1A-035 [A]: 277)

(43) I *should have* called the police (I've only read about situations like these in books and watched it on TV), but I know if I do they will just force me to go outside and testify. (ICE-SIN W2F-007: 147)

4.2.1.3. *Should not* and *shouldn't*

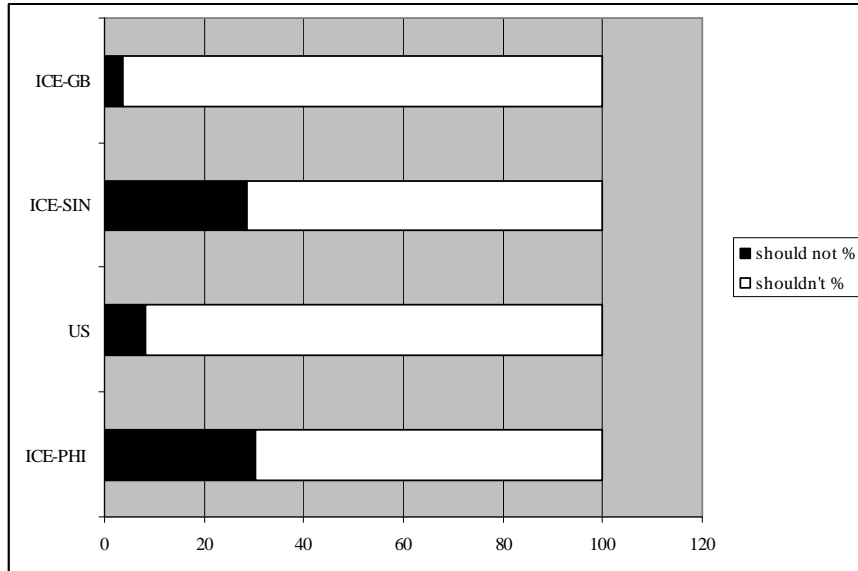


Figure 11. *Should not* and *shouldn't* in ICE-PHI, US, ICE-SIN and ICE-GB

ICE-PHI	<i>should not</i> %	<i>shouldn't</i> %	Total %
Conversation	28.6 (N=6)	71.4 (N=15)	100 (N=21)
Fiction	50 (N=1)	50 (N=1)	100 (N=2)
ICE-SIN			
Conversation	20.7 (N=6)	79.3 (N=23)	100 (N=29)
Fiction	66.7 (N=4)	33.3 (N=2)	100 (N=6)

Table 5. *Should not* and *shouldn't* in ICE-PHI, US, ICE-SIN and ICE-GB conversation and fiction

The contracted *shouldn't* was the most frequent negative form in all varieties, but interestingly, PhiE and SinE seem to favour the full negative form *should not* more than AmE and BrE. In fiction the appearance of the full form is hardly surprising, but there were no instances of *should not* in AmE and BrE conversation, while there were a few instances in PhiE and SinE. This may be a sign of more formal attitude in PhiE and SinE, which was discussed above in the case of PhiE (see 2.5.1.2.):

(44) Do you want me to tell him that perhaps he *should not* pursue you yet?
(ICE-PHI S1A-018 [A]: 82)

(45) But they they cautioned me in that I *should not* uh look at the
administrative side of it so much. (ICE-SIN S1A-032 [B]: 214)

4.2.1.4. Subjects of *should*

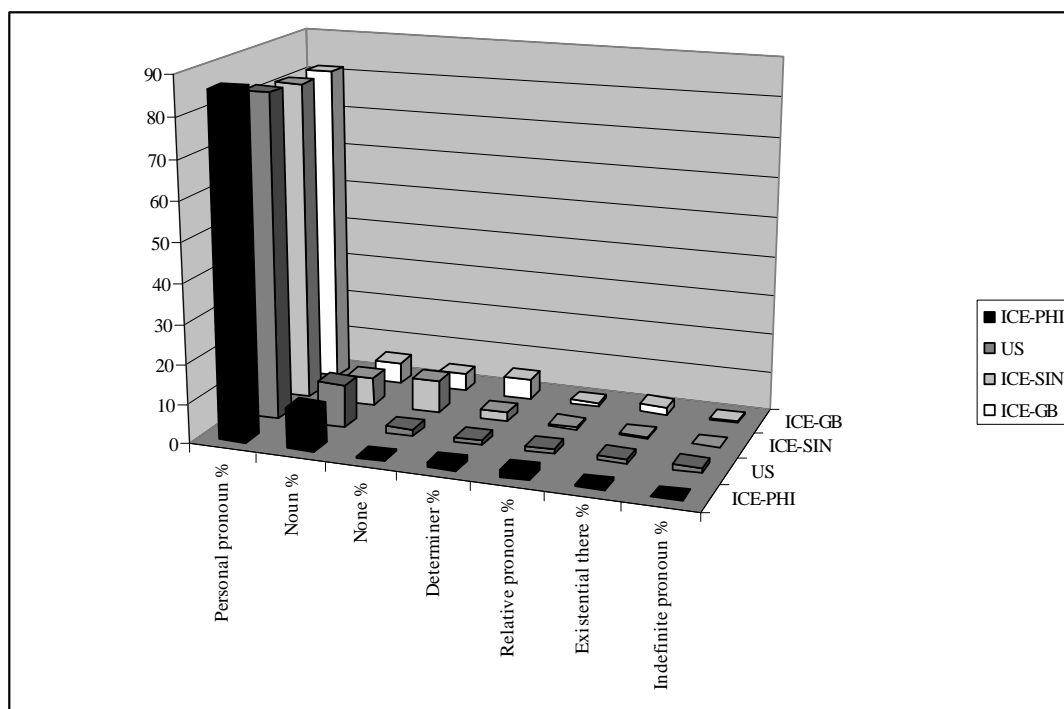


Figure 12. Subjects of *should* in ICE-PHI, US, ICE-SIN and ICE-GB

ICE-PHI	Personal pronoun %	Noun %	Other %	Total %
Conversation	87.4 (N=188)	9.3 (N=20)	3.3 (N=7)	100 (N=215)
Fiction	74.1 (N=20)	18.5 (N=5)	7.4 (N=2)	100 (N=27)
US				
Conversation	93.2 (N=41)	2.3 (N=1)	4.6 (N=2)	100 (N=44)
Fiction	78.9 (N=101)	14.1 (N=18)	7.0 (N=9)	100 (N=128)
ICE-SIN				
Conversation	82.2 (N=222)	6.3 (N=17)	11.5 (N=31)	100 (N=270)
Fiction	74.2 (N=23)	12.9 (N=4)	12.9 (N=4)	100 (N=31)
ICE-GB				
Conversation	81.0 (N=128)	3.2 (N=5)	15.8 (N=25)	100 (N=158)
Fiction	82.9 (N=34)	14.6 (N=6)	2.4 (N=1)	100 (N=41)

Table 6. Subjects of *should* in ICE-PHI, US, ICE-SIN and ICE-GB conversation and fiction

The subjects of *should* are no different to those already discussed in the case of *have to*. Personal pronoun is again the most frequent subject type followed by noun, but other subjects of *should* seem to be more frequent in conversation than those of *have to* in all varieties with the exception of AmE, but it must also be noted that the number of instances is very low in AmE conversation. SinE speakers, again, use more nouns as subjects than BrE speakers, but other subjects are more frequent in BrE than in SinE. Nevertheless, the trend of omitting the subject in SinE conversation, which was discussed in the case of *have to* above (see 4.1.1.3. above), continues with *should*.

In conclusion, fiction is again more prolific in choosing different subjects than conversation with the exception of other subjects in BrE: these are surprisingly few in ICE-GB. In contrast, other subjects are just as frequent in SinE fiction as are nouns.

4.3. *Must*

If a speaker wishes to use an expression with which they can assert power and authority over the addressee, *must* is sure to make that impact. Indeed, Woisetschlaeger (1985, 110) says that *must* in comparison with *should* provides a safer guess, a more comforting reassurance and harsher criticism. Coates (1983, 33) also adds that a native speaker's stereotype of the utterer of *must* is that he/she is interested in getting the subject to perform the action, and he/she has authority over the subject.

According to Coates (1983, 31–33) the root meaning of *must* expresses obligation or necessity. She goes on to note that the root meaning of *must* comes close to an imperative phrase, i.e. *I order you to do something*, and it therefore implies strong obligation. Therefore, subjective *must* is essentially performative – by uttering the word, the speaker simultaneously tells the addressee to do something:

(46) You *must* get a lawyer for this you know. (ICE-PHI S1B-068 [B]: 148)

(47) Oh yes well you know you *must* get over it as best as you can. (ICE-GB:S1A-049 [B]: 17)

Meanwhile, epistemic *must* conveys the speaker's confidence in the truth of the utterance, i.e. by uttering epistemic *must*, the speaker makes a logical inference (Christophersen & Sandved 1970, 195; Coates 1983, 41). The utterance is based on deduction from facts which are known to the speaker and on logic. Davis (1977, 102) says that these facts or this logic may be based on physical laws or rules. According to Huddleston and Pullum (2002, 181), subjective epistemic *must* (48) involves pragmatic weakening, and it will therefore be interpreted as a mere confident inference, while objective epistemic *must* (49–50) involves strict semantic necessity:

(48) I think the time-table *must* have got mixed up. (ICE-SIN S1A-[B]: 63)

(49) Now if you have a transfer from one place to another definitely there *must* be some relationship between the two phases and since you have a interface that equilibrium relationship most probably I say first most probably occur at the interface. (ICE-SIN S1B-007 [A]: 45)

(50) I *must* be the same age as the man who killed the world outside the Walls, and I can recognize him now when I look upon his face. (ICE-PHI W2F-015: 199)

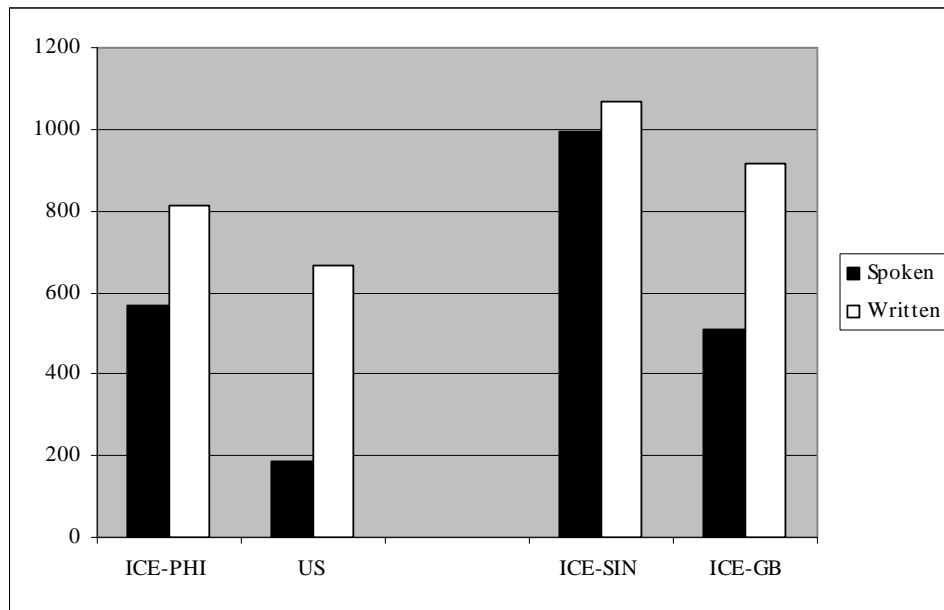
4.3.1. Frequency of *must*

Figure 13. Frequency of *must* in ICE-PHI, US, ICE-SIN and ICE-GB

As Collins (2005, 253–254, see also chapter 3.) says, the use of *must* is on the decline, mainly because of its authoritative nature. Collins suggests that this is due to “democratisation”, a phenomenon first presented by Myhill (1995, 202), which entails changes in language induced by social reasons. Myhill argues that *must* is strongly associated with the expression of unequal power, and the strive for equality has lead people to mark individuality and solidarity in more overt ways. This would explain the recent decline in the frequency of *must*.

In all four dialects, *must* is more frequent in written language. Interestingly, both PhiE and SinE use *must* more than their colonisers, especially in spoken language. The reason for its high frequency in the South-East Asian varieties remains unclear. However, it may be that it is more acceptable in Asia to oblige people than in our Western culture, and that power relationships are more overtly expressed. This would explain the large difference between the new and the old Englishes.

Must seems to be quite frequent in SinE in both spoken and written registers (993 / 1068), which is unique because the verb is clearly preferred by written language in the other varieties. The extensive use of *must* in written SinE may be due to the influence of colonisation, as *must* is quite frequent in written BrE as well.

4.3.1.1. Root and epistemic *must*

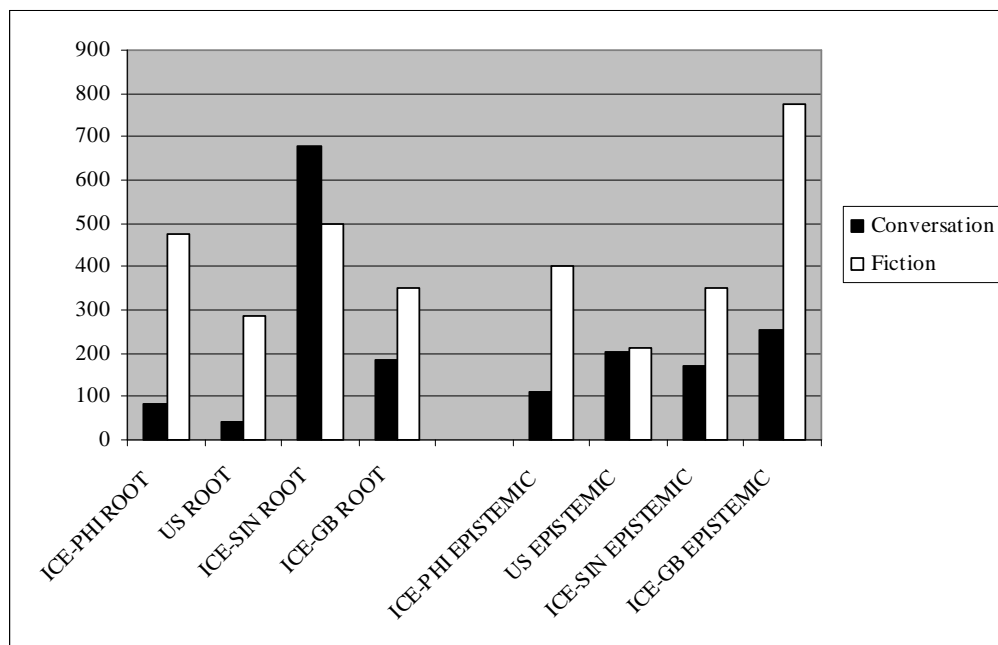


Figure 14. Root and epistemic *must* in ICE-PHI, US, ICE-SIN and ICE-GB conversation and fiction

Must is the only modal verb in this study whose epistemic use reaches the same numbers as the root use: making inferences is a more popular approach than giving orders. This was also found by Collins (2005, 266–267, see chapter 3.) In fact, in conversation, epistemic *must* is more frequent than root *must* in all dialects with the exception of SinE. This solidifies the notion that it may be more acceptable to oblige people to act in Singapore. PhiE speakers on the other hand seem to be less enthusiastic about the epistemic use than AmE speakers (110 / 201). As regards fiction, root meaning is only slightly more frequent than epistemic meaning in all

corpora except ICE-GB, which has a considerably high frequency of the epistemic use (775).

4.3.1.2. *Must have* and *must've*

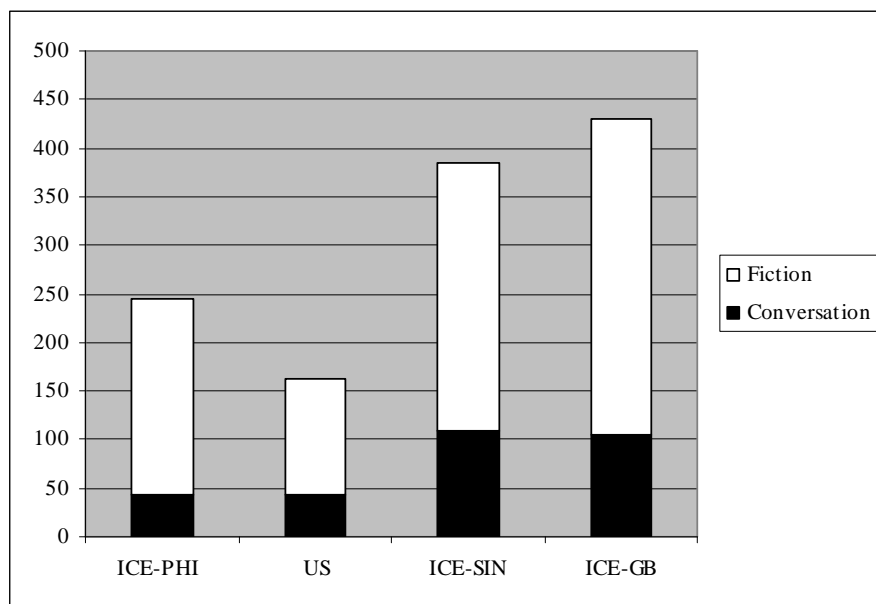


Figure 15. *Must have* and *must've* in ICE-PHI, US, ICE-SIN and ICE-GB conversation and fiction

As all modal verbs, *must* has no past tense form. Close (1962, 122) says that the present perfect form *must have* tells us what has necessarily taken place, i.e. it expresses necessity. The non-fulfilment of the obligation is simply impossible, as the obligation was inevitable:

(51) There *must have* been a build-up of ill-will somewhere along the line.
(ICE-PHI S1B-042 [C]: 80)

All the tokens of *must have* in the corpora are then essentially epistemic. This is most likely the reason for the high frequency of *must have*, as it is more frequent than *should have* (see 4.2.1.2. above). *Must have* is nevertheless more restricted to written language. The frequency in both conversation and fiction in ICE-PHI is again higher than in US (244 / 163), while the number in ICE-SIN is this time slightly lower than

in ICE-GB (385 / 430). The differences in both cases are made by the numbers in fiction as the numbers in conversation are nearly equal between PhiE and AmE and between SinE and BrE.

4.3.1.3. *Must not* and *mustn't*

ICE-PHI	<i>must not</i>	<i>mustn't</i>	US	<i>must not</i>
Conversation	0	0	Conversation	0
Fiction	50 (2)	50 (2)	Fiction	21 (5)
ICE-SIN				
Conversation	5 (1)	5 (1)	Conversation	0
Fiction	0	25	Fiction	50 (2)

Table 7. *Must not* and *mustn't* in ICE-PHI, US, ICE-SIN and ICE-GB conversation and fiction

The frequency of *must not* and *mustn't* was surprisingly low in all corpora. In fact, there was only one instance of *must not* in spoken ICE-SIN, and none in the rest of the corpora. This is most likely again due to the strict and authoritative nature of *must not* and its contracted version. Close (1962, 120) also reminds us that the meaning of *I must not go* is that 'I am forbidden to go', and if one wants to negate the obligation, *need* must be used: *I need not go*.

4.3.1.4. Subjects of *must*

ICE-PHI	Personal pronoun %	Noun %	Other %	Total %
Conversation	62.9 (N=22)	14.3 (N=5)	22.9 (N=8)	100 (N=35)
Fiction	60 (N=21)	31.4 (N=11)	8.6 (N=3)	100 (N=35)
US				
Conversation	62.5 (N=10)	25 (N=4)	12.5 (N=2)	100 (N=16)
Fiction	70.3 (N=83)	19.5 (N=23)	10.2 (N=12)	100 (N=118)
ICE-SIN				
Conversation	67.6 (N=115)	7.6 (N=13)	24.7 (N=42)	100 (N=170)
Fiction	58.8 (N=20)	32.4 (N=11)	8.8 (N=3)	100 (N=34)

ICE-GB	Personal pronoun %	Noun %	Other %	Total %
Conversation	79.5 (N=70)	3.4 (N=3)	17.0 (N=15)	100 (N=88)
Fiction	66.7 (N=30)	24.4 (N=11)	8.9 (N=4)	100 (N=45)

Table 8. Subjects of *must* in ICE-PHI, US, ICE-SIN and ICE-GB conversation and fiction

The subjects of *must* present no surprises: most of the subjects are personal pronouns in all dialects. Fiction is again more versatile in the choice of subject. The number of verb tokens with no subject in spoken SinE has been high in both of the other verbs discussed (see 4.1.1.3 and 4.2.1.4 above), but in the case of *must*, it is very high indeed (19.4%, N=33):

(52) Next time *must* bring a tumbler of water. (ICE-SIN S1A-036 [B]: 288)

4.4. *Need to*

Need to is used to express “an attitude towards an unfulfilled activity” (Close 1962, 128). Quasi-modal *need to* differs semantically from the verbs mentioned above in that the compulsion implicated comes from within the speaker (Perkins 1983, 62–63). For example, if it is stated that *I need to lie down*, I personally feel the compulsion even though it may be beyond my control. Perkins adds that if we state that a chair *needs to be repaired*, we see the need originating in, or being a property of, the chair. Interestingly, Perkins goes on to note that although these compulsions are seen as originating within the speaker, they are nevertheless explicitly objective, because they come from such part of the speaker over which he/she has no control:

(53) Yeah because I need extra cash because my Mom won't give me any allowance this summer so I *need to* earn money to be able to go out. (ICE-PHI S1A-022 [B]: 5)

In the previous example, speaker B needs to earn money because she is unable to control his/her mother. In fact, *need to* may only have an objective interpretation. Modal *need*, however, may have both a subjective and an objective interpretation (see 4.9. below). In addition, Perkins (1983, 63) says that the root meaning of *need to* denies the involvement of the speaker, but the context in itself may nevertheless have an illocutionary force of a directive:

(54) You *need to* ask more close-ended questions to draw out responses from a younger child. (ICE-SIN W2B-016: 42)

Need to also has the past tense form *needed to*. This is ideal for reporting:

(55) I ran to my car and backed out of the driveway fast, without paying attention to signs or traffic, and I headed toward the highway. I *needed to* go someplace where I could think, where I could breathe; I felt as if I were choking. (FROWN P-19: 122–125)

(56) What business furthermore had she to tell an old man that he *needed to* get rid of the stubble around his chin? (ICE-SIN W2F-020: 87)

4.4.1. Frequency of *need to*

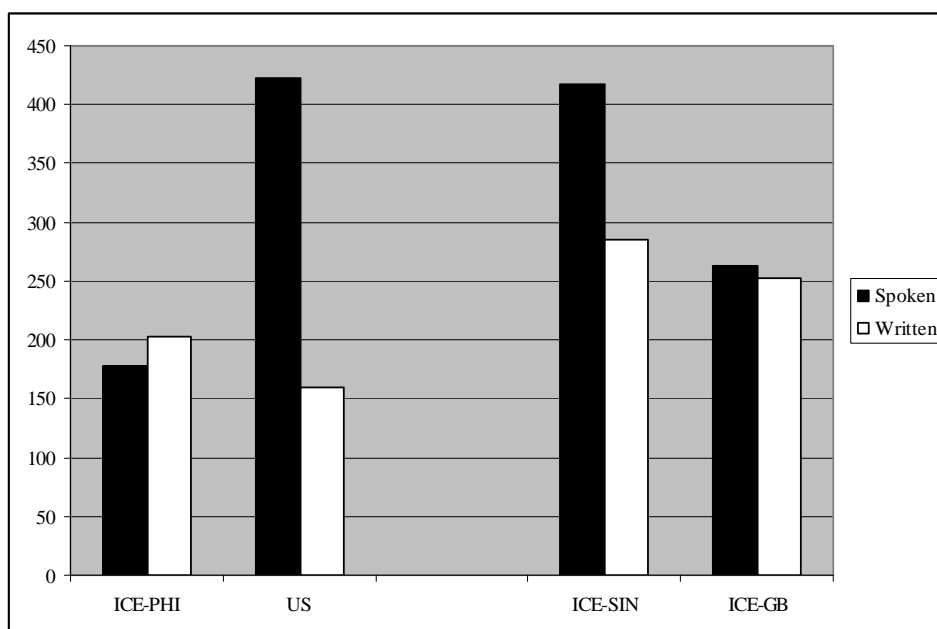


Figure 16. Frequency of *need to* in ICE-PHI, US, ICE-SIN and ICE-GB

Quasi-modal *need to* appears to be frequent in all corpora. In fact, Collins (2005, 259) says that the verb has “undergone a spectacular increase in recent BrE and AmE”. This can without a doubt be attributed to the syntactic flexibility of *need to*, such as the ability to form different tenses. Interestingly, the spectacular increase in AmE which Collins refers to has not reached the Philippines: the frequency in ICE-PHI in spoken language is rather low compared to SBC (173 / 423). The number of *need to* in PhiE is also higher in written than in spoken language (200 / 173), which makes the variety unique. *Need to* is the first of these verbs that has not caught on in spoken PhiE, and it also suggests that the expansion of the use of the modals of obligation is perhaps not as evident in the Philippines as it is in Singapore. This may be due to what Trudgill (1999, 227) refers to as *colonial lag*, a delay in the normal development of linguistic change. According to him, certain features of a language may not be adopted as quickly as others in colonial situations, mainly because there is no common peer-group dialect among children. This may result in a time lag before these features are acquired. Trudgill adds that this lag usually lasts for about one generation.

The frequency of *need to* is again higher in spoken ICE-SIN than in spoken ICE-GB (417 / 263). SinE and BrE have adopted *need to* into written language as well, while AmE writers seem more reluctant to do so. On the basis of the results viewed so far, it seems that the Singaporeans are quite innovative in their use of modals and quasi-modals of obligation and necessity. In the case of *need to*, however, it could be argued that the reason may be “Americanisation” at some scale, as the numbers in spoken ICE-SIN and in SBC and are extremely close to each other (417 / 423). It is quite likely that AmE has influenced SinE: the political and economic power of the USA is indisputable, not to mention the pervasive American popular culture cultivated by the media and the entertainment industry (see also chapter 2.5.2.2).

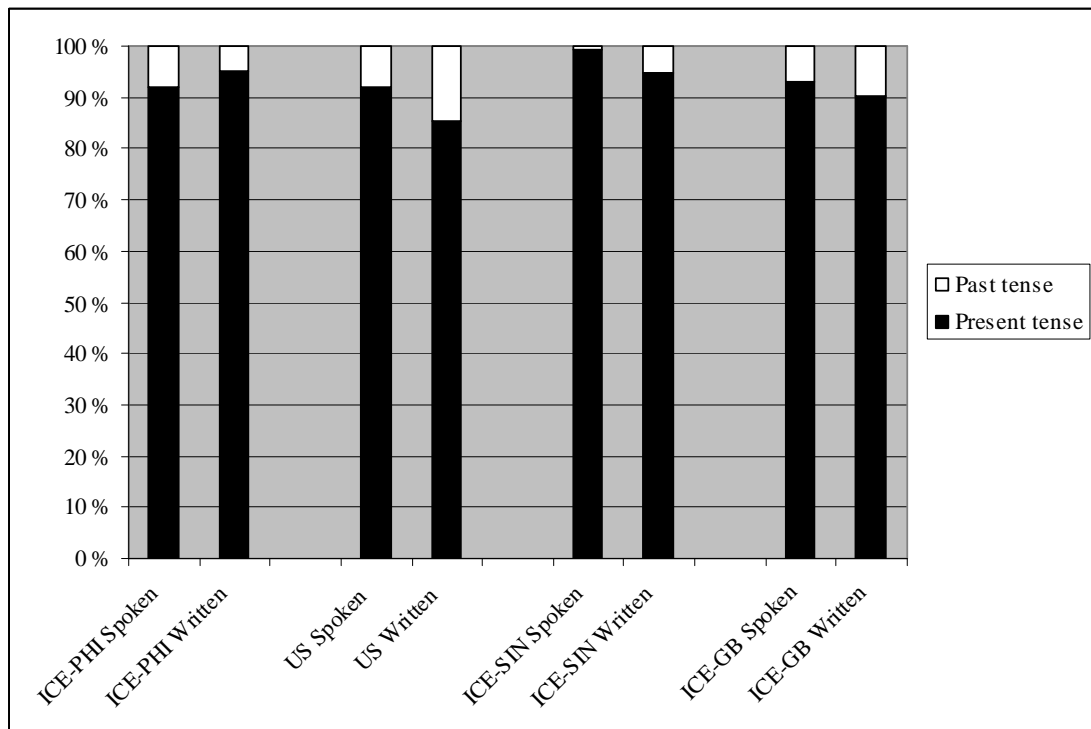
4.4.1.1. Present tense vs. past tense *need to*

Figure 17. Past and present tense *need to* in ICE-PHI, US, ICE-SIN and ICE-GB

Even though syntactic flexibility is regarded as one of the reasons for the high frequency of *need to*, it must be stated that the percentage of past tense *needed to* compared to the present tense forms *need to* and *needs to* is surprisingly small in all dialects. Nevertheless, here are a few examples of the past tense use:

(57) And because of the largeness of the area we *needed to* have a pilot area of six blocks which is a doable area to demonstrate that the private sector can come in and be involved in this. (ICE-PHI S2A-041 [A]: 23)

(58) The rent was too high, but they *needed only to* stay until he found something cheaper. (ICE-SIN W2B-005: 88)

If we compare the numbers of *needed to* with those of *had to* above (see Figure 3. above), it must be acknowledged that past tense *needed to* is not being used to its full potential. In addition, the old Englishes, AmE and BrE, seem to use the past tense form mainly for reporting, as the number is higher in the written registers. Again, the fact that PhiE and SinE speakers do not necessarily mark verbs for past tense may be

the reason (see 4.1.1.2. above). In contrast, PhiE and SinE use the past tense form relatively little in writing. The fact that the past tense form is hardly used in spoken SinE is somewhat surprising considering the high frequency of *need to* in total.

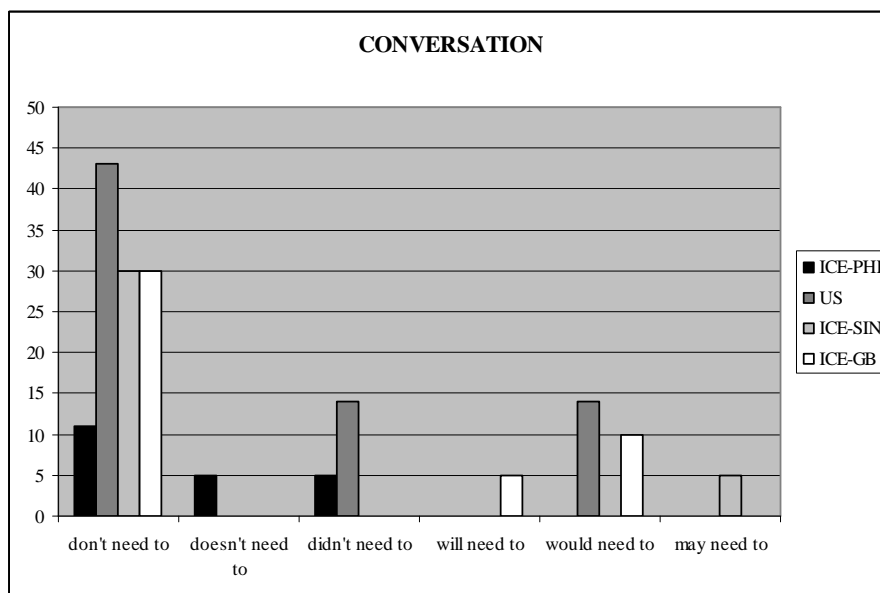


Figure 18. Positive and negative verb forms of *need to* in ICE-PHI, US, ICE-SIN and ICE-GB conversation

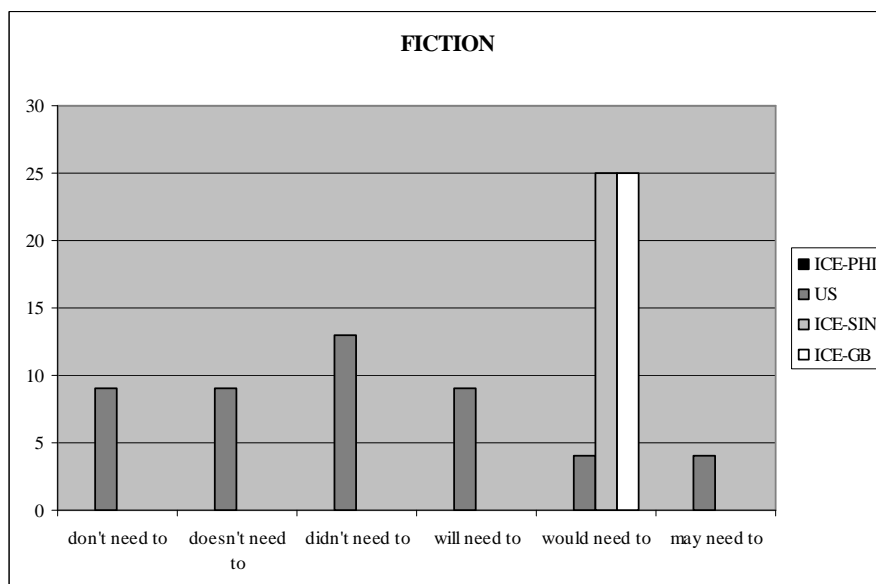


Figure 19. Positive and negative verb forms of *need to* in ICE-PHI, US, ICE-SIN and ICE-GB fiction

In addition to preferring present tense over past tense, the four varieties do not seem to favour the other verb forms of *need to*, namely the negative forms and the forms which are used to refer to future or hypothetical events. The only forms worth mentioning are the contracted *don't need to* in conversation and the hypothetical *would need to* in fiction:

(59) I *don't need to* see other people. (ICE-SIN S1A-041 [B]: 37)

(60) Of course the chaos when the Supreme Being was discovered tied up and concussed on the floor would be indescribable, but surely they *would need to* be more than just lucky to win much more time out of mere chaos? (ICE-GB W2F-015: 69)

It should also be noted that PhiE appears to be more resilient to these forms than the other three, probably because of its low overall frequency of *need to*. The verb forms are more frequent in AmE, especially in fiction. This is most likely due to its high overall frequency.

4.4.1.2. Subjects of *need to*

ICE-PHI	Personal pronoun %	Relative pronoun %	Other %	Total %
Conversation	97 (N=32)	3 (N=1)	0 (N=0)	100 (N=33)
Fiction	100 (N=3)	0 (N=0)	0 (N=0)	100 (N=3)
US				
Conversation	79.4 (N=27)	8.8 (N=3)	11.8 (N=4)	100 (N=34)
Fiction	83.9 (N=26)	6.4 (N=2)	9.7 (N=3)	100 (N=31)
ICE-SIN				
Conversation	98.3 (N=59)	1.7 (N=1)	0 (N=0)	100 (N=60)
Fiction	100 (N=2)	0 (N=0)	0 (N=0)	100 (N=2)
ICE-GB				
Conversation	95.9 (N=47)	0 (N=0)	4.0 (N=2)	100 (N=49)
Fiction	75 (N=6)	12.5 (N=1)	12.5 (N=1)	100 (N=8)

Table 9. Subjects of *need to* in ICE-PHI, US, ICE-SIN and ICE-GB conversation and fiction

With regard to the subjects of *need to*, personal pronouns are used the most, while the frequency of nouns as subjects seem to decline compared to the verbs already discussed. In fact, there were no nouns as subjects in ICE-PHI, and fairly little in the other corpora as well. Only AmE seems to have variety in its subjects in conversation, which can be expected considering the high frequency of the verb in US. However, one must take into consideration the low number of tokens.

4.5. *Supposed to*

Be supposed to can be paraphrased as *be expected to*, as in the phrase *every man is supposed to do his duty* (Perkins 1983, 85):

(61) You know what I mean you 'll go to like uhm whatever whatever place and buy like a cellphone or whatever and then you get something that you paid for uhm like *it 's supposed to be made in Finland* right. (ICE-PHI S1B-035 [B]: 42)

It is also stated in the *Longman Grammar of Spoken and Written English* (2000, 500) that *be supposed to* appears relatively commonly with the progressive aspect. This, according to the grammar, marks a personal obligation or a likely occurrence, which is actually in progress at the present moment, or predicted to occur some time in the future. This was not a very frequent approach in PhiE or in SinE, but there were a few instances:

(62) No *he's supposed to be giving* it to the woman. (ICE-PHI S1B-023 [C]: 225)

(63) And they *are supposed to be writing* in their English medium uh in exams or whatever projects. (ICE-SIN S1A-071 [B]: 111)

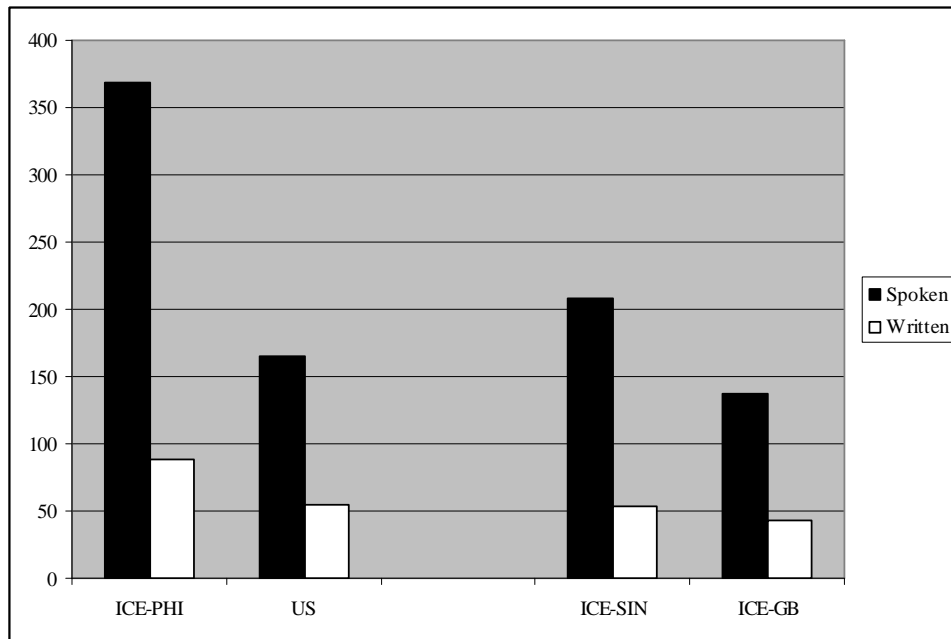
4.5.1. Frequency of *supposed to*

Figure 20. Frequency of *supposed to* in ICE-PHI, US, ICE-SIN and ICE-GB

Based on the study, *supposed to* belongs to spoken rather than written language, supposedly because of its personal nature mentioned above (see chapter 4.5.). PhiE speakers use *supposed to* most frequently (369), followed by Singaporeans (208). In fact, both South-East Asian varieties use *supposed to* more than their colonisers in both media: the use of the verbs is surprisingly restricted in AmE and BrE, especially in writing. Whether the Americans and the British regards *supposed to* as formal because of the low frequency in speech, or as colloquial because of the same tendency in writing, is an intriguing question. It is interesting that the South-East Asian varieties again surpass the old countries in frequency.

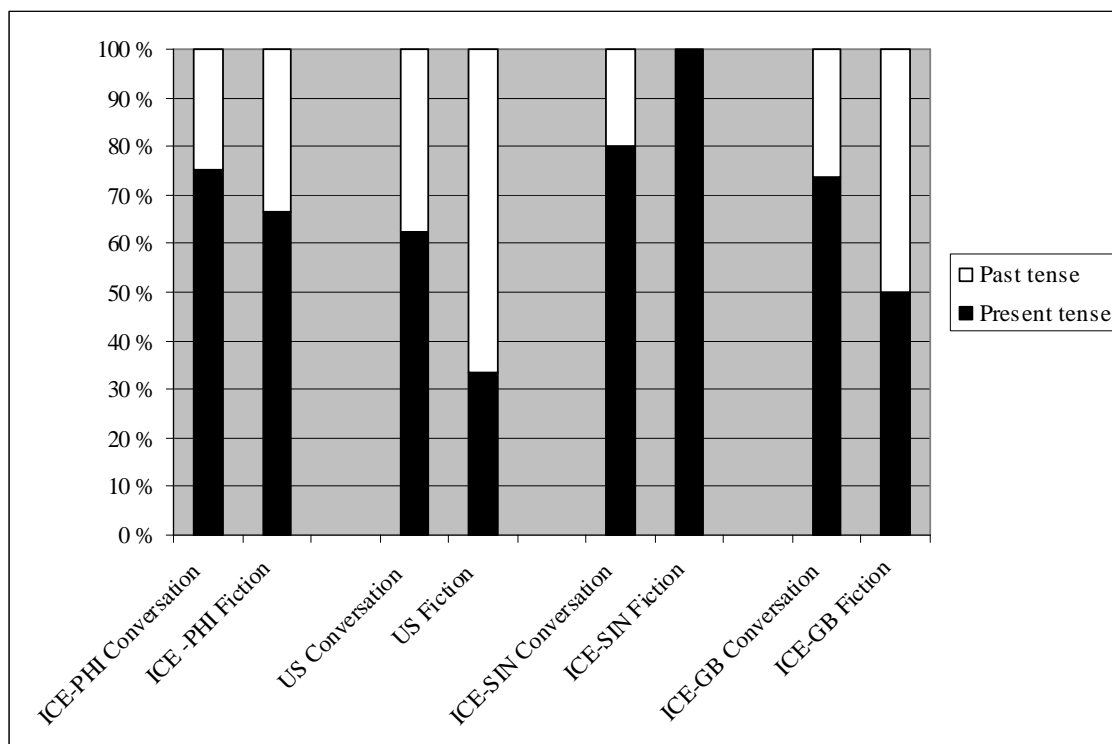
4.5.1.1. Present tense vs. past tense *supposed to*

Figure 21. Present and past tense *supposed to* in ICE-PHI, US, ICE-SIN and ICE-GB conversation and fiction

Compared to the frequency of past tense *have to* and *need to* (see 4.1.1. and 4.4.1. above), the past tense potential of *supposed to* is represented more efficiently in conversation and fiction in all of the varieties. Past tense forms account for over 20% in all four dialects, apart from SinE fiction, in which there were only present tense tokens. In AmE fiction, the past tense use accounts for over 75%, which is remarkable considering the low number of tokens, but not so remarkable when taking into consideration the reporting nature of fiction. As was the case with past tense *had to* and *need to*, PhiE and SinE users have not adopted past tense *supposed to* as markedly as AmE and BrE users.

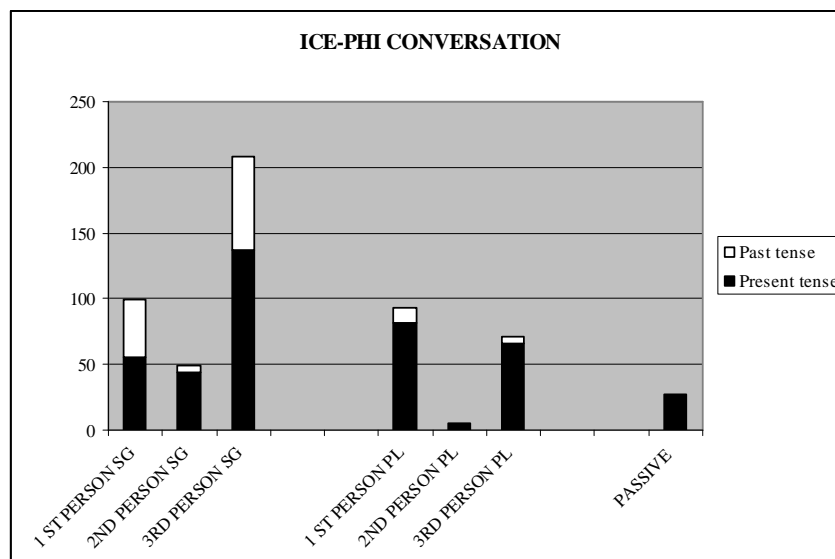


Figure 22. Persons of *be* with *supposed to* in ICE-PHI conversation

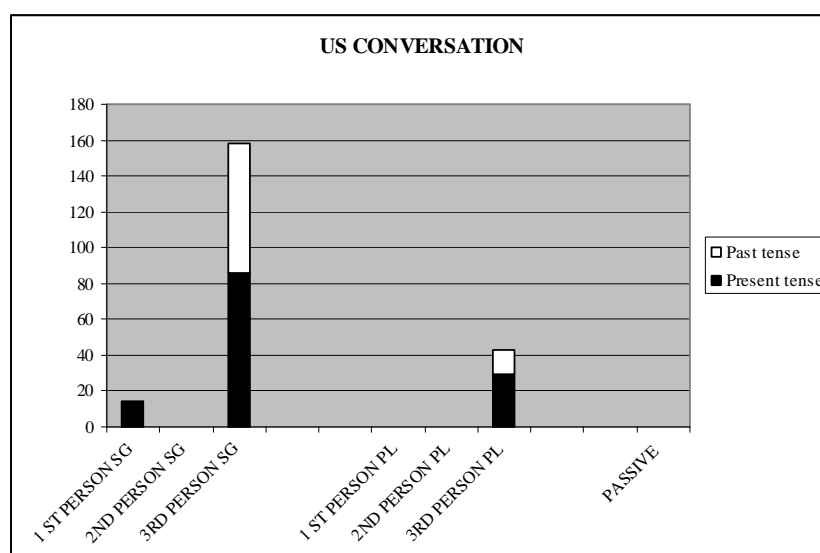


Figure 23. Persons of *be* with *supposed to* in US conversation

In conversation, both PhiE and AmE speakers use present tense *supposed to* rather than past tense. Third person singular *he/she/it is supposed to* is the dominant form used in speech, but past tense *he/she/it was supposed to* is by no means rare. In addition, there is a lot more variation in PhiE as to what person, and therefore, what form of *be*, is used:

(64) When I graduated actually before I graduated *I was supposed to* go abroad but the government withheld my passport. (ICE-PHI S1A-

009 [B]: 31)

(65) I think *they're supposed to* deliberate on it after the end of March.
(ICE-PHI S1A-051 [B]: 104)

(66) So not that *you're supposed to* make mistakes it's just that you can't avoid mistakes. (ICE-PHI:S1A-058 [B]: 182) (passive)

There were only three instances of *supposed to* in PhiE fiction. One of these was a 1st person singular present tense and the others were 3rd person singular past tense:

(67) I know *I'm not supposed to* go out. (ICE-PHI W2F-015: 7)

(68) By age seventeen, Emilio stopped wondering how his father knew he was smiling when *he was supposed to* be unconscious. (ICE-PHI W2F-014: 89)

(69) Vincent, on the other hand, stayed close to the pipe issuing the water and tried to enjoy the hot bath for what *it was supposed to* be - - and the water was indeed very hot, and the weather was particularly warm. (ICE-PHI W2F-020: 9)

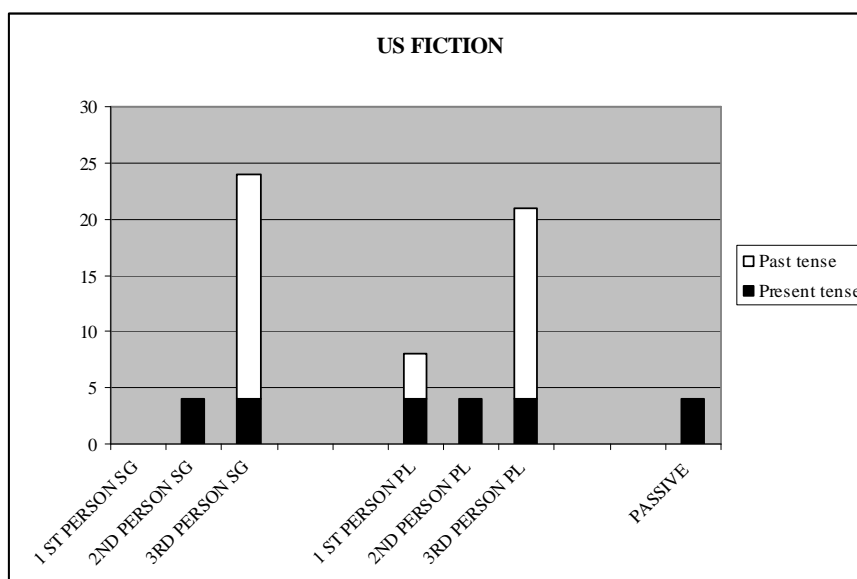


Figure 24. Persons of *be* with *supposed to* in US fiction

There is a bit more variation in US fiction in the forms of *be*, although one must note that there were a only a few instances in the Frown fiction section (N=16). Past tense is more frequent in fiction, again most likely because of the reporting nature of the text type.

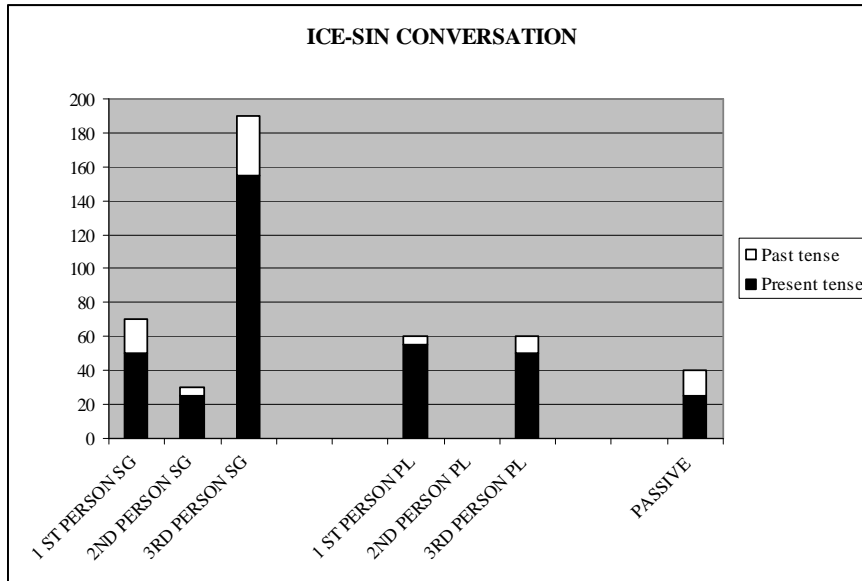


Figure 25. Persons of *be* with *supposed to* in ICE-SIN conversation

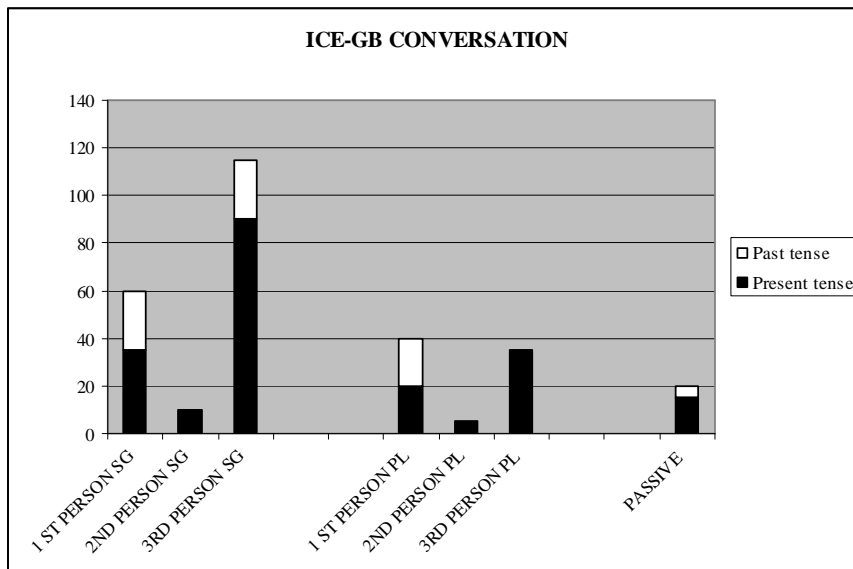


Figure 26. Persons of *be* with *supposed to* in ICE-GB conversation

The present tense use of *supposed to* is also more frequent in SinE conversation than past tense, but not overwhelmingly so. It must be acknowledged that past tense forms of *be* were found in almost each person, even though Fong (2004, 87) says that *be* is optional in this phrase in SinE. There are no remarkable differences between SinE and BrE: 3rd person singular form *is supposed to* is most frequent in both dialects followed by a variety of the other forms. Considering the obliging nature of *supposed*

to, it could be argued that it is odd that the frequency of second person *you are supposed to* is so low in all of these dialects. In fact, the passive *you are supposed to* was more frequent than the second person form in both varieties, which demonstrates that impersonalising an obligation is a frequent approach: it is more acceptable to mask the notion of what someone is expected to do in an utterance which applies to no one in particular rather than someone who is singled out.

As was the case in ICE-PHI and Frown, there were only a couple instances of *supposed to* in ICE-SIN fiction and six in ICE-GB fiction:

(70) "Strangers *are not supposed to* be walking in and out -" "I'm his son," he said. (ICE-SIN W2F-004: 7)

(71) The plants *are supposed to* be green with big healthy leaves. (ICE-SIN W2F-015: 29)

(72) I knew I *was supposed to* cover for them for a few days, then for a few more days I thought something might have delayed them - a ferry strike or airport problems or something. (ICE-GB W2F-006: 235)

4.5.1.2. Subjects of *supposed to*

ICE-PHI	Personal pronoun %	Noun %	Other %	Total %
Conversation	79.2 (N=80)	13.9 (N=14)	6.9 (N=7)	100 (N=101)
Fiction	100 (N=3)	0 (N=0)	0 (N=0)	100 (N=3)
US				
Conversation	50 (N=8)	37.5 (N=6)	12.5 (N=2)	100 (N=16)
Fiction	43.8 (N=7)	37.5 (N=6)	18.8 (N=3)	100 (N=16)
ICE-SIN				
Conversation	85.6 (N=77)	8.9 (N=8)	5.6 (N=5)	100 (N=90)
Fiction	0 (N=0)	100 (N=2)	0 (N=0)	100 (N=2)
ICE-GB				
Conversation	82.4 (N=47)	10.5 (N=6)	7.0 (N=4)	100 (N=57)
Fiction	50 (N=2)	25 (N=1)	25 (N=1)	100 (N=4)

Table 10. Subjects of *supposed to* in ICE-PHI, US, ICE-SIN and ICE-GB conversation and fiction

The subjects of *supposed to* show no difference to the subjects of the other modal verbs: personal pronouns are the most frequent subject type followed by nouns and other subjects. In written AmE, however, all subjects were nouns, but this is due to the low number tokens in the Frown (N=2).

4.6. *Have got to*

Have got to is semantically quite like *have to*, which was already discussed in chapter 4.1. Nevertheless, there are differences between these verbs. Palmer (1979, 92) says that *have got to* represents a more colloquial style while *have to* is more formal. Perkins (1983, 60) also says that *have got to* is more impersonal, and that it is required in situations where a certain amount of politeness is required, i.e. in situations where *must* would be too intrusive:

(73) Exactly so *we've got to* get our thesis good you know.
(ICE-PHI S1A-017 [B]: 178)

In addition, while *have to* is never subjective, *have got to* covers a range of meanings from subjective (74) to more objective (75). However, *have got to* is never performative:

(74) Please take that down. *You've got to* read that. (ICE-PHI S1B-018 [A]: 31–32)

(75) But the thing is ya lah only the with the children we also *got to* keep an eye on them and then make sure they don't fall off or whatever. (ICE-SIN S1A-094 [B]: 211)

Have got to also has an epistemic meaning:

(76) *There's got to* be more schools around here that have room for a Puppet Lady. You should try to get another gig as soon as this one's finished. (FROWN K05: 61–63)

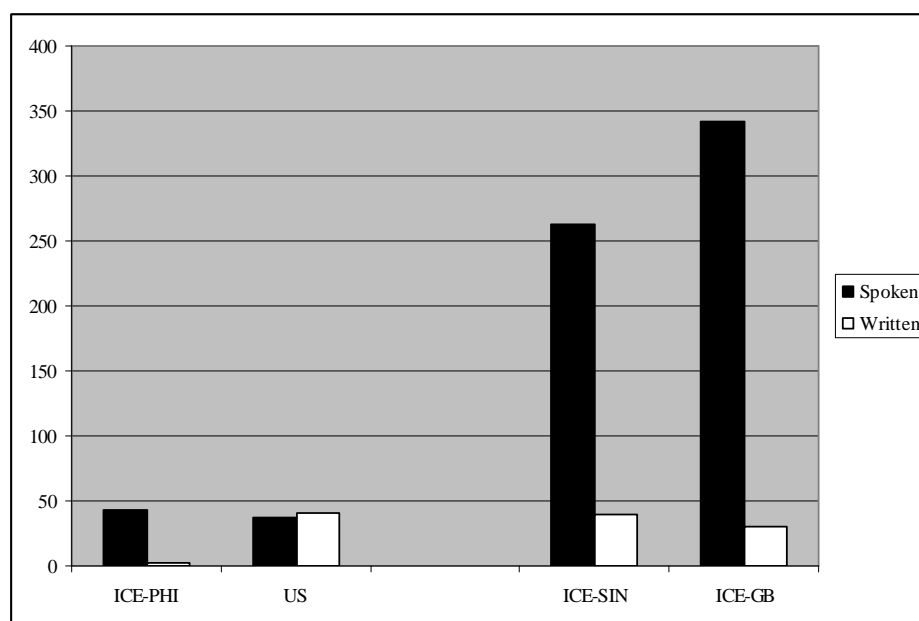
4.6.1 Frequency of *have got to*

Figure 27. Frequency of *have got to* in ICE-PHI, US, ICE-SIN and ICE-GB

Have got to is often reduced to simple *got to* or *gotta*. These two reduced forms were also studied. The results of this study confirm those of the LGSW study above (see chapter 3.) in that *have got to* is more frequent in BrE than AmE. This has had an impact on the language of the colonies: *have got to* is rare PhiE but frequent in SinE. The verb is the most frequent in spoken BrE (342), followed by spoken SinE (263), but virtually non-existent in spoken PhiE (43) and AmE (37). The case of *have got to* is also the first instance of BrE having more tokens than SinE. In addition, *have got to* appears to be rare in written language in all varieties and non-existent in written PhiE. This is expected considering the colloquial and impersonal nature of the verb.

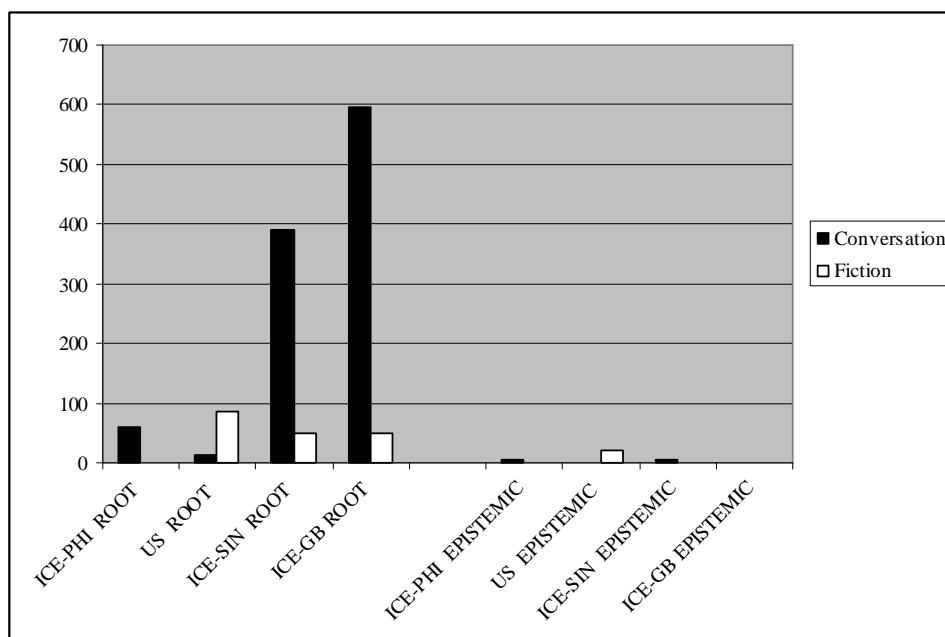
4.6.1.1. Root and epistemic *have got to*

Figure 28. Frequency of root and epistemic *have got to* in ICE-PHI, US, ICE-SIN and ICE-GB conversation and fiction

Epistemic *have got to* is extremely rare, as was epistemic *have to*. There was only one instance in both spoken ICE-PHI and ICE-SIN, a few in the Frown, but none in SBC or ICE-GB, which is surprising taking into account the overall frequency of *have got to* in BrE:

(77) *It's got to* happen and you know James is like I 'm so excited to go shopping with you baby. (ICE-PHI S1A-015 [A]: 157)

(78) She *got to* call up one of her boys. (ICE-SIN S1A-069 [A]: 223)

(79) Don't you see, *that's got to* be the answer? (FROWN K04: 147)

In (77), the speaker is confident that something will soon take place, while the speaker in (78) is confident that one of her interlocutors, who is speaking on the phone, is talking to a boyfriend. In example (79), the speaker is simply confident about the nature of the situation.

4.6.1.2. Subjects of *have got to*

ICE-PHI	Personal pronoun %	Noun %	Other %	Total %
Conversation	100 (N=12)	0 (N=0)	0 (N=0)	100 (N=12)
Fiction	0 (N=0)	0 (N=0)	0 (N=0)	0 (N=0)
US				
Conversation	0 (N=0)	100 (N=1)	0 (N=0)	100 (N=1)
Fiction	72.7 (N=16)	0 (N=0)	27.3 (N=6)	100 (N=22)
ICE-SIN				
Conversation	86.1 (N=68)	1.3 (N=1)	12.7 (N=10)	100 (N=79)
Fiction	100 (N=2)	0 (N=0)	0 (N=0)	100 (N=2)
ICE-GB				
Conversation	95.0 (N=113)	2.5 (N=3)	2.5 (N=3)	100 (N=119)
Fiction	100 (N=2)	0 (N=0)	0 (N=0)	100 (N=2)

Table 11. Subjects of *have got to* in ICE-PHI, US, ICE-SIN and ICE-GB conversation and fiction

The subjects of *have got to* confirm further the notion that personal pronouns are the most frequent subject of modals of obligation and necessity. Nouns are even more on the decline and the choice of other subjects seems more random than with the verbs already discussed. In conclusion, ICE-SIN is the only corpus which shows minor versatility in the choice of subject with *have got to*, and again, these other subjects are mainly instances with no subject at all.

4.7. *Ought to*

Root *ought to* expresses weak obligation in both subjective and objective uses, similarly to root *should* (Collins 2005, 262). According to Declerck (1992, 377), *ought to* can be used to express a non-forceful recommendation (80) or to make a simple assertion of the convenience of the state of affairs (81)

(80) Washing can be done in a basin of clean water. If so, you *ought to* change water several times. (ICE-SIN W2B-032: 99–100)

(81) But why are these properties found only in Philippine papaya? That *ought to* be the subject of further research. (ICE-PHI W2E-00165–66)

Palmer (1979, 100) says that *ought to* and *should* are largely interchangeable. He also adds that there is often an implication that the event will not, or did not ever take place, i.e. there is an implication of non-actuality: *I ought to be ashamed but I can't*. According to Coates (1983, 79), epistemic *ought to* can be paraphrased as ‘meant to’ or ‘supposed to’:

(82) Because I I think there're a lot of mechanics they *ought to* know right how to uhm manage the O H T uhm a lot of other classroom mechanics which I thought would be helpful to them because now I'm looking back I felt find a lot of lecturers and tutors don't really know how to control a class and how to read the faces of pupils of of the students in in university. (ICE-SIN S1A-076 [B]: 13)

(83) “That pot's been brewing since morning.” “Then it *ought to* be ready.” (FROWN L-14: 176–177)

Nuyts (2002, 174) in turn says that when uttering *ought to*, the speaker has weaker evidence of the situation at hand than with *must* or with *have to*, Perkins (1983, 54–55) adds that *ought to* is also slightly more polite than *must*, especially in its negative use:

(84) You *oughtn't* to pick your nose in public. (cf. *mustn't*)

Surprisingly, there were no examples of *oughtn't* in any of the corpora. Positive *ought to* is also declining in frequency, as will be demonstrated next.

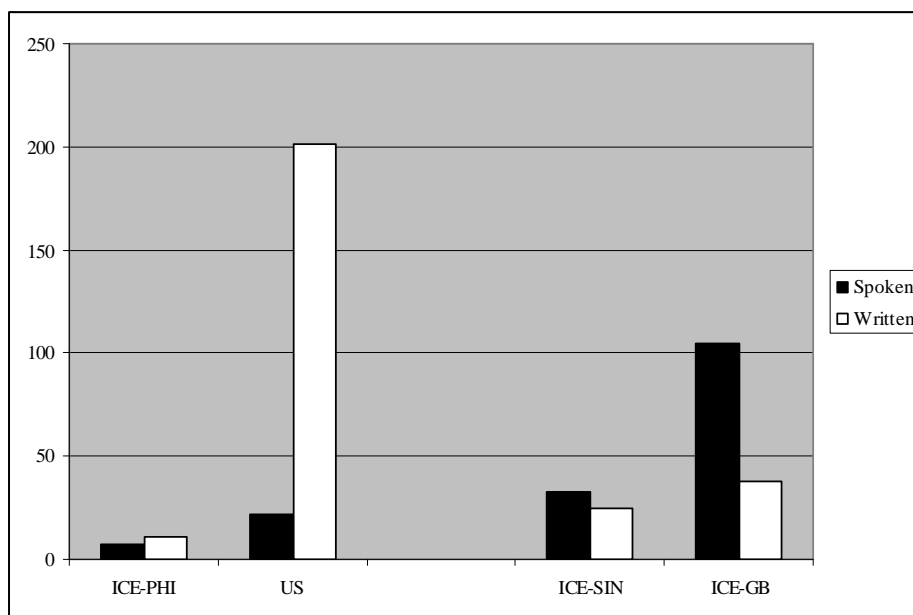
4.7.1 Frequency of *ought to*

Figure 29. Frequency of *ought to* in ICE-PHI, US, ICE-SIN and ICE-GB

According to the results, *ought to* has clearly not caught on in either PhiE or SinE. It is indeed the first modal verb of obligation and necessity which had lower frequency in both speech and writing in PhiE and SinE. *Ought to* is nevertheless used in AmE and BrE, but even then, only scarcely.

It is interesting that the frequency in written AmE is high (201), as many of these verbs under scrutiny have been scarce in the Frown. In contrast, the number of tokens in spoken language is higher in BrE (105). The same trend can be noted in PhiE and SinE in smaller scale. It can then be argued that the use of *ought to* in PhiE and SinE has been, at least to some extent, influenced by the language of the colonising countries, but perhaps the profusion of other similar verbs has contributed to its disfavour.

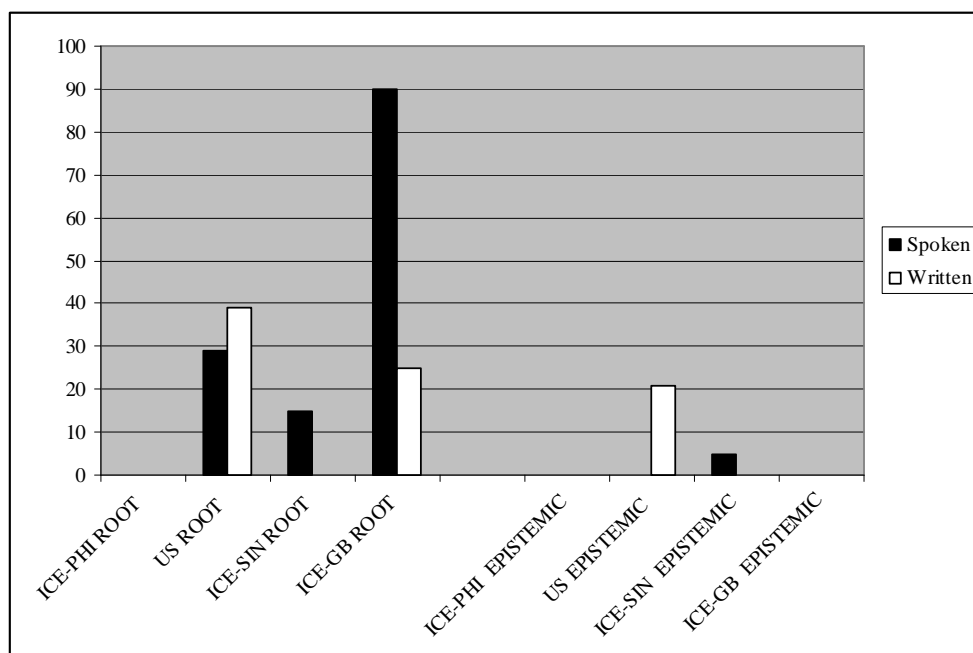
4.7.1.1. Root and epistemic *ought to* and subjects of *ought to*

Figure 30. Frequency of root and epistemic *ought to* in ICE-PHI, US, ICE-SIN and ICE-GB conversation and fiction

Root *ought to* was not found in ICE-PHI private dialogue and creative writing, nor in ICE-SIN creative writing, which confirms the notion that *ought to* is not favoured by PhiE and SinE. Epistemic *ought to* is also extremely rare: it was not found in ICE-PHI, spoken US nor ICE-GB, and the only instance found in ICE-SIN conversation was example 82. However, there were quite a few tokens of epistemic *ought to* in the Frown corpus:

(85) "Manj, stay here. Make sure that we question everybody in every house on this block. Neighboring blocks too. We *ought to* be able to find somebody who saw something out of place - anything odd." (FROWN L-4: 237–240)

(86) Salina was dark when they passed through. A couple of dogs ran out and challenged them, but they retreated once they'd said their piece. "The prairie never stops," Thomas said, longing for a soft bed. "We *ought to* come into Lincoln about dawn. We'll shake down there." (FROWN N-04: 207–213)

The Frown corpus was also the only one that had nouns as subjects with *ought to* (14.2%, N=2). All other tokens in the corpora had personal pronouns as subjects.

4.8. *Had better*

By using the verbal expression *had better*, the speaker gives the further information, that in his/her view, it 'is better' that an event take place, or, as Palmer (1979, 69) puts it, gives advice and is fairly firm about it. However, this does not entail that the source of the obligation is necessarily the speaker, and the expression is therefore said to be objective (Perkins 1983, 63): *We had better dress up warmly.*

In addition, *had better* expresses only deontic modality. The use of *had better* then entails that something should be brought about, or in contrary, avoided (Perkins 1983, 9; 64). While epistemic meaning relates to knowledge, deontic relates to duties:

(87) And then when I told her that you are uhm you are uh up-to-date on the literature she said *we 'd better* give it to Tish. (ICE-PHI S1A-003 [B]: 234)

(88) So, to begin with, the reason for this note/letter/memo is because Paul came over to the hostel at Eusoff College and told me you called and would be leaving the ashram where you are now by the end of March and that I *had better* write you something before you're again "SOMEWHERE OUT THERE" and where nobody can reach you by mail/air/phone or whatever the latest technology has invented. (ICE-SIN W1B-008: 2)

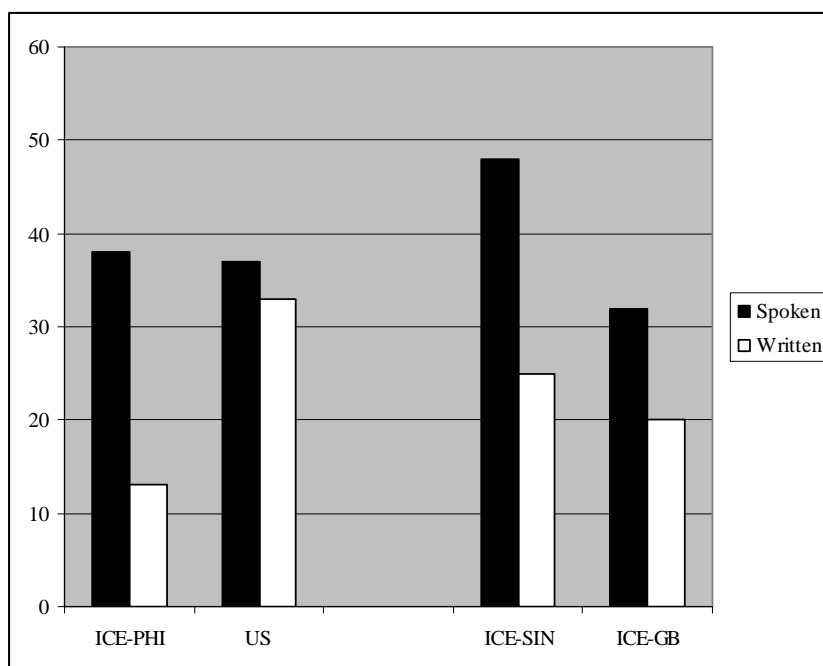
4.8.1. Frequency of *had better*

Figure 31. Frequency of *had better* in ICE-PHI, US, ICE-SIN and ICE-GB

Had better is definitely on the decline in all of the varieties. Its inflexibility in both syntactic and semantic aspects has made it a marginal quasi-modal. However, the verb also appears in PhiE and SinE, and the latter has yet again the highest frequency in spoken language (48). There were quite a few instances where either the subject (usually a personal pronoun) or the verb *had*, or in some cases both, had been omitted. Therefore, to be able to find all tokens, only *better* was used as the search word. Here are a couple examples from ICE-SIN correspondence:

(89) Well *better* end here before it becomes an autobiography! (ICE-SIN W1B-001: 121)

(90) *Better* stop myself from 'Fa Lao Sao' (can guess what is this?) - ie letting off my frustrations. (ICE-SIN W1B-002: 28)

There was also an interesting example in ICE-PHI, which incorporates *should* with *had better*:

(91) That I 'm not sure we *should better* ask him. (ICE-PHI S1A-012 [A]: 142)

4.8.1.1. Subjects of *had better*

US	Personal pronoun %	Noun %	Relative pronoun %	Total %
Conversation	100 (N=4)	0 (N=0)	0 (N=0)	100 (N=4)
Fiction	92 (N=23)	4 (N=1)	4 (N=1)	100 (N=25)
ICE-SIN	Personal pronoun %	None %		Total %
Conversation	81.3 (N=13)	18.7 (N=3)		100 (N=16)
Fiction	100 (N=4)	0 (N=0)		100 (N=4)

Table 12. Subjects of *had better* in ICE-PHI, US, ICE-SIN and ICE-GB conversation and fiction

Only the Frown corpus and ICE-SIN show variation in the subjects of *had better*: all the instances of the verb in ICE-PHI and ICE-GB had a personal pronoun as subject. The absence of the subject continues to be a frequent phenomenon in SinE, which was also demonstrated above in examples 89–90.

4.9. *Need*

Coates says (1983, 50) that the use of modal *need* is on the decline, and it seems that its main function is to provide a negative form (*need not* or *needn't*) which expresses negation of the modal predication. Christophersen and Sandved (1970, 195) add that *need not* expresses absence of obligation while *must not* expresses a negative obligation. *Need* also expresses both root (92) and epistemic necessity (93):

(92) Filipinos *need not* be told how government can affect their lives. In a corrupt dictatorship, citizens must worry not only about censorship, warrantless arrests and summary executions, but also about spiralling prices, “crony capitalism” and an unhealthy business climate. (ICE-PHI W2E-003: 82–83)

(93) It *needn't* be a complicated issue, it can be very straightforward. (= it is not necessarily the case that is complicated, Coates 1983, 50)

Perkins (1983, 62) says that modal *need* may have both a subjective and an objective interpretation, while quasi-modal *need to* may only have an objective one:

(94) You *needn't* got to the bathroom if you don't *need to*.

According to Close (1962, 128), the semantic distinction between *need* and *need to* becomes clear in their negative use:

(95) You *need not* stay. (= you may go)

(96) You *don't need to* stay. (= it is not necessary, there is nothing you can do)

(97) We *didn't need to* stay. (= staying was unnecessary, we were free to stay or go)

(98) We *needn't* have stayed. (= we stayed unnecessarily)

4.9.1. Frequency of *need*

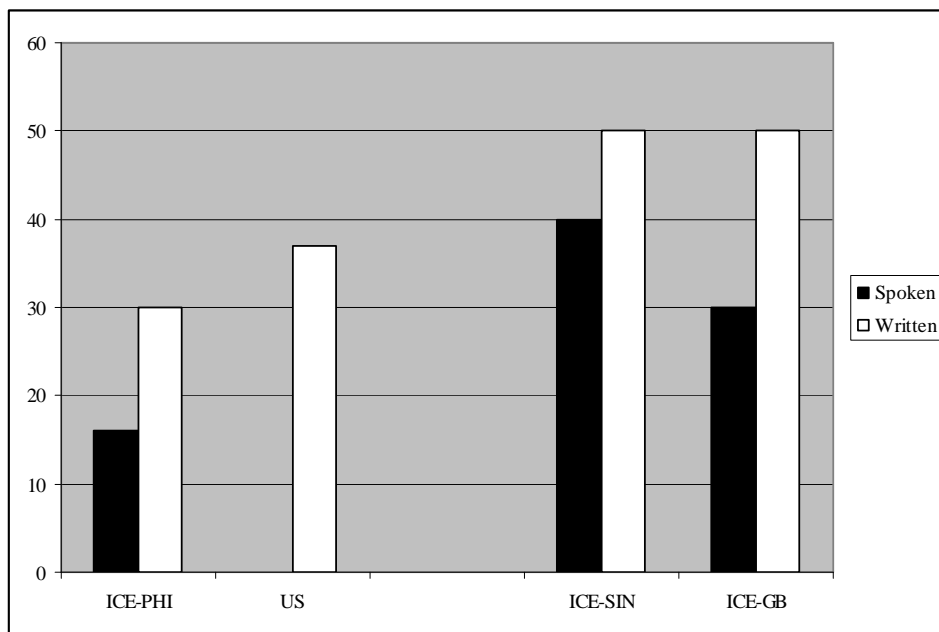


Figure 32. Frequency of *need* in ICE-PHI, US, ICE-SIN and ICE-GB

Coates mentions (1983, 5) that the use of modal *need* as opposed to the full verb *need* is rare. This notion is confirmed by the results of this study. *Need* is extremely rare in all varieties, and practically non-existent in spoken AmE, as there were no tokens in SBC.

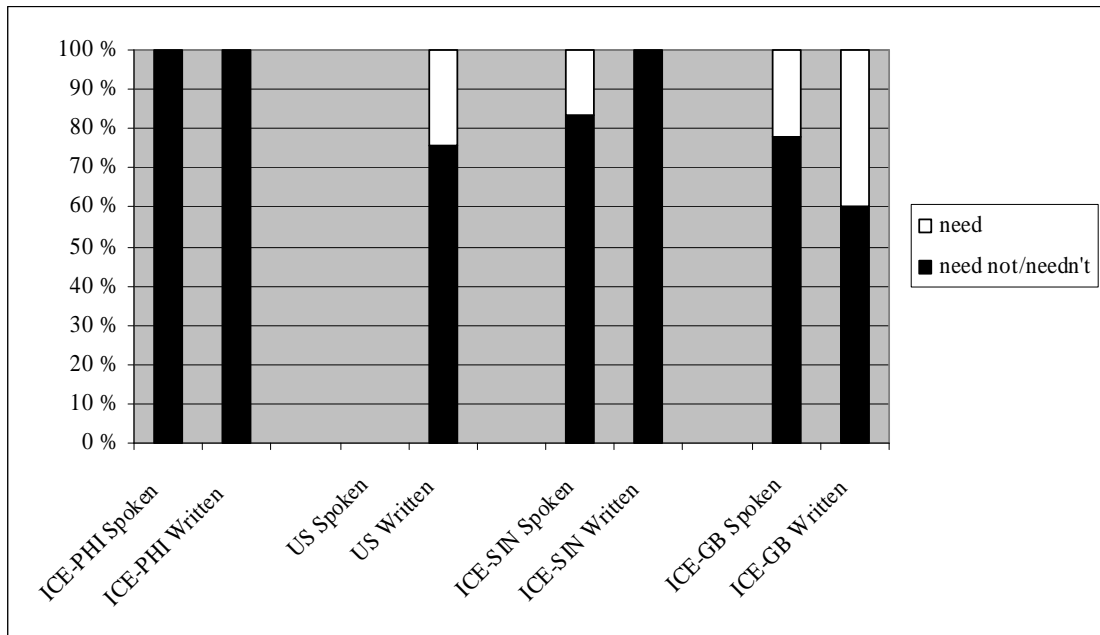
4.9.1.1. *Need not* and *needn't*

Figure 33. Percentages of positive *need* and negative *need not* and *needn't* in ICE-PHI, US, ICE-SIN and ICE-GB

The number of positive cases of modal *need* was notably lower than the number of negative cases in all corpora: in fact, the positive case was not found in ICE-PHI, but there were a few positive tokens in the Frown (24.3% N=9). In both spoken ICE-SIN and ICE-GB, only four instances of *need* were positive; the rest (N=24 in ICE-SIN and N=18 in ICE-GB) were negative, and more precisely, mostly cases of the full form *need not*, not of the contracted *needn't*. This confirms the notion that the main function of the verb is to provide a negative form. However, the numbers are so small that the verb can be said to be virtually non-existent in all varieties.

4.9.1.2. Subjects of *need*

US	Personal pronoun %	Noun %	Determiner %	Total %
Fiction	20 (N=1)	60 (N=3)	20 (N=1)	100 (N=5)
ICE-SIN	Personal pronoun %			Total %
Conversation	100 (N=3)			100 (N=3)
Fiction	0.0			0
ICE-GB	Personal pronoun %	Noun %	Indefinite pronoun %	Total %
Conversation	100 (N=1)	0 (N=0)	0 (N=0)	100 (N=1)
Fiction	0 (N=0)	50 (N=1)	50 (N=1)	100 (N=2)

Table 13. Subjects of *need* in ICE-PHI, US, ICE-SIN and ICE-GB conversation and fiction

Need had low frequency in both conversation and fiction, and therefore the percentages of subjects offer us no further information on the use of the verb, especially when there were no tokens in ICE-PHI conversation and fiction. Personal pronouns were again found the most frequent subject, followed by nouns and other random cases of subjects.

5. Discussion

It is clear the PhiE and SinE should not be considered marginal Englishes that are still strongly influenced by the language of their colonisers, AmE and BrE. This study shows that these two relatively new varieties of English are not restricted to following their donor-languages: Filipinos and Singaporeans are innovative in the use of English, and they have followed a path of their own in the use of modal and quasi-modal verbs of obligation and necessity.

5.1. Distribution of the modals and quasi-modals of obligation and necessity

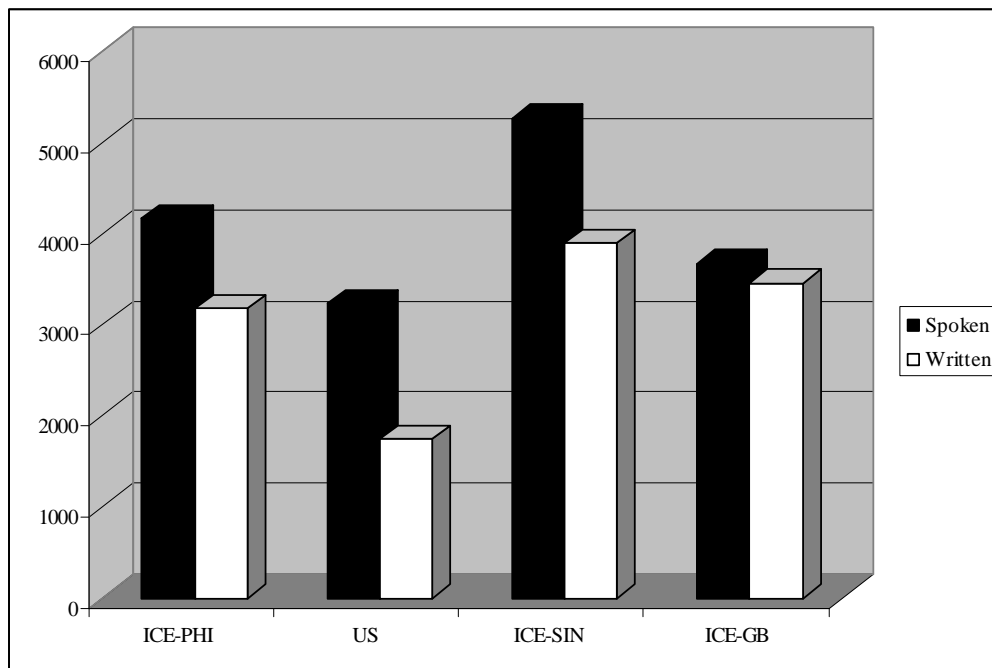


Figure 34. The frequency of all modal and quasi-modal verbs of obligation and necessity in ICE-PHI, US, ICE-SIN and ICE-GB

There were tokens of all nine modals in both varieties, and in most cases, the verbs were more frequent in PhiE and SinE than in AmE and BrE. In fact, it was only in the case of *have got to* and *ought to* that BrE had higher frequency than SinE. In PhiE and AmE, however, there were a few more differences between verbs: on the whole, the

verbs which had the lowest frequencies overall were less likely to be more frequent in PhiE than in AmE, i.e. *need to*, *have got to*, *ought to*, *had better* and *need*.

The subjects of the verbs were mostly personal pronouns, but there were quite a few cases with nouns, indefinite pronouns, relative pronouns, determiners or existential *there* as subject. There was also an interesting trend in SinE, where the subject had been completely omitted from the clause, i.e. there was a tendency to imply the subject pronoun rather than state it, because the subject is usually clear from the context (see section 4.1.1.3.).

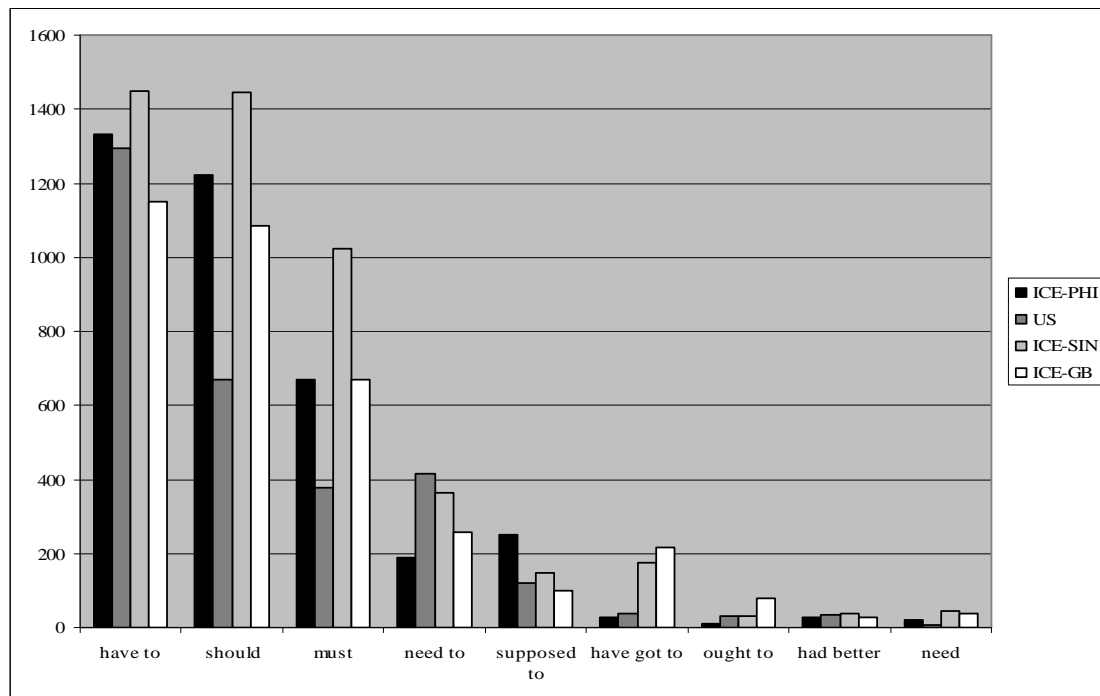


Figure 35. The modals and quasi-modals of obligation and necessity in ICE-PHI, US, ICE-SIN and ICE-GB

In the case of the four varieties, *have to*, *should* and *must* are the most frequent auxiliaries of obligation. In contrast, *need to*, *supposed to*, *have got to*, *ought to*, *had better* and *need* are on the decline. *Must* and *should* are also more frequent in BrE than in AmE, as was suggested by the previous studies. Unfortunately, it must also be noted that the number of all of the verbs was surprisingly low in the Frown corpus. I

cannot therefore totally agree with the statement made in the *Longman Grammar of Spoken and Written English* (2000, 488), that *have to* is now also quite common in written language in AmE: neither my study nor Collins's 2005 study support this view. Having stated that, it must be added that *have to* is still more common in written AmE than *need to*, *supposed to*, *have got to*, *ought to*, *need* and *had better*.

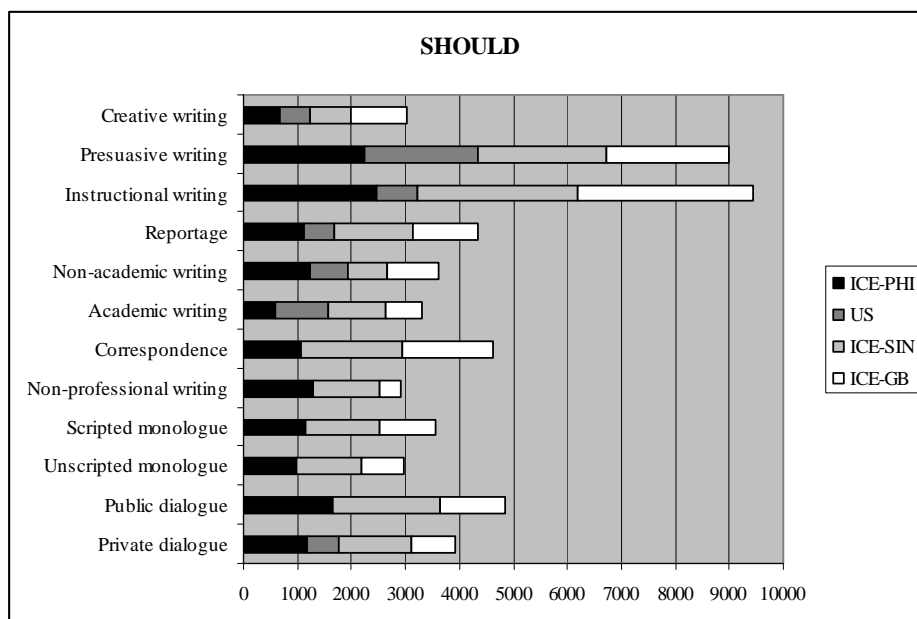


Figure 36. The frequency of *should* in different text types

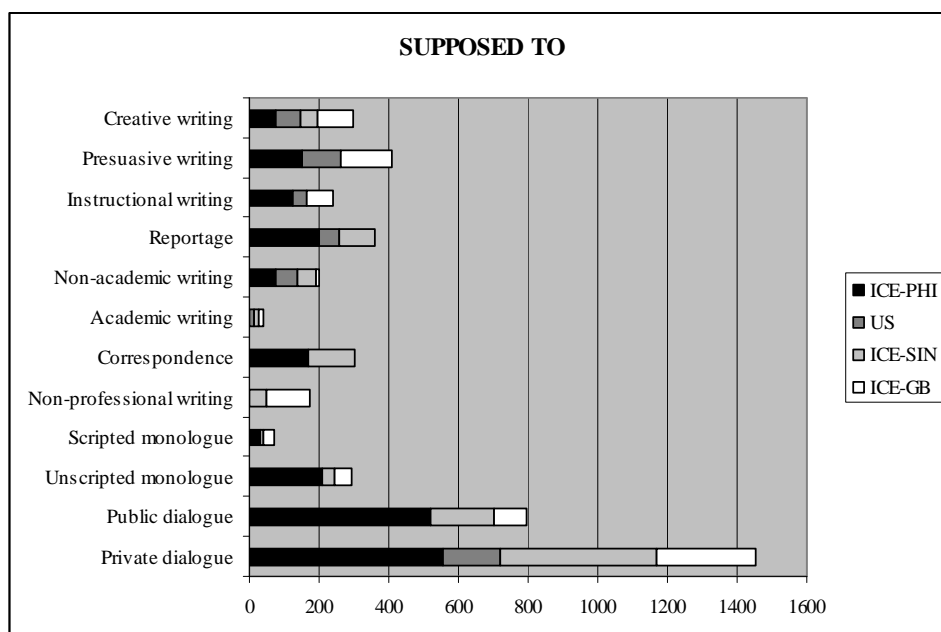


Figure 37. The Frequency of *supposed to* in different text types

In the different text types of the corpora, private dialogue, instructional writing and persuasive writing were the most prolific in using the modals. This varied somewhat between the verbs, but the above examples of the use of *should* and *supposed to* illustrate the main uses. *Have to*, *need to*, *supposed to* and *got to* were mainly used in speech while *should*, *must*, *ought to*, *had better* and *need* were more or less used in writing.

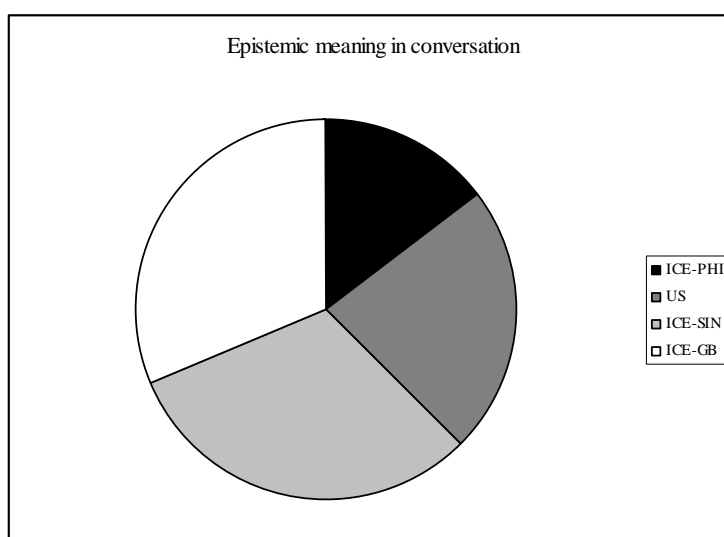


Figure 38. Epistemic meaning in ICE-PHI, US, ICE-SIN and ICE-GB conversation

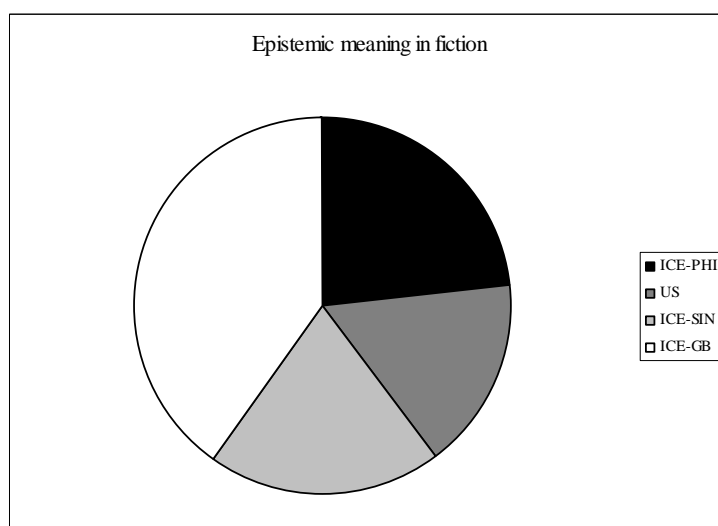


Figure 39. Epistemic meaning in ICE-PHI, US, ICE-SIN and ICE-GB fiction

Epistemic meaning was without a doubt secondary to root meaning in all varieties. There were only a few examples of epistemic use in the cases of most verbs, with the exception of *must*, which had a quite high frequency of epistemic use. In conversation, PhiE speakers are less likely to use epistemic meaning than AmE speakers, while in contrast, PhiE fiction writers are more likely to do so than AmE writers. SinE users are also less likely to lean towards epistemic use than BrE users in both media, although the difference is rather small in conversation (415 / 420). In conclusion, SinE and BrE users are more accustomed to epistemic meaning than PhiE and AmE users.

5.2. Cultural aspects

Why is it then that the countries which were colonised by English-speaking people not more than two hundred years ago have overtaken the original Englishes in the use of these verbs? Especially in the case of Singapore, why is it that the numbers are higher? English-medium education is hardly a reason for the figures in ICE-SIN, as English is used in education in the Philippines as well.

It is generally assumed that western English-speaking people are extremely aware of their face in conversation, and do not wish to be seen as overpowering. There is a strive for consensus even though there might be a hierarchical relationship between the speakers. This is reflected on the use of verbs of obligation, as, for example, the use of *must*, which is regarded to express strong obligation, has declined in frequency. In contrast, eastern philosophies are clear in their insistence on respect towards those who are more mature, and in the emphasis on an extremely hierarchical social system. It can then be suggested that the number of verbs of obligation is higher because it may be that it is more acceptable to oblige people in the Philippines and Singapore. This is not to say that Asian English speakers wish in any respect to seem

overpowering. It is to acknowledge the hierarchical and collective nature of these cultures, which may be a part of the reason for the high frequency of the verbs of obligation and necessity.

This view entails that the hierarchical system is quite visible, or rather audible, in the way people interact. In fact, Singapore did not achieve its position among the most successful nations in the world by giving its citizens the freedom to act according to their own wishes and desires. It seems that in Singapore, everyone goes along with what those above them command and they will continue to do so as long as their welfare remains secure. Foley (1988, 3) adds that while some Anglophone colonies have moved from English as a foreign language to English as an L2 and back to English as a foreign language, English in Singapore is moving from an L2 to a native language. This is also spurred by the fact that although it has a colonial origin, English was politically neutral in Singapore, and could therefore promote national unity. This has without a doubt had an effect in moving SinE farther away from BrE.

According to Bernardo (2004, 29), English in the Philippines is now mainly a language of access to education, and its function has not been nearly as unifying as it has in Singapore. Having stated that, the difference between PhiE and AmE almost as large as that between SinE and BrE. It can be argued therefore, that the difference could be due to a more or less conscience differentiation from AmE.

It can naturally be argued that computer corpora are not valid to make these sorts of generalisations, but it is quite evident that corpora provide an objectively-based method for the study of such social phenomena. For example, Leech and Fallon (1992, 44) examined the LOB and the Brown Corpus and came to the conclusion that because of the high frequency of words such as *perhaps*, *rather* and *fairly* in LOB, BrE speakers come across as lacking firmness and decisiveness, which conforms well

with the British stereotype. They also say (1992, 45) that the method “claims to be moving towards a true picture of cultural contrasts, on the grounds that the evidence is in the corpora, and no other explanation can be found for it”.

6. Final Remarks

The Philippines and Singapore are, without a doubt, fruitful areas for any study. The encounter of the west and the east is unique in both countries. In the Philippine archipelago, the native cultures of the small islands, and the way of living as one with the ocean meet the hectic and urban English-speaking environment of the capital city Manila. In Singapore, the Asian discipline and strive for excellence come together with western capitalism and English-driven internationalism. These countries were American and British colonies not more than sixty years ago, but it is nevertheless evident that Filipinos and Singaporeans have succeeded in making English their own language and a part of their own culture without having to rigidly model its structure and use according to AmE and BrE.

This study focused on the expression of the modality of obligation and necessity in PhiE and SinE. This semantic category, which refers to the speaker's attitude or opinion on a certain situation, is realised in English primarily with modal verbs such as *must* and *should* and quasi-modal verbs such as *have to* and *need to*. Five electronic corpora were used to retrieve information on how modals *must*, *should* and *need*, and quasi-modals *have to*, *have got to*, *need to*, *supposed to*, *ought to* and *had better* are used in the above varieties. These corpora included the ICE components of PhiE, SinE and BrE, the SBC and the Frown corpus. The main agenda was to find out to what extent these new Englishes have retained features from AmE and BrE in the use of these modal expressions.

There were plenty of tokens of most of the verbs in all corpora, which proves that the expression of modality of obligation and necessity is a central part of the English language on all continents. *Have to* was the most frequent verb in all varieties followed by *should*, *must*, *need to*, *supposed to* and *have got to* respectively. *Ought to*,

had better and *need* were rare in all varieties. The popularity of *have to* and *should* was attributed to their unthreatening and democratic nature in speech and writing, while the unpopularity of *must* was generally thought to be due to its strict and authoritative nature. These results are well comparable with those of *The Longman Grammar of Spoken and Written English* (2005) and Collins (2005). Both of these studies suggested that *have to*, *should* and *must* are the most frequent verbs used in this respect.

It also became evident that South-East Asian PhiE and SinE were more prolific in the use of the modals and quasi-modals of obligation and necessity in both speech and writing. It was only in the case of *have got to* and *ought to* that AmE and BrE had more tokens than PhiE and SinE. In addition, *need to*, *had better* and *need* were less frequent in PhiE than in AmE. However, the total numbers of *have got to*, *ought to*, *had better* and *need* were marginal and the differences minuscule. Another point made concerns the frequency of epistemic modality, which refers to the speaker's assessment of the situation and evaluation of chances. Overall, epistemic modality was rare with most verbs with the exception of *must*. In addition, epistemic modality was more frequent in SinE and BrE than in PhiE and AmE.

It was suggested that the reason for the trend of favouring the modals and quasi-modals in the South-East Asian varieties may lie at least partly in the culture of the Philippines and Singapore. While western English speakers are regarded as striving for consensus and wishing not to seem overpowering, eastern speakers may be more accustomed to the expression of obligation and authority. This is not to say that authority in the east is gained by overpowering one's interlocutor. Nevertheless, one must acknowledge the collective nature of eastern societies, which do not function

without hierarchy. It can then be argued that hierarchy does not function without obligation.

It is evident that PhiE and SinE enrich the knowledge we have of the Englishes of the world. The abundance of phonological, syntactic, semantic and sociolinguistic features which are yet to be discovered and accounted for in these two languages offer a wide scope for any linguist. On the basis of this study, the future holds a possible study in the sociolinguistic field. It would be rewarding to find out to what extent the reasons for the high frequency of the modals and quasi-modals of obligation and necessity are connected with Asian philosophies, the way of living, and the way of situating oneself in society. Another study could take into consideration the other modal verbs, such as *can*, *may* and *will*. Meanwhile, English may well be the only language in the world without genuine frontiers, but as long as man-made frontiers exist, PhiE and SinE will continue to develop in their own directions.

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Appendix

All frequencies have been normalised to tokens per one million words.

Number of words in each corpora:

	Total	Spoken	Written	Conversation	Fiction
ICE-PHI	956 000	556 000	400 000	182 000	40 000
US	1 266 972	266 972	1 000 000	69 557	233 493
ICE-SIN, ICE-GB	1 000 000	600 000	400 000	200 000	40 000

Frequencies for Figure 1. Modals and quasi-modals of necessity in Australian, British, New Zealand and American English (figures normalised to tokens per one million words). (Collins 2005, 269)

	ICE-AUS	ICE-GB	ICE-NZ	C-US	TOTAL
<i>must</i>	613	675	714	402	2404
<i>have to</i>	1311	1244	1182	1384	5121
<i>should</i>	1141	1065	1577	850	4633
<i>need to</i>	343	208	338	473	1362
<i>have got to</i>	332	339	229	173	1073
<i>ought to</i>	36	80	58	51	225
<i>need</i>	19	26	20	15	80
<i>had better</i>	48	33	36	41	158
<i>may/might as well</i>	14	15	22	5	56
Total	3857	3685	4176	3394	15112

Frequencies for Figure 2. Frequency of *have to* in ICE-PHI, US, ICE-SIN and ICE-GB (figures normalised to tokens per one million words, raw figures in parentheses).

<i>have to</i>	ICE-PHI	US	ICE-SIN	ICE-GB
Spoken	1709 (950)	1768 (472)	1776 (1066)	1310 (786)
Written	808 (323)	582 (582)	955 (382)	910 (364)

Frequencies for Figure 3. Frequency of root and epistemic *have to* in ICE-PHI, US, ICE-SIN and ICE-GB conversation and fiction (figures normalised to tokens per one million words, raw figures in parentheses).

	ICE-PHI	US	ICE-SIN	ICE-GB
<i>have to</i>	Root	Root	Root	Root
Conversation	2418 (440)	1826 (127)	1760 (352)	1390 (278)
Fiction	1075 (43)	917 (214)	1100 (44)	1100 (44)
	ICE-PHI	US	ICE-SIN	ICE-GB
	Epistemic	Epistemic	Epistemic	Epistemic
Conversation	5 (1)	14 (1)	5 (1)	15 (3)
Fiction	50 (2)	43 (10)	25 (1)	50 (2)

Frequencies for Figure 4. Present tense *have to* and *has to* vs. past tense *had to* in ICE-PHI, US, ICE-SIN and ICE-GB.

	ICE-PHI	Present tense %	Past tense %	Total %
Spoken		85.5 (812)	14.5 (138)	100 (950)
Written		75 (243)	25 (80)	100 (323)
US		Present tense %	Past tense %	Total %
Spoken		75 (354)	25 (118)	100 (471)
Written		62.4 (363)	37.6 (219)	100 (582)
ICE-SIN		Present tense %	Past tense %	Total %
Spoken		91.4 (974)	8.6 (92)	100 (1066)
Written		70.5 (269)	29.5 (113)	100 (382)
ICE-GB		Present tense %	Past tense %	Total %
Spoken		80 (629)	20 (157)	100 (786)
Written		78.8 (287)	21.2 (77)	100 (364)

Frequencies for Figure 5. Positive and negative verb forms of *have to* in ICE-PHI, US, ICE-SIN and ICE-GB conversation (figures normalised to tokens per one million words, raw figures in parentheses).

Conversation	ICE-PHI	US	ICE-SIN	ICE-GB
<i>do not have to</i>	5 (1)	0 (0)	0 (0)	0 (0)
<i>don't have to</i>	99 (18)	72 (5)	130 (26)	100 (20)
<i>doesn't have to</i>	5 (1)	43 (3)	25 (5)	10 (2)
<i>did not have to</i>	5 (1)	0 (0)	0 (0)	0 (0)
<i>didn't have to</i>	33 (6)	43 (3)	5 (1)	10 (2)
<i>have had to</i>	0 (0)	0 (0)	0 (0)	10 (2)
<i>has had to</i>	0 (0)	0 (0)	0 (0)	10 (2)
<i>will have to</i>	17 (3)	58 (4)	70 (14)	110 (22)
<i>would have to</i>	0 (0)	58 (4)	0 (0)	0 (0)
<i>won't have to</i>	0 (0)	0 (0)	5 (1)	5 (1)

<i>may have to</i>	0 (0)	0 (0)	25 (5)	5 (1)
<i>might have to</i>	0 (0)	43 (3)	5 (1)	15 (3)

Frequencies for Figure 6. Positive and negative verb forms of *have to* in ICE-PHI, US, ICE-SIN and ICE-GB fiction (figures normalised to tokens per one million words, raw figures in parentheses).

Fiction	ICE-PHI	US	ICE-SIN	ICE-GB
<i>don't have to</i>	50 (2)	21 (5)	50 (2)	0 (0)
<i>doesn't have to</i>	25 (1)	0 (0)	0 (0)	0 (0)
<i>did not have to</i>	0 (0)	9 (2)	0 (0)	0 (0)
<i>didn't have to</i>	0 (0)	0 (0)	25 (1)	0 (0)
<i>have had to</i>	0 (0)	0 (0)	25 (1)	0 (0)
<i>had had to</i>	0 (0)	13 (3)	25 (1)	25 (1)
<i>will have to</i>	75 (3)	77 (18)	0 (0)	75 (3)
<i>would have to</i>	100 (4)	94 (22)	25 (1)	225 (9)
<i>will have had to</i>	0 (0)	9 (2)	0 (0)	0 (0)
<i>would have had to</i>	0 (0)	4 (1)	25 (1)	0 (0)
<i>won't have to</i>	0 (0)	9 (2)	0 (0)	0 (0)
<i>wouldn't have to</i>	0 (0)	13 (3)	0 (0)	0 (0)
<i>may have to</i>	0 (0)	0 (0)	0 (0)	0 (0)
<i>might have to</i>	25 (1)	13 (3)	0 (0)	0 (0)

Frequencies for Figure 7. Subject types of *have to* ICE-PHI, US, ICE-SIN and ICE-GB conversation and fiction.

	Personal pronoun %	Noun %	Indefinite pronoun %	Relative pronoun %
ICE-PHI	96.3 (468)	2.5 (12)	0.2 (1)	0.6 (3)
US	81.0 (285)	13.5 (47)	2.6 (9)	1.1 (4)
ICE-SIN	92.5 (368)	3.2 (13)	0.5 (2)	1.0 (4)
ICE-GB	94.2 (308)	3.9 (13)	0.3 (1)	0.3 (1)
	None %	Determiner %	Existential there %	Total %
ICE-PHI	0 (0)	0.4 (2)	0 (0)	100 (486)
US	0 (0)	1.4 (5)	0.6 (2)	100 (352)
ICE-SIN	2.3 (9)	0.5 (2)	0 (0)	100 (398)
ICE-GB	0.9 (3)	0 (0)	0.3 (1)	100 (327)

Frequencies for Figure 8. Frequency of *should* in ICE-PHI, US, ICE-SIN and ICE-GB (figures normalised to tokens per one million words, raw figures in parentheses).

<i>should</i>	ICE-PHI	US	ICE-SIN	ICE-GB
Spoken	1248 (694)	588 (157)	1482 (889)	945 (567)
Written	1195 (478)	788 (788)	1395 (558)	1295 (518)

Frequencies for Figure 9. Frequency of *should* in ICE-PHI, US, ICE-SIN and ICE-GB conversation and fiction (figures normalised to tokens per one million words, raw figures in parentheses).

	ICE-PHI	US	ICE-SIN	ICE-GB
<i>should</i>	Root	Root	Root	Root
Conversation	1082 (197)	532 (37)	1065 (213)	560 (112)
Fiction	550 (22)	415 (97)	625 (25)	725 (29)
	ICE-PHI	US	ICE-SIN	ICE-GB
<i>should</i>	Epistemic	Epistemic	Epistemic	Epistemic
Conversation	77 (14)	86 (6)	236 (46)	150 (30)
Fiction	75 (3)	73 (17)	75 (3)	75 (3)
	ICE-PHI	US	ICE-SIN	ICE-GB
<i>should</i>	Subjunctive	Subjunctive	Subjunctive	Subjunctive
Conversation	5 (1)	0 (0)	35 (7)	15 (3)
Fiction	50 (2)	34 (8)	50 (2)	150 (6)
	ICE-PHI	US	ICE-SIN	ICE-GB
<i>should</i>	Would	Would	Would	Would
Conversation	16 (3)	0 (0)	20 (4)	65 (13)
Fiction	0 (0)	17 (4)	25 (1)	75 (3)

Frequencies for Figure 10. *Should have* and *should've* in ICE-PHI, US, ICE-SIN and ICE-GB conversation and fiction (figures normalised to tokens per one million words, raw figures in parentheses).

<i>should have / should've</i>	ICE-PHI	US	ICE-SIN	ICE-GB
Conversation	115 (21)	86 (6)	130 (26)	100 (20)
Fiction	75 (3)	116 (27)	225 (9)	150 (6)

Frequencies for Figure 11. *Should not* and *shouldn't* in ICE-PHI, US, ICE-SIN and ICE-GB.

	<i>should not</i> %	<i>shouldn't</i> %	Total %
ICE-PHI	30.4 (7)	69.6 (16)	100 (23)
US	8.3 (2)	91.6 (22)	100 (24)
ICE-SIN	28.6 (10)	71.4 (25)	100 (35)
ICE-GB	3.6 (1)	96.4 (27)	100 (28)

Frequencies for Figure 12. Percentages of subject types of *should* in ICE-PHI, US, ICE-SIN and ICE-GB.

	Personal pronoun %	Noun %	None %	Determiner %
ICE-PHI	86.0 (208)	10.3 (25)	0.4 (1)	1.2 (3)
US	82.5 (142)	11.0 (19)	1.7 (3)	1.2 (2)
ICE-SIN	81.4 (245)	7.0 (21)	8.3 (25)	2.3 (7)
ICE-GB	81.4 (162)	5.5 (11)	4.5 (9)	5.0 (10)

	Relative pronoun %	Existential there %	Indefinite pronoun %	Total %
ICE-PHI	1.7 (4)	0.4 (1)	0 (0)	100 (242)
US	1.2 (2)	1.2 (2)	1.2 (2)	100 (172)
ICE-SIN	0.7 (2)	0.3 (1)	0 (0)	100 (301)
ICE-GB	1.0 (2)	2.0 (4)	0.5 (1)	100 (199)

Frequencies for Figure 13. Frequency of *must* in ICE-PHI, US, ICE-SIN and ICE-GB (figures normalised to tokens per one million words, raw figures in parentheses).

<i>must</i>	ICE-PHI	US	ICE-SIN	ICE-GB
Spoken	568 (316)	187 (50)	993 (596)	507 (304)
Written	813 (325)	668 (668)	1068 (427)	915 (366)

Frequencies for Figure 14. Root and epistemic *must* in ICE-PHI, US, ICE-SIN and ICE-GB conversation and fiction (figures normalised to tokens per one million words, raw figures in parentheses).

<i>must</i>	ICE-PHI	US	ICE-SIN	ICE-GB
Root	Root	Root	Root	Root
Conversation	82 (15)	43 (3)	680 (136)	185 (37)
Fiction	475 (19)	287 (67)	500 (20)	350 (14)

	ICE-PHI	US	ICE-SIN	ICE-GB
<i>must</i>	Epistemic	Epistemic	Epistemic	Epistemic
Conversation	110 (20)	201 (14)	170 (34)	255 (51)
Fiction	400 (16)	214 (50)	350 (14)	775 (31)

Frequencies for Figure 15. *Must have and must've* in ICE-PHI, US, ICE-SIN and ICE-GB conversation and fiction (figures normalised to tokens per one million words, raw figures in parentheses).

<i>must have/ must've</i>	ICE-PHI	US	ICE-SIN	ICE-GB
Conversation	44 (8)	43 (3)	110 (22)	105 (21)
Fiction	200 (8)	120 (28)	275 (11)	325 (13)

Frequencies for Figure 16. Frequency of *need to* in ICE-PHI, US, ICE-SIN and ICE-GB (figures normalised to tokens per one million words, raw figures in parentheses).

<i>need to</i>	ICE-PHI	US	ICE-SIN	ICE-GB
Spoken	173 (96)	423 (113)	417 (250)	263 (158)
Written	200 (80)	159 (159)	285 (114)	253 (101)

Frequencies for Figure 17. Past and present tense *need to* in ICE-PHI, US, ICE-SIN and ICE-GB.

ICE-PHI	Present tense %	Past tense %	Total %
Spoken	92 (92)	8 (8)	100 (100)
Written	95 (76)	5 (4)	100 (80)
US	Present tense %	Past tense %	Total %
Spoken	92.0 (104)	8.0 (9)	100 (113)
Written	85.4 (135)	14.6 (23)	100 (158)
ICE-SIN	Present tense %	Past tense %	Total %
Spoken	99.2 (248)	0.8 (2)	100 (250)
Written	94.7 (108)	5.3 (6)	100 (114)
ICE-GB	Present tense %	Past tense %	Total %
Spoken	93.0 (147)	7.0 (11)	100 (158)
Written	90.1 (91)	9.9 (10)	100 (101)

Frequencies for Figure 18. Positive and negative forms of *need to* in ICE-PHI, US, ICE-SIN and ICE-GB conversation (figures normalised to tokens per one million words, raw figures in parentheses).

Conversation	ICE-PHI	US	ICE-SIN	ICE-GB
<i>don't need to</i>	11 (2)	43 (3)	30 (6)	30 (6)
<i>doesn't need to</i>	5 (1)	0 (0)	0 (0)	0 (0)
<i>didn't need to</i>	5 (1)	14 (1)	0 (0)	0 (0)
<i>will need to</i>	0 (0)	0 (0)	0 (0)	5 (1)
<i>would need to</i>	0 (0)	14 (1)	0 (0)	10 (2)
<i>may need to</i>	0 (0)	0 (0)	5 (1)	0 (0)

Frequencies for Figure 19. Positive and negative forms of *need to* in ICE-PHI, US, ICE-SIN and ICE-GB fiction (figures normalised to tokens per one million words, raw figures in parentheses).

Fiction	ICE-PHI	US	ICE-SIN	ICE-GB
<i>don't need to</i>	0 (0)	9 (2)	0 (0)	0 (0)
<i>doesn't need to</i>	0 (0)	9 (2)	0 (0)	0 (0)
<i>didn't need to</i>	0 (0)	13 (3)	0 (0)	0 (0)
<i>will need to</i>	0 (0)	9 (2)	0 (0)	0 (0)
<i>would need to</i>	0 (0)	4 (1)	25 (1)	25 (1)
<i>may need to</i>	0 (0)	4 (1)	0 (0)	0 (0)

Frequencies for Figure 20. Frequency of *supposed to* in ICE-PHI, US, ICE-SIN and ICE-GB (figures normalised to tokens per one million words, raw figures in parentheses).

<i>supposed to</i>	ICE-PHI	US	ICE-SIN	ICE-GB
Spoken	369 (205)	165 (44)	208 (125)	137 (82)
Written	88 (35)	55 (55)	53 (21)	43 (17)

Frequencies for Figure 21. Present and past tense *supposed to* in ICE-PHI, US, ICE-SIN and ICE-GB conversation and fiction.

ICE-PHI	Present tense %	Past tense %	Total %
Conversation	75.2 (76)	24.8 (25)	100 (101)
Fiction	66.7 (2)	33.3 (1)	100 (3)
US	Present tense %	Past tense %	Total %
Conversation	62.5 (10)	37.5 (6)	100 (16)
Fiction	33.3 (5)	66.7 (10)	100 (15)
ICE-SIN	Present tense %	Past tense %	Total %
Conversation	80 (72)	20 (18)	100 (90)

Fiction	100 (2)	0 (0)	100 (2)
ICE-GB	Present tense %	Past tense %	Total %
Conversation	73.7 (42)	26.3 (15)	100 (57)
Fiction	50 (2)	50 (2)	100 (4)

Frequencies for Figure 22. Persons of *be* with *supposed to* in ICE-PHI conversation (figures normalised to tokens per one million words, raw figures in parentheses).

ICE-PHI	Present tense conversation	Past tense conversation
1st person sg	55 (10)	44 (8)
2nd person sg	44 (8)	5 (1)
3rd person sg	137 (25)	71 (13)
1st person pl	82 (15)	11 (2)
2nd person pl	5 (1)	0 (0)
3rd person pl	66 (12)	5 (1)
passive	27 (5)	0 (0)

Frequencies for Figure 23. Persons of *be* with *supposed to* in US conversation (figures normalised to tokens per one million words, raw figures in parentheses).

US	Present tense conversation	Past tense conversation
1st person sg	14 (1)	0 (0)
2nd person sg	0 (0)	0 (0)
3rd person sg	86 (6)	72 (5)
1st person pl	0 (0)	0 (0)
2nd person pl	0 (0)	0 (0)
3rd person pl	29 (2)	14 (1)
passive	0 (0)	0 (0)

Frequencies for Figure 24. Persons of *be* with *supposed to* in US fiction (figures normalised to tokens per one million words, raw figures in parentheses).

US	Present tense fiction	Past tense fiction
1st person sg	0 (0)	0 (0)
2nd person sg	4 (1)	0 (0)
3rd person sg	4 (1)	20 (5)
1st person pl	4 (1)	4 (1)
2nd person pl	4 (1)	0 (0)
3rd person pl	4 (1)	17 (4)
passive	4 (1)	0 (0)

Frequencies for Figure 25. Persons of *be* with *supposed to* in ICE-SIN conversation (figures normalised to tokens per one million words, raw figures in parentheses).

ICE-SIN	Present tense conversation	Past tense conversation
1st person sg	50 (10)	20 (4)
2nd person sg	25 (5)	5 (1)
3rd person sg	155 (31)	35 (7)
1st person pl	55 (11)	5 (1)
2nd person pl	0 (0)	0 (0)
3rd person pl	50 (10)	10 (2)
passive	25 (5)	15 (3)

Frequencies for Figure 26. Persons of *be* with *supposed to* in ICE-GB conversation (figures normalised to tokens per one million words, raw figures in parentheses).

ICE-GB	Present tense conversation	Past tense conversation
1st person sg	35 (7)	25 (5)
2nd person sg	10 (2)	0 (0)
3rd person sg	90 (18)	25 (5)
1st person pl	20 (4)	20 (4)
2nd person pl	5 (1)	0 (0)
3rd person pl	35 (7)	0 (0)
passive	15 (3)	5 (1)

Frequencies for Figure 27. Frequency of *have got to* in ICE-PHI, US, ICE-SIN and ICE-GB (figures normalised to tokens per one million words, raw figures in parentheses).

<i>have got to</i>	ICE-PHI	US	ICE-SIN	ICE-GB
Spoken	43 (24)	37 (10)	263 (158)	342 (205)
Written	2,5 (1)	41 (41)	40 (16)	30 (12)

Frequencies for Figure 28. Frequency of root and epistemic *have got to* in ICE-PHI, US, ICE-SIN and ICE-GB conversation and fiction (figures normalised to tokens per one million words, raw figures in parentheses).

	ICE-PHI	US	ICE-SIN	ICE-GB
<i>have got to</i>	Root	Root	Root	Root
Conversation	60 (11)	14 (1)	390 (78)	595 (119)
Fiction	0 (0)	86 (20)	50 (2)	50 (2)
	ICE-PHI	US	ICE-SIN	ICE-GB
	Epistemic	Epistemic	Epistemic	Epistemic
Conversation	5 (1)	0 (0)	5 (1)	0 (0)
Fiction	0 (0)	20 (3)	0 (0)	0 (0)

Frequencies for Figure 29. Frequency of *ought to* in ICE-PHI, US, ICE-SIN and ICE-GB (figures normalised to tokens per one million words, raw figures in parentheses).

	ICE-PHI	US	ICE-SIN	ICE-GB
<i>ought to</i>				
Spoken	7 (4)	22 (6)	33 (20)	105 (63)
Written	11 (6)	201 (47)	25 (10)	38 (15)

Frequencies for Figure 30. Frequency of root and epistemic *ought to* in ICE-PHI, US, ICE-SIN and ICE-GB conversation and fiction (figures normalised to tokens per one million words, raw figures in parentheses).

	ICE-PHI	US	ICE-SIN	ICE-GB
<i>ought to</i>	Root	Root	Root	Root
Conversation	0 (0)	29 (2)	15 (3)	90 (18)
Fiction	0 (0)	39 (9)	0 (0)	25 (1)
	ICE-PHI	US	ICE-SIN	ICE-GB
	Epistemic	Epistemic	Epistemic	Epistemic
Conversation	0 (0)	0 (0)	5 (1)	0 (0)
Fiction	0 (0)	21 (5)	0 (0)	0 (0)

Frequencies for Figure 31. Frequency of *had better* in ICE-PHI, US, ICE-SIN and ICE-GB (figures normalised to tokens per one million words, raw figures in parentheses).

	ICE-PHI	US	ICE-SIN	ICE-GB
<i>had better</i>				
Spoken	38 (21)	37 (10)	48 (29)	32 (19)
Written	13 (5)	33 (33)	25 (10)	20 (8)

Frequencies for Figure 32. Frequency of *need* in ICE-PHI, US, ICE-SIN and ICE-GB (figures normalised to tokens per one million words, raw figures in parentheses).

<i>need</i>	ICE-PHI	US	ICE-SIN	ICE-GB
Spoken	16 (9)	0 (0)	40 (24)	30 (18)
Written	30 (12)	37 (37)	50 (20)	50 (20)

Frequencies for Figure 33. Percentages of positive *need* and negative *need not* and *needn't* in ICE-PHI, US, ICE-SIN and ICE-GB.

ICE-PHI	<i>need</i> %	<i>need not / needn't</i> %	Total %
Spoken	0 (0)	100 (8)	100 (8)
Written	0 (0)	100 (12)	100 (12)
US	<i>need</i> %	<i>need not / needn't</i> %	Total %
Spoken	0 (0)	0 (0)	0 (0)
Written	24.3 (9)	75.7 (28)	100 (37)
ICE-SIN	<i>need</i> %	<i>need not / needn't</i> %	Total %
Spoken	16.7 (4)	83.3 (20)	100 (24)
Written	0 (0)	100 (20)	0 (0)
ICE-GB	<i>need</i> %	<i>need not / needn't</i> %	Total %
Spoken	22.2 (4)	77.8 (14)	100 (18)
Written	40 (8)	60 (12)	100 (20)

Frequencies for Figure 34. The frequency of all modal and quasi-modal verbs of obligation and necessity in ICE-PHI, US, ICE-SIN and ICE-GB (figures normalised to tokens per one million words, raw figures in parentheses).

	ICE-PHI	US	ICE-SIN	ICE-GB
Spoken	4169 (2318)	3229 (862)	5262 (3157)	3670 (2202)
Written	3175 (1270)	1742 (1742)	3895 (1558)	3545 (1418)

Frequencies for Figure 35. The modals and quasi-modals of obligation and necessity in ICE-PHI, US, ICE-SIN and ICE-GB (figures normalised to tokens per one million words, raw figures in parentheses). The number of tokens in SBC (the first number in parentheses) has been normalised per 600 000 words and the numbers in Frown per 400 000 words. These figures have been added.

	ICE-PHI	ICE-SIN	US	ICE-GB
<i>have to</i>	1332 (1273)	1448 (1448)	1293 (472, 582)	1150 (1150)
<i>should</i>	1224 (1170)	1447 (1447)	668 (353, 315)	1085 (1085)
<i>must</i>	671 (641)	1023 (1023)	379 (112, 267)	670 (670)
<i>need to</i>	189 (181)	364 (364)	417 (112, 63)	256 (256)
<i>supposed to</i>	251 (240)	146 (146)	121 (99, 22)	99 (99)
<i>have got to</i>	26 (25)	174 (174)	38 (22, 16)	217 (217)
<i>ought to</i>	11 (10)	30 (30)	32 (13, 19)	78 (78)
<i>had better</i>	27 (26)	39 (39)	35 (22, 13)	27 (27)
<i>need</i>	22 (21)	44 (44)	6 (0, 15)	38 (38)

Frequencies for Figure 36. The frequency of *should* in different text types (figures normalised to tokens per one million words, raw figures in parentheses).

	ICE-PHI	US	ICE-SIN	ICE-GB
Private dialogue	1181 (215)	588 (157)	1350 (270)	790 (158)
Public dialogue	1650 (231)	-	1981 (317)	1206 (193)
Unscripted monologue	992 (133)	-	1186 (166)	793 (111)
Scripted monologue	1150 (115)	-	1360 (136)	1050 (105)
Non-professional writing	1300 (52)	-	1225 (49)	375 (15)
Correspondence	1067 (64)	-	1867 (112)	1683 (101)
Academic writing	600 (48)	975 (216)	1063 (85)	675 (54)
Non-academic writing	1225 (98)	711 (199)	713 (57)	975 (78)
Reportage	1125 (45)	563 (68)	1450 (58)	1200 (48)
Instructional writing	2475 (99)	760 (55)	2950 (118)	3250 (130)
Presuasive writing	2250 (45)	2081 (113)	2400 (48)	2250 (51)
Creative writing	675 (27)	545 (137)	775 (31)	1025 (41)

Frequencies for Figure 37. The Frequency of *supposed to* in different text types (figures normalised to tokens per one million words, raw figures in parentheses).

	ICE-PHI	US	ICE-SIN	ICE-GB
Private dialogue	555 (101)	165 (44)	450 (90)	285 (57)
Public dialogue	521 (73)	-	181 (29)	94 (15)
Unscripted monologue	209 (28)	-	36 (5)	50 (7)
Scripted monologue	30 (3)	-	10 (1)	30 (3)
Non-professional writing	0 (0)	-	50 (2)	125 (5)
Correspondence	167 (10)	-	133 (8)	0
Academic writing	0	14 (3)	13 (1)	13 (1)
Non-academic writing	75 (6)	64 (18)	50 (4)	13 (1)
Reportage	200 (8)	58 (7)	100 (4)	0 (0)
Instructional writing	125 (5)	41 (3)	0 (0)	75 (3)
Presuasive writing	150 (3)	110 (6)	0 (0)	150 (3)
Creative writing	75 (3)	72 (18)	50 (2)	100 (4)

Frequencies for Figure 38. Epistemic meaning in ICE-PHI, US, ICE-SIN and ICE-GB conversation (figures normalised to tokens per one million words, raw figures in parentheses).

	ICE-PHI Epistemic	US Epistemic	ICE-SIN Epistemic	ICE-GB Epistemic
Conversation	198 (36)	302 (21)	415 (83)	420 (84)

Frequencies for Figure 39. Epistemic meaning in ICE-PHI, US, ICE-SIN and ICE-GB fiction (figures normalised to tokens per one million words, raw figures in parentheses).

	ICE-PHI Epistemic	US Epistemic	ICE-SIN Epistemic	ICE-GB Epistemic
Fiction	525 (21)	364 (85)	450 (18)	900 (36)