

***HELP* OR *HELP TO*: WHAT DO CORPORA HAVE TO SAY?¹**

HELP is a frequent verb of English, with a distinctive syntax, that has generated on-going debate amongst language researchers. As such it is a verb that is often given some prominence in textbooks and grammars (e.g., Chalker 1984: 106; Eastwood 1992: 106; Murphy 1985: 110) though the treatment of the verb can be poor (e.g., Close 1988; Dixon 1991: 199; Duffley 1992: 27-9; Quirk, Greenbaum, Leech & Svartvik 1972: 841). For example, all of the authors who provide a poorer account of *HELP* maintain the choice of a full or bare infinitive after *HELP* is determined by a semantic distinction between the two – this is not the case (cf. section 4). In this paper we will take a corpus-based approach to improve the description of the verb and to test claims made about the verb in the literature. We will also explore variation in that description between two major varieties of English, British English (BrE) and American English (AmE). In addition, we will investigate how *HELP* has varied diachronically and by register in these varieties. First, however, the claim that *HELP* is a frequent verb of English with distinctive syntactic properties must be justified.

HELP is one of the most frequent words in the English language, ranking as 245th in the word frequency list of the British National Corpus (BNC).² When its inflected forms *helped*, *helps* and *helping* are included, there are 528.62 instances of *HELP* per million words. When we look at the most frequent verbs (lemmatized) in the BNC, *HELP* rises to 72nd in the word frequency list.

Furthermore, *HELP* is the only verb that can both control either a full infinitive or a bare infinitive and occur either with or without an intervening noun phrase (NP),³ as in the following examples cited from the BNC:

(1) (a) *HELP* to V

Perhaps the book helped to prevent things from getting even worse.

(b) *HELP* NP to V

I thought I could help him to forget.

(c) *HELP* V

Savings can help finance other Community projects.

(d) *HELP* NP V

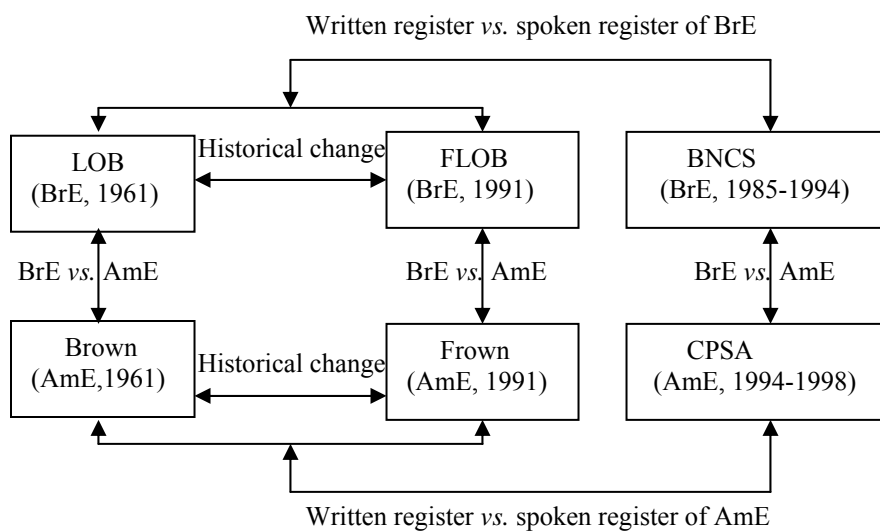
We helped him get to his feet and into a chair.

In this paper, we will examine the factors that may potentially influence a language user's choice of a full infinitive or a bare infinitive as the object or object complement of *HELP*.⁴ Our work is based on the relative frequencies of *HELP* in six corpora, as shown in Figure 1. All of these corpora are used to explore the potential syntactic and semantic conditions that may be relevant to the choice of a full or bare infinitive with *HELP*.

The four written English corpora were compiled using the same sampling frame, each containing 500 segments sampled from fifteen text categories, each corpus totalling one million words. LOB (*The Lancaster-Oslo-Bergen Corpus of British English*) and FLOB (*The Freiburg-LOB Corpus of British English*) represent

British English (BrE) in 1961 and 1991, while Brown (*A Standard Corpus of Present-Day Edited American English*) and Frown (*The Freiburg-Brown Corpus of American English*) represent American English (AmE) in the same periods.⁵ The corpus of spoken AmE used in this paper is the Corpus of Professional Spoken American English (CPSA),⁶ including over two million words of conversations occurring between 1994 and 1998 in the context of professional activities broadly tied to academics and politics. The corpus of spoken BrE we use is a subcorpus we defined within the spoken component of the British National Corpus (BNC), totalling around 6.43 million words. To make BNC more representative of BrE and more comparable to CPSA, the subcorpus only includes language uttered between 1985 and 1994 by speakers whose first language is BrE.⁷

Figure 1 Corpus data



This paper is organized as follows: section 1 contrasts the BrE data and the AmE data to see whether the variety of English has an effect on the language user's choice; section 2 compares frequencies in LOB/Brown and FLOB/Frown to show the effect of language change over three decades; section 3 is concerned with factors relating to the spoken/written distinction; section 4 examines the effect of the alleged semantic distinction between a full infinitive and a bare infinitive; section 5 discusses the potential influences of syntactic conditions on the use of *HELP*; and section 6 concludes the paper.⁸

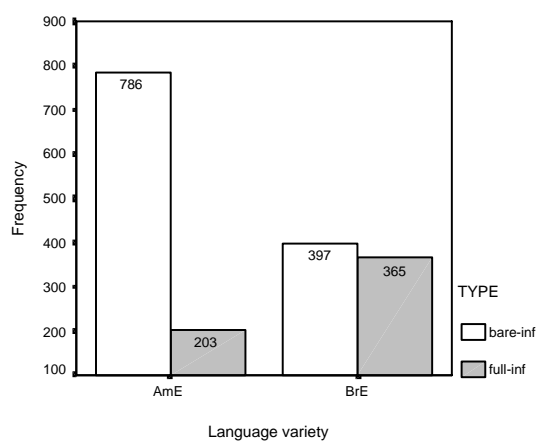
1 Language variety

To examine the potential effect of the variety of English on *HELP*, we extracted all of the instances of *HELP*, including its inflected forms (e.g., *helps*, *helped* and *helping*), from the six corpora and classified each occurrence according to the four-fold classification in (1). The frequencies of the full and bare infinitives in the BrE and AmE corpora are shown in Figure 2. Note that the frequencies in the figure are total counts of the relevant usage of infinitives in both the data of the 1960s and the 1990s, and in both written and spoken corpora.

As sample sizes may affect the level of statistical significance, raw frequencies must first be normalized to a common base.⁹ Of the six corpora used in this paper, four (Brown, Frown, LOB and FLOB) are one million words in size. Therefore, unless otherwise stated, the raw frequencies (RF) of CPSA and BNCS are normalized as frequencies per million words in order to facilitate the comparison

between the six corpora. Table 1 shows both raw and normalized frequencies of infinitive variants in the AmE and BrE data.¹⁰ The last two columns of the table indicate the LL (log likelihood) ratio calculated on the basis of normalized frequencies and the significance level¹¹.

Figure 2 Contrasting BrE and AmE



For one degree of freedom (df), the critical value of significance at $p < 0.001$ is 10.83, much less than the calculated log likelihood value (LL) in Table 1. Therefore, we can confidently conclude that the difference in usage of *HELP* between BrE and AmE is statistically significant with respect to the choice of a full or bare infinitive. Our finding is in line with the observation of Biber *et al* (1999: 735) that ‘AmE has an especially strong preference for the pattern *verb + bare infinitives* although the bare infinitive is more common than the *to*-infinitive in both varieties’. However, a more refined view of the differences between AmE and BrE emerges if we compare the three pairs of comparable corpora separately.

Table 1 Contrast between BrE and AmE

Variety	Full-infinitive		Bare-infinitive		LL (1 df)	Sig. level (2-sided)
	RF	NF	RF	NF		
BrE	365	43.30	397	47.04	23	<0.001
AmE	203	50.75	786	196.50		

Table 2 shows the results of such a comparison. As can be seen from the table, LOB and Brown (with an LL value of 65.265), which represent written BrE and written AmE in 1961, contrast more strikingly than FLOB and Frown (with an LL value of 24.805). For the moment we will simply note this difference, though we will return to it in section 2. The difference between the two spoken corpora (with an LL value of 18.393) is roughly similar to the FLOB/Frown difference rather than to the LOB/Brown difference. Interestingly, the spoken data is nearly contemporaneous with FLOB and Frown.

Table 2 Full infinitives and bare infinitives in BrE and AmE corpora

Corpus	Full-inf		Bare-inf		LL (1 df)	Sig. level (2-sided)
	RF	RF	RF	NF		
LOB	95	95	27	27	65.265	<0.001
Brown	58	58	125	125		
FLOB	78	78	121	121	24.805	<0.001
Frown	45	45	204	204		
BNCS	192	29.86	249	38.72	18.393	<0.001
CPSA	100	50	457	228.5		

The following example illustrates the British preference for *to*-infinitives:

(2) You are going to *help me* make *to make* a birthday cake for Jim remember.

(BNC)

The repair in this utterance is telling. The speaker first utters *You are going to help me make* but immediately changes the utterance to use the full infinitive.

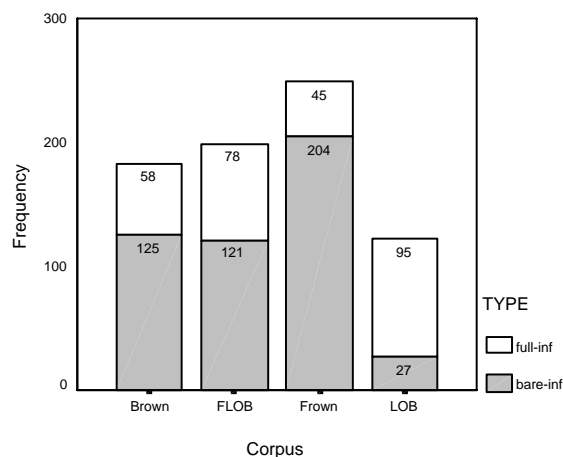
By the wording ‘British preference’, we do not mean that full infinitives are more frequent in British English. Rather, the British preference for full infinitives is in relation to the domination of bare infinitives in the AmE data. As Figure 2 shows, bare infinitives account for nearly 80% in the AmE data, whereas they make up only about 52% of the BrE data. Bare infinitives are prevalent in AmE simply because this construction is of American provenance, though it has penetrated rapidly into BrE (cf. Lind 1983: 264; Onions 1965). Zandvoort (1966) classified this construction as an Americanism and claimed that ‘except in American English, however, *to help* usually takes an infinitive with *to*’ (cf. Lind 1983: 264). However, if we take language change into account, which we will do in section 3, we find Zandvoort’s claim does not hold any longer – *HELP* no longer necessarily takes a full infinitive in BrE; rather, the bare infinitive has also become the statistical norm in BrE (cf. also Mair 1995: 264; 2002:124).

3 Language change

Language change over time has affected the choice of a full or bare infinitive following *HELP*. The bare infinitive after *HELP* was pronounced to be now dialectal or vulgar in the *Oxford English Dictionary* (1st ed., 1933). The *Supplement to the OED* (1989) removed this label and judged it as being ‘a common *colloq.* form’ (cf. Kjellmer 1985: 264). There is evidence that even the

1933 *OED* was not reflecting reality, however; Mair (2002: 123), based on the quotation base of the *OED*, observed a rapid increase in bare infinitives from the mid nineteenth century onwards. As such, Vallins's (1951: 56) claim that 'the construction is not seriously questioned now (as it might have been twenty years ago) even in normal literary writing' is credible. Certainly, by 1991, a bare infinitive after *HELP* 'lost the informal ring formerly associated with it' (Mair 1995: 268).

Figure 3 Frequencies in the four written corpora



Given that there is some evidence of language change related to *HELP*, this section examines recent data to demonstrate the possible effect of language change on the language user's choice. We will only consider written English because the four written corpora used in this paper are perfect for this purpose. Figure 3 shows the relevant frequency data from the four corpora.¹² It can be seen

from the figure that the proportion of the bare infinitives in both BrE and AmE data have increased over the period 1961-1991.

Table 3 Contrast between written English in 1961 and 1991

Sample Period	Corpus	Full-inf	RF	Bare-inf	RF	LL (1 df)	Sig. level (2-sided)
1961	LOB	95	153	27	152	40.143	<0.001
	Brown	58		125			
1991	FLOB	78	123	121	325		
	Frown	45		204			

Table 3 shows the frequencies of the full and bare infinitives in the data for English in 1961 and 1991. As the written AmE and the written BrE data are equal in size, normalization is not needed. The calculated log likelihood value in the table is much greater than the critical value of 10.83 for significance at $p < 0.001$. Therefore, it can be argued confidently that language change over the three decades has indeed exerted influence over the language user's choice between the two infinitive variants. It is also interesting to note in the table that there is a marked increase in the total occurrence of HELP, in both the BrE and AmE data. For the moment, we will simply note this increase, though we will return to it in section 5.

Table 4 Changes in written BrE and AmE

Variety	Corpus	Full-inf	Bare-inf	% of bare-inf	LL (1 df)	Sig. level
BrE	LOB	95	27	22.13%	47.575	<0.001
	FLOB	78	121	60.80%		
AmE	Brown	58	125	68.31%	10.678	0.001
	Frown	45	204	81.93%		

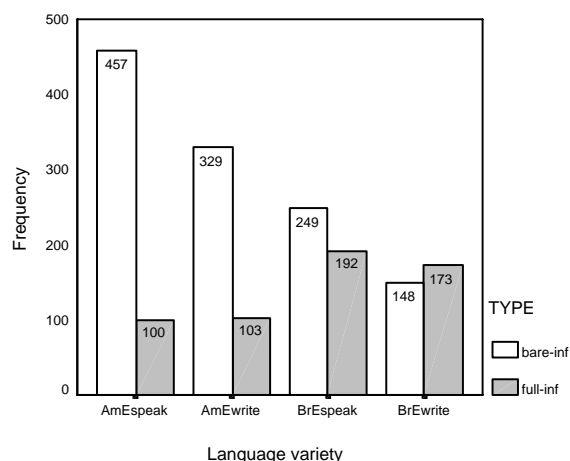
As can be seen in Table 4, in the 1960s, bare infinitives account for only 22% of the BrE data, but this percentage rose to 60% in the 1990s; In the AmE data, there was also an increase, from 68% to 82%, in the proportion of bare infinitives. But the change in AmE is not as marked as that in BrE, as reflected by the lower significance level and smaller LL value for the AmE data. The difference between FLOB and LOB (LL=47.575) is significant at $p < 0.001$, whereas the significance level between Frown and Brown (LL=10.678) is 0.001. The reason for this apparent difference is that by 1961 AmE was already much more tolerant of bare infinitives than BrE (see Figure 2). Consequently a greater shift towards the use of bare infinitives in the period 1961-1991 was possible for BrE, resulting in a more marked change. It is clear that by the 1990s, the bare infinitive has become the statistical norm also in BrE. But even so, the British use full infinitives more frequently than Americans.

4 The spoken/written distinction

Written language differs from spoken language in many respects, one of which is that speech is typically less formal than writing and thus more tolerant of variant forms. Earlier studies of *HELP* show that of the two variants of *HELP (NP) to do* and *HELP (NP) do*, the former is the original one and the latter a later development (cf. Kjellmer 1985: 158). As such, bare infinitives are predicted to be more common in spoken English than in written English. This prediction is generally supported by our corpus data. As can be seen in Figure 4, except in

written BrE,¹³ bare infinitives occur more frequently in the spoken data than in the written data. In spite of the slightly larger proportion of bare infinitives in spoken English, however, we cannot conclude that the spoken/written distinction actually influences the language user's choice, as shown by the statistical test conducted below.

Figure 4 Full/bare infinitives following HELP in spoken and written English



To test the statistical significance of this difference, all of the raw frequencies were normalized to one million words, as shown in Table 5. For the difference to be statistically significant, the calculated log likelihood ratio must be greater than 3.84, the critical value for significance at $p < 0.05$ for one df. Table 5 shows that irrespective of whether we consider the written and spoken data in BrE and AmE separately, or ignore the language variety and take the written and spoken data in the two language varieties together, the significance score is greater than 0.05 and hence the difference is not statistically significant. Even if we disregard the effect

of language change (cf. section 3) and compare the written and spoken data of the matching period (see Table 6), we come to the same conclusion: while bare infinitives occur more frequently in spoken English, the spoken vs. written distinction does not significantly influence a language user's choice between the two infinitive variants.

Table 5 Contrast between spoken and written registers

Register	Full-inf		Bare-inf		LL (1 df)	Sig. level (2-sided)
	RF	NF	RF	NF		
BrEwrite	173	86.5	148	74	2.159	0.142
BrEspeak	192	29.86	249	38.72		
AmEwrite	103	51.5	329	164.5	2.711	0.100
AmEspeak	100	50	457	228.5		
Written	276	69	477	119.25	1.746	0.186
Spoken	294	34.88	706	83.75		

Table 6 Contrasting the spoken and written data of the matching period

Corpus	Full-inf		Bare- inf		LL (1 df)	Sig. level (2 sided)
	RF	NF	RF	NF		
FLOB	78	78	121	121	0.389	0.533
BNCS	192	29.86	249	38.72		
Frown	45	45	204	204	0.002	0.964
CPSA	100	50	457	228.5		
Written	123	61.5	325	162.5	0.132	0.716
Spoken	292	34.64	706	83.75		

4 Semantic distinction

The debate over the semantic distinction between the two versions of the infinitive has a long history (see Duffley 1992:1-14). While most researchers content themselves with stating that the omission of *to* after *HELP* is optional, a few others see a subtle semantic distinction between the two variant forms. Wood (1962: 107-8) and Lu (1996: 813), for example, argue that *to* 'can be omitted only

when the helper does some of the work, or shares in the activity jointly with the person that is helped' (Wood, *ibid*). In other words, when the helper does not take part in the activity with which the help is offered, the infinitive *must* take *to*, as in (3a). Thus sentences like (3b) and (3c) are unacceptable according to Lu and Wood.

- (3) (a) This book *helped me to see* the truth. (Lu, *ibid*)
 (b) These tablets will *help you sleep*. (Wood, *ibid*)
 (c) Writing out a poem will *help you learn* it. (Wood, *ibid*)
- (4) (a) Will you *help me clear* the table? (Quirk *et al* 1972: 841)
 (b) This book will *help you to see* the truth. (Quirk *et al* 1972: 841)
- (5) (a) John *helped Mary eat* the pudding. (Dixon 1991: 199)
 (b) John *helped Mary to eat* the pudding. (Dixon 1991: 199)

Similarly to Wood, Quirk *et al* (1972: 841) argue that the choice of the infinitive variants 'is conditioned by the subject's involvement'. For example, in (4a) with a bare infinitive, 'external help is called in' whereas in (4b) with a full infinitive, 'assistance is outside the action proper'. Similar views can also be found in Dixon (1991: 199), who argues that in (5a) John ate part of the pudding as Mary did, whereas in (5b) John presumably fed the pudding to an invalid Mary. Quirk *et al* (1985: 1206), though, drop the semantic distinction and claim that the only contrast is that the bare infinitive is more American.

Duffley (1992: 14, 18) uses the following minimal pairs to argue for a semantic distinction between the two infinitival variants:

- (6) (a) I saw him be impolite.
 (b) I saw him to be impolite.
- (7) (a) I had nine people call.
 (b) I had nine people to call.

Duffley suggests that there is a general difference in the aspectual properties of the bare and full infinitives: the bare infinitive evokes ‘a perfective view of the realization of an event’ (action-like or state-like) while the full infinitive evokes ‘an action situation referred to a point in time prior to its realization’. Thus in (7a) the bare infinitive ‘evokes the actual realization of the action of calling from beginning to end in the past time-stretch referred to by *had*’ (*ibid*: 18) whereas in (7b) *call* is supposed to follow the existence of the obligation to realize this event, denoted by *had*. On careful examination, however, we find that *saw* and *had* have different meanings, and the different readings of these minimal pairs come as a result of a lexical shift rather than the presence or absence of *to* before the infinitive. In (6a) *saw* refers to visual perception whereas in (6b) it is related to mental apprehension, or the realization of his being impolite by means of inference (cf. also Bolinger 1974: 66). Likewise, in (7a), *had* has a causative meaning while in (7b), *had* simply means ‘possess’, thus the sentence can be interpreted as *I will call nine people, and these people are my (real or fictitious)*

calling list. Hunston (2002: 139) argues, on the basis of collocations, that the three main meanings of *maintain* ('do not allow to weaken', 'say something strongly' and 'keep at a particular level') might as well be treated as three phraseologies with their own meaning rather than as a single word with three meanings. We believe the same applies to *see* and *have* in (6) and (7). As long as we can approach the difference in these sentences from the perspective of the semantic difference encoded in full verbs, rather than aspectual properties of the full and bare infinitives, we need not pursue this issue further here.

The semantic difference between the infinitival variants is not reported in more recent corpus-based works such as *The Longman Language Activator* (1993), *The Collins COBUILD English Dictionary* (1995), *The Longman Dictionary of Contemporary English* (1996), and *The Longman Grammar of Written and Spoken English* (1999). The *Collins* dictionary, for example, defines *HELP* thus:

If you help someone, you make it easier for them to do something, for example by doing part of the work for them or by giving them advice or money. (*Collins*, p. 787)

The *Collins* definition does not draw a distinction between whether the helper actually shares or does not share the helping activity. One of their examples is:

(8) My mum used to *help cook* the meals for the children. (*Collins*, p. 787)

Without more contextual information, it is not clear whether the mother did the actual cooking herself or helped the children, perhaps, by means of simply giving

advice on how to cook or relieving the children from such chores as vacuuming the floor so that they could cook. The most reasonable reading is that the mother did the cooking herself, yet the bare infinitive *cook* is used. The *Activator*'s examples, as quoted in (9), are even more illustrating as they certainly seem to counter the semantic distinction:

(9) (a) My mother's death was a very difficult time for me but my boyfriend *helped me get over* it. (*Activator*, p. 604)

(b) If I write a list, it *helps me remember* all the things I have to do in a day. (*Activator*, p. 606).

Yet assessing the claims of Lu, Wood, and Quirk *et al* on a large scale is made difficult by two factors. Firstly, most of the examples in our corpora do not cover the scenario discussed by these authors. Secondly, where an example may fit the desired scenario, it is in fact hard to make the distinction between whether or not the helper actually takes part in the helping activity. Nevertheless, the following examples provide enough evidence to undermine the semantic distinction as suggested by Lu, Wood and Quirk *et al* as being an absolute one (cf. also Lind 1983: 271):

(10) (a) Good field techniques will not only equip linguists for better work, but also *help them overcome* negative attitudes. (Brown)

(b) Historical antecedents *help us understand* the current debate and the absence of a perfect solution to the dilemma of war coverage. (Frown)

(c) Mrs. Clinton, before she came up here today, gave a tour of the White House and the personal residence to one of the physical therapists that will be added to the White House Medical Unit team that will *help the President convalesce* when he leaves the hospital. (CPSA)

(d) And there's nothing like a poultice to *help you get* to sleep. (LOB)

(e) I *help people stop* smoking. (FLOB)

(f) Well you oh it says if you have a dose last thing at night it *helps you sleep*. (BNC)

In none of these cases, with either an animate or inanimate subject (i.e. the helper) could the helper have actively involved in helping activity, yet the bare infinitive was chosen. As such, Duffley suggests that

A better characterization of the bare infinitive structure in these uses is that it evokes 'helping' as direct or active involvement in the bringing into being of the action denoted by the infinitive...In contrast, *HELP + to* evokes help as a condition which enables the helpee to realize the event denoted by the infinitive. (Duffley 1992:28)

This characterization, however, does not add much to the argument for the semantic distinction, because there is little difference between direct/active involvement and direct/active participation discussed above. The two are practically equivalent. Duffley uses the examples in (11) to support the distinction he makes:

(11) (a) Mrs Arthur Goldberg, wife of the Secretary of Labour, paints professionally and *helps sponsor* the Associated Artists' Gallery in the District of Columbia. (Brown)

(b) The Bonaventure was quivering and lurching like an old spavined mare. Her stern was down and a sharp list *helped us to cut* loose the lifeboat, which dropped heavily into the water. (Brown)

According to Duffley (*ibid*: 24), it is not acceptable to use *to sponsor* in (11a) while *to cut* in (11b) cannot be replaced with the bare infinitive *cut*. However, we cannot see any contextual difference between the sentences in (11) and (12):

(12) (a) What a thoughtful company are Ford Motors. They don't only *help to sponsor* Sky's TV Soccer but close down a factory and various assembly lines so that their workers will have time to watch! (BNC)

(b) Opportunity 2000 in Kingfisher has *helped us unlock* rich reserves of talent among our employees [...] (BNC)

Just as Mrs Arthur Goldberg could be actively involved in sponsoring an art gallery (11a), Ford Motors could similarly sponsor a football match, because 'the only way to help sponsor something is to sponsor it in part by contributing money oneself' (Duffley 1992: 138). Yet the full infinitive was used in (12a).¹⁴ Similarly, the subjects in (11b) and (12b) are both inanimate, and *HELP* in both sentences means *to enable* or *to facilitate*. However, one sentence uses the full infinitive whereas the other uses the full infinitive. It would appear that neither

AmE nor BrE in fact display the distinction claimed by Lu, Wood, Quirk *et al* and Duffley. Consequently, we claim that the sentences in (3) are perfectly acceptable. Another issue that is related to the semantic distinction is the hypothesis that *HELP* preceding a bare infinitive is progressively grammaticalized as a modal idiom/catenative or ‘quasi-auxiliary’ (Mair 1995:270; 2002:124). Based on his observation that the use of *HELP* with infinitives (especially bare infinitives) has started mushrooming since the mid nineteenth century, Mair (*ibid*) argues that the meaning of *HELP* has become so general, and abstract (*contribute to/provide a favourable environment for*) that its meaning ‘approaches those typically associated with grammatical categories’. While Mair is right that the increase of the use of *HELP* with infinitives in general and bare infinitives in particular is attributable to the extension of the meaning of *HELP*, we cannot see a link between this increase and the grammaticalization of *HELP*. In what way has grammaticalization contributed to the increase of the use of *HELP* with infinitives? Is it that only a grammatical word increases in use over time while a lexically full verb does not? Such issues cannot be addressed fully here, but clearly beg future investigation.

Another problematic finding of Mair (2002: 125) is based on his use of the 132 instances of the *to help* + full verb sequence in the whole BNC corpus to argue that this sequence should be analyzed as an ‘auxiliate’ rather than two separate infinitival clauses arranged in sequence. This argument seems to us to be ill

founded. If the sequence is to be analysed as a modal idiom, the infinitival verb following *HELP* must be definite. For example, *going* in the ‘quasi-modal’ (Biber *et al* 1999: 484) *be going to* cannot be replaced with *coming*. Unfortunately, both in the BNC as used by Mair, and in the other corpora we use, we cannot find a clear pattern in the infinitival verbs following *to help*. Furthermore, the examples that we found were mainly in the BrE data. The normalized frequencies (per million words) are given as follows: 2 in LOB, 2 in FLOB, 1.24 in BNCS and 0.5 in CPSA. No instances were found in Brown and Frown (see Table 11 in section 5.3). It seems unusual at best, and seems in fact unreasonable that grammaticalization should occur in BrE alone.

As Mair (2002:122, 124) observes, bare infinitives have increased considerably in BrE, especially from the 1930s and 1940s onwards. In addition, our discussion in section 2 also shows that, in both BrE and AmE, bare infinitives increased significantly over the period 1961-1991. If *HELP* is indeed in the process of grammaticalizing as an auxiliary, as Mair claims, there should be, by now, some clear sign of this process. Yet, apart from a considerable increase in the frequency of bare infinitives, we cannot find any evidence showing that sentences like (13a) are becoming acceptable. In contrast, though, *need* and *dare* can be used both as a main verb and as a modal auxiliary, and thus (13b) and (13c) are quite felicitous:

- (13) (a) *Helped Mrs Arthur Goldberg sponsor the art gallery?
 (b) Do we need/dare to escape? (Duffley 1992: 99)

(c) Need we/Dare we escape? (*ibid*)

Biber *et al* (1999:483-4) observe that ‘the boundary between modals and lexical verbs taking infinitive complementation is in some cases unclear’. Examples include so-called marginal or quasi-modals like *need (to)*, *dare (to)*. It is reasonable to assume that these semi-modals derive from lexical verbs and are undergoing a process of grammaticalizing as full modals.

Mair (2002:125) provides the following examples from the quotation base of *OED* to support his grammaticalization hypothesis:

(14) (a) Sir Kingsley Wood ... asked the House for another £1,000,000,000, to *help pay* for the next three months of war.

(b) Nor have they eliminated the unburned hydrocarbons which *help produce* the smog that blankets such a motor-ridden conurbation as Los Angeles.

(c) Negro cabbie John W. Smith, whose arrest for ‘tailgating’ a police car ... *helped spark* five days of rioting ..., was found guilty of assaulting a policeman.

(d) Part of the fun of the game comes in ‘sooping’. This is when the players sweep the ice with special brooms in front of a moving stone to *help it go* further.

According to Mair, replacing the bare infinitive *pay* with the full infinitive *to pay* in (14a) ‘would not only be stylistically clumsy because of the repetition involved; it would also produce a slight shift in perspective, from the instrument (money) to the agent who spends it’. While we agree with the first half of his argument, we cannot accept the second half. Consider the example (15a):

(15) (a) Money raised from tolls on roads will *help to pay* for the scheme.

(BNC)

(b) The diesel also produces 90% less carbon monoxide, 60% fewer oxides of nitrogen and 90% fewer of unburnt hydrocarbons which *help to produce* acid rain.

(BNC)

(c) Where the fund of damage is likely to be substantial, including future nursing costs and the like as well as loss of earnings, an accountant's evidence can *help the court to decide* the multiplier, as well as the multiplicand, for example in the case of a one-man business [...] (BNC)

In (15a) the full infinitive *to pay* is used, yet no agent is mentioned at all. An infinitive marker clearly does not necessarily produce a shift in perspective. One must also, therefore, doubt the reliability of Mair's proposed paraphrase test for this feature.

Mair (2002:126) argues that adding *to* before the infinitives in (14b) and (14c) 'would be slightly incongruous' because the negative effect featured in the two sentences (i.e., smog and rioting) are 'incompatible with the core semantics of *HELP*'. Nevertheless, this argument is poorly postulated, as it is not uncommon for examples featuring negative effects to take infinitives with *to*, as shown in (15b).¹⁵

Finally, Mair (*ibid*) argues that as (14d) is 'a fairly clear case of a purely causative use of *HELP*, equivalent to *make*', 'adding *to* before the infinitive is

problematical'. This statement raises two problems. First, we do not see why the causative use of *HELP* should be analyzed as a modal idiom, because *make* is not a modal auxiliary. Second, we cannot find any reason why Mair should claim that the causative use of *HELP* cannot take a full infinitive, because counter examples are not uncommon, as exemplified in (15c).

On the basis of our exploration of AmE and BrE corpus data, we claim that not only is the semantic distinction between the full and bare infinitives following *HELP* not well grounded, it is also the case that the grammaticalization hypothesis is not justified.

5 Syntactic conditions

A number of syntactic conditions have been suggested in the literature that may be related to the choice of a full or bare infinitive following *HELP*. In this section we will discuss the following factors:

- an intervening NP or adverbial
- the number of intervening words
- *to* preceding *help*
- the passive construction
- inflections of *HELP*
- *it* as the subject

5.1 The intervening NP or adverbial

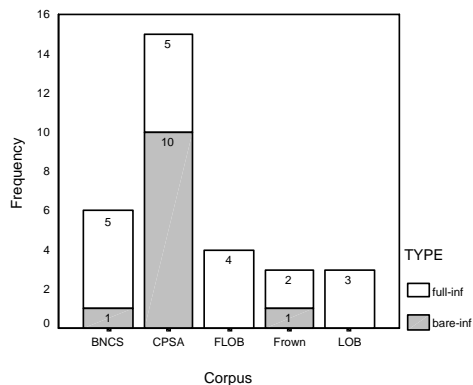
Biber *et al* (1999: 73), Lind (1983: 269) and Kjellmer (1985: 158) observe that bare infinitives occur more frequently after *HELP* with an intervening NP than where there is no intervening NP. This observation is partially supported by our data, as shown in Table 7.

Table 7 Comparison of HELP and HELP + NP

Corpus	Inf. type	No NP			With NP			±%	LL 1 df	Sig. level
		RF	%	NF	RF	%	NF			
Brown	full	39	37.5	39	19	24.05	19	-13.45	3.81	0.051
	bare	65	62.5	65	60	75.95	60	+13.45		
Frown	full	31	23.13	31	14	12.17	14	-10.96	5.15	0.023
	bare	103	76.87	103	101	87.83	101	+10.96		
CPSA	full	63	23.68	31.5	37	12.71	18.5	-10.97	5.57	0.018
	bare	203	76.32	101.5	254	87.29	127	+10.97		
LOB	full	60	81.08	60	35	72.92	35	-8.16	1.11	0.292
	bare	14	18.92	14	13	27.08	13	+8.16		
FLOB	full	46	37.10	46	32	42.67	32	+5.57	0.61	0.436
	bare	78	62.90	78	43	57.33	43	-5.57		
BNCS	full	75	44.64	11.66	117	42.86	18.20	-1.78	0.055	0.814
	bare	93	55.36	14.46	156	57.14	24.26	+1.78		

Note that the frequencies in the table do not include the occurrences where an intervening NP and an adverbial co-occur, hence the potential influence of an intervening adverbial is excluded. It can be seen from the table that an intervening NP typically contributes an increase of 10% or more to the proportion of bare infinitives in the AmE data; the increase in the proportion of bare infinitives contributed by an intervening NP is only statistically significant in AmE (marginally significant in Brown). In the BrE data, however, the effect of an intervening NP is unpredictable and not statistically significant. This finding is in line with our conclusion in section 1.

Figure 5 Frequencies of full/bare infinitives preceded by an adverbial



Lind (*ibid.*: 272) uses the example in (15) to argue that ‘an intervening adverbial will preclude omission of *to*’. This argument, however, is not supported by our corpus data, as shown in Figure 5. The frequencies in the figure include both instances where an adverbial and an NP co-occur and an adverbial alone intervenes and instances where an adverbial alone intervenes.

(16) The whisky *helped me not to stagger* under this blow. (Lind 1983: 272)

It is not hard to find examples like these in our corpora, as shown in

(17):¹⁶

(17) (a) So, *to help people not jump* all over it as soon as they see it and say, oh, my God, they didn’t say enough about it. (CPSA)

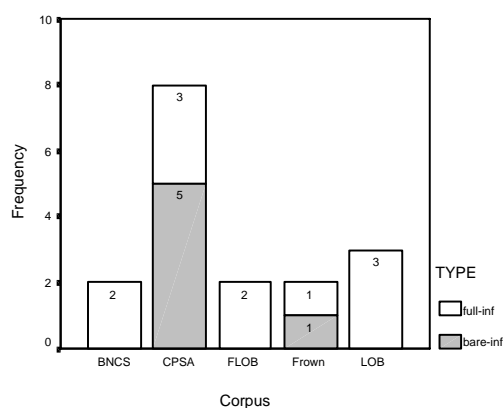
(b) Mr. Clinton was an organizer of two London rallies in the fall of 1969 and also *helped, to an apparently much lesser degree, organize* a huge march on Washington on Oct. 15, 1969. (Frown)

(c) That we extend – in some cases to MSEB and in other cases remind –of a previous extension that they are most welcome to respond in a public hearing and in addition that we will put some questions for those public hearings up that would even *help perhaps focus* some of those responses. (CPSA)

(d) And somebody was following, a colleague was following, saw it happen, stopped and *helped him sort of do* what you've got to do to get the man's address and this sort of thing, make sure the car was alright, and took him into the office. (BNC)

If we exclude the possible influence of an intervening NP and only consider the cases where an adverbial alone intervenes, however, Lind's argument seems to be viable in BrE, as shown in Figure 6.

Figure 6 Frequencies of full/bare infinitives preceded by an adverbial alone



5.2 The number of intervening words

While an intervening NP is associated with the omission of *to*, Lind (1983: 269) seems to suggest that the number of intervening words may also influence the choice of a full or bare infinitive. As the first step towards testing this hypothesis, we counted the raw frequencies of the full and bare infinitives in different slots and normalized them to one million words, as shown in Table 8.

In this case, we could not use the log-likelihood test, however, because at least one of 4 cells in the 2x2 contingency table for each data set has an expected value less than 5. Consequently we applied Fisher's exact test to the normalized frequencies to determine the exact significance level so as to avoid the potentially misleading outcomes resulting from log-likelihood test relying on expected values less than 5 (cf. Howitt & Cramer 2001: 121-3). The results are given in Table 9.¹⁷

Table 8 Frequencies of infinitive variants in different slots

Corpus	Inf. type	Number of intervening words													
		0		1		2		3		4		5		>5	
		RF	NF	RF	NF	RF	NF	RF	NF	RF	NF	RF	NF	RF	NF
Brown	full	39	39	12	12	4	4	1	1	2	2	0	0	0	0
	bare	65	65	41	41	16	16	1	1	0	0	2	2	0	0
Frown	full	29	29	10	10	3	3	0	0	1	1	1	1	1	1
	bare	103	103	74	74	19	19	2	2	2	2	1	1	3	3
CPSA	full	55	27.5	31	15.5	3	1.5	1	0.5	2	1	3	1.5	5	2.5
	bare	203	101.5	185	92.5	41	20.5	17	8.5	4	2	3	1.5	4	2
LOB	full	57	57	22	22	11	11	3	3	1	1	1	1	0	0
	bare	14	14	11	11	2	2	0	0	0	0	0	0	0	0
FLOB	full	44	44	22	22	2	2	4	4	3	3	2	2	1	1
	bare	78	78	29	29	7	7	2	2	1	1	1	1	3	3
BNCS	full	73	11.35	98	15.24	13	2.02	5	0.78	1	0.16	1	0.16	1	0.16
	bare	93	14.46	149	23.17	3	0.47	2	0.31	1	0.16	1	0.16	0	0

Table 9 Number of intervening words and the language user's choice

Corpus	Fisher's exact test value	Exact sig. level (2-sided)	Df	Critical value
Brown	9.497	0.052	5	11.07
Frown	7.157	0.237	6	12.59
CPSA	11.073	0.056	6	12.59
LOB	3.958	0.601	5	11.07
FLOB	7.048	0.294	6	12.59
BNCs	3.674	0.236	6	12.59

As can be seen from the table, the Fisher's exact test value calculated for each data set is less than the corresponding critical value. Hence, we can safely conclude that the number of intervening words does not significantly influence the language user's choice of a full or bare infinitive. As such, while infinitives that are spaced more than 5 words apart from *HELP* are found to take *to* in our corpora, it is also not infrequent for them to omit *to*, as shown by the examples in (18).

(18) (a) [...] the President and I are determined to do all we can to *help Israel and its neighbors in the Middle East stay* on the path to peace [...] (CPSA)

(b) Mrs. Child [...] now confided that she had *helped one of Henry Palfrey's slaves escape* to Canada some years before [...] (Brown)

(c) Lo, in the post came an invitation to *help the now venerable but astonishingly active trio write* a fifth edition. (FLOB)

5.3 TO preceding help

A decisive syntactic condition that encourages the omission of *to* following *help*, as noted in Biber *et al* (1999: 737), Lind (1983: 269) and Kjellmer (1985: 159), is

whether or not the controlling verb itself is preceded by the infinitive marker *to*, as shown below:

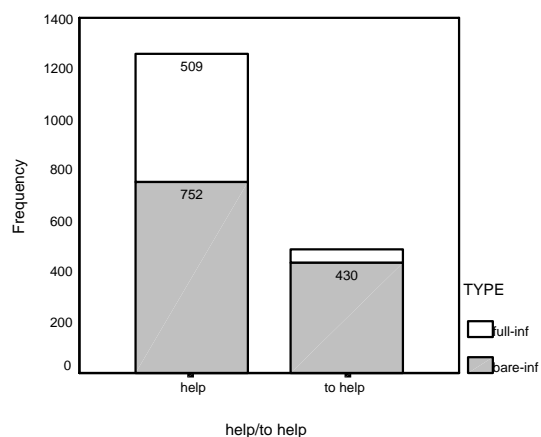
(19) (a) They took on an estate manager and wine-maker to *help run* the business. (FLOB)

This is one device to *help him pay* those bills. (CPSA)

Figure 7 compares the proportions of bare infinitives following *HELP* and *to help*.

In the figure, the frequency for the label *HELP* includes counts of full and bare infinitives following *HELP* (inclusive of its inflected forms). It can be seen that when the controlling verb *help* is preceded by *to*, bare infinitives make up 88% of examples, otherwise, they only account for around 60% of examples.

Figure 7 Contrast between *HELP* (including inflected forms) and *to help*



To show the effect of the preceding *to* more clearly, we also experimented with excluding all of the other factors by comparing the non-inflected form of *help* and *help* preceded by *to*. Table 10 shows the frequencies of the full and bare

infinitives following the uninflected form of *help* and *help* preceded by *to* in each corpus, their calculated log likelihood values and their significance levels. It can be seen from the table that the difference shown in Figure 6 is statistically significant except in spoken BrE.

Table 10 Frequencies of full/bare infinitives after help and to help

Corpus	Inf. type	<i>help</i>		<i>to help</i>		LL (1df)	Sig. level (2-sided)
		RF	NF	RF	NF		
Brown	full	18	18	1	1	19.740	<0.001
	bare	32	32	43	43		
Frown	full	12	12	2	2	6.333	0.012
	bare	64	64	58	58		
CPSA	full	47	23.5	6	3	21.869	<0.001
	bare	150	75	197	98.5		
LOB	full	30	30	6	6	26.418	<0.001
	bare	2	2	15	15		
FLOB	full	26	26	4	4	29.917	<0.001
	bare	19	19	47	47		
BNCS	full	67	10.42	40	6.22	0.014	0.907
	bare	108	16.8	71	11.04		

Table 11 Full and bare infinitives after to help

Corpus	Inf. type	No NP			With NP			±%	Sig. level
		RF	%	NF	RF	%	NF		
Brown	full	0	0	0	1	4.35	1	+4.35	1.000
	bare	21	100	21	22	95.65	22	-4.35	
Frown	full	0	0	0	2	5.56	2	+5.56	0.512
	bare	24	100	24	34	94.44	34	-5.56	
CPSA	full	1	1.25	0.5	5	4.20	2.5	+2.95	0.645
	bare	79	98.75	39.5	114	95.80	57	-2.95	
LOB	full	2	22.22	2	4	33.33	4	+11.11	0.659
	bare	7	77.78	7	8	66.67	8	-11.11	
FLOB	full	2	6.25	2	2	10.53	2	+4.28	0.623
	bare	30	93.75	30	17	89.47	17	-4.28	
BNCS	full	8	19.51	1.24	32	45.71	4.98	+26.2	0.333
	bare	33	80.49	5.13	38	54.29	5.91	-26.2	

While an intervening NP encourages language users to choose a bare infinitive after *HELP* (cf. section 5.1), intervening NPs after *to help* may lead to an increase

in the proportion of full infinitives, as shown in Table 11. A possible reason for this increase is that, in the absence of an intervening NP or adverbial, language users are reluctant, consciously or unconsciously, to repeat *to* consecutively on the grounds of euphony (cf. Lind 1983: 269). Indeed, the pattern of *to help to* is non-existent in the written AmE data and only one such instance occurs in the spoken AmE data.

We hypothesized that the infinitive marker preceding *help* enjoys higher priority over an intervening NP in this case. To test this, we used Fisher's exact test. As can be seen from Table 11, in none of the data sets under consideration is this increase statistically significant (i.e., exact significance level less than 0.05).

5.4 *The passive construction*

Palmer (1969: 169) makes the claim that the 'passive occurs [...] only with *to*: *They were helped to do it*'. As such, it is hardly surprising that, of the 9 examples of *HELP* in a passive construction in our corpora, all are of the *be helped to V* type without exception. For example:

(20) (a) [...] but in fact we have never *been helped to think* about it. (BNC)

(b) Are the Arabs to be dominated by men like Saddam Hussein, or can they at last *be helped to break* out into a freer and more rational future? (FLOB)

Beginning with a problem posed by experience, the student must then *be helped to gain* command of data [...] (Frown)

The reason why *to* cannot be omitted in passive constructions can be explained as follows. The form *be helped to V* is the passive transformation of *HELP NP (to) V*. In the *HELP NP (to) V* type, *NP* is an object and the infinitive functions as an object complement. In this case the infinitive marker *to* can be omitted. When it is transformed into the passive, *NP* becomes the subject and the infinitive becomes a subject complement accordingly, meaning that *to* can no longer be omitted. An analogy between *HELP* and verbs such as *make/let/see/hear* illustrates this point well (cf. Onions 1965). Although verbs of the latter group almost always take a bare infinitive as the object complement, the infinitive marker is not normally omitted when these verbs occur in passive constructions.¹⁸

The passive construction seems to have a greater influence than *to* preceding *help*. If *HELP* is used in the passive construction, the infinitive following *HELP* must take the infinitive marker irrespective of whether the controlling verb *HELP* is or is not preceded by *to*. For example:

(21) We needed to *be helped to train* to sell and so we needed that training to get us going so to speak, there were no natural salesmen amongst departments.

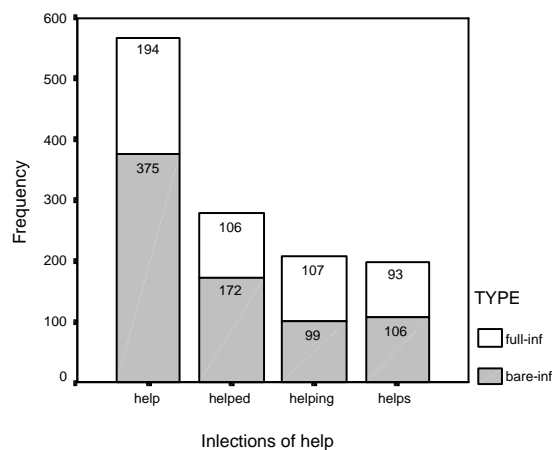
(BNC)

5.5 Inflections of *HELP*

Lind (1983: 268) observes that the omission of *to* occurs ‘much more frequently after the uninflected form *help* than after any of the inflected forms’.¹⁹ This observation is partly supported by our corpus data. Figure 8 shows the frequencies

of the two types of infinitives occurring with the uninflected form of *help* and its inflected forms. It can be seen from the figure that 66% (i.e., 375/569) of the infinitives occurring after the uninflected form *help* are bare infinitives. However, the inflected forms of *HELP* do not demonstrate marked contrasts. Lind (1983) does not make a distinction between the non-infinitive form of *help* and the infinitive form of *help*, nor between *helped* and passive constructions. In Figure 8, however, the frequency of the infinitive variants after the uninflected form does not include the count of infinitives occurring with *to help*, neither does the frequency of *helped* include the count of passive constructions. Hence, the influence of these two factors is avoided (cf. sections 5.3 and 5.4), and our method is more reliable than Lind's. We hypothesize that the inflections of *HELP* may influence the language user's choice of a full or bare infinitive.

Figure 8 Contrast of inflections of HELP



We tested this hypothesis against the corpora used in this paper. The results are given in Table 12. As the expected values in some cells of the contingency table are less than 5, Fisher's exact test was used (cf. section 5.3). For a difference to be statistically significant, the calculated significance value must be less than 0.05. As can be seen from the table, in the 1960s, neither written AmE nor written BrE was influenced by the inflections of *HELP*. In the 1990s, however, written AmE changed to become affected by inflections, though neither spoken BrE nor spoken AmE has changed similarly. This finding lends further evidence to support our claim that language change has affected the choice of a full or bare infinitive (cf. section 1).

Table 12 Frequencies of full and bare infinitives after inflected HELP

Corpus	Inf. type	<i>help</i>		<i>helped</i>		<i>helps</i>		<i>helping</i>		Fisher's test value	Sig. level
		RF	NF	RF	NF	RF	NF	RF	NF		
Brown	full	18	18	10	10	9	9	18	18	6.88	0.75
	bare	32	32	26	26	11	11	13	13		
Frown	full	12	12	12	12	9	9	9	9	10.05	0.016
	bare	64	64	53	53	19	19	10	10		
CPSA	full	41	20.5	9	4.5	14	7	29	14.5	4.34	0.223
	bare	150	75	30	15	34	17	46	23		
LOB	full	30	30	28	28	12	12	17	17	3.47	0.336
	bare	2	2	6	6	3	3	1	1		
FLOB	full	26	26	25	25	12	12	10	10	1.892	0.603
	bare	19	19	30	30	15	15	10	10		
BNCS	full	67	10.4	22	3.4	37	5.8	24	3.7	2.13	0.583
	bare	108	16.8	27	4.2	24	3.7	19	3.0		

5.6 It as the subject

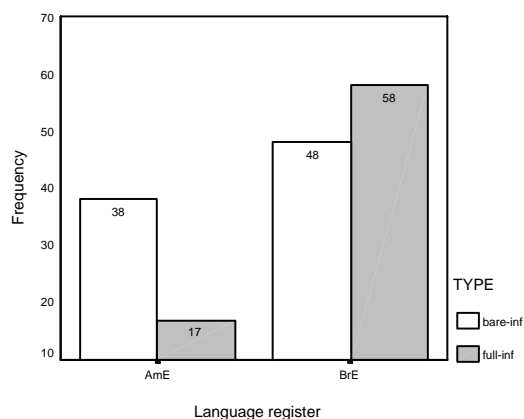
When *it* functions as the subject of an infinitive, it is necessary to distinguish between two situations: *it* as the real subject, anaphoric to something mentioned in the context (e.g., 22a, in which *it* refers to her spending time in the studios) and

it as the provisional or logical subject, anticipating the real subject of the infinitive (e.g., 22b, in which *it* refers for them to have the United States as the mediator).²⁰

(21) (a) She certainly loved her time at the studios today, even though there wasn't anything too exciting going on. I would think it *helped her a bit to get over* the shock of Elvis's murder. (FLOB)

(b) Sometimes it helps both parties for them to have the United States as the mediator. (CPSA)

Figure 9 Frequencies of infinitives after *HELP* (*it* as the real subject)



To explore how a language user's choice relates to *it*, we extracted all examples of *it* as the subject of *HELP* from our corpora. We found 184 examples in total. Of these, 23 had *it* as the provisional subject of *HELP*. In all 23 cases, the full infinitive is selected, because the infinitive marker cannot be omitted for syntactic reasons (cf. Lind 1983: 269). This is not the case where *it* is the real subject of *HELP*. *HELP* simply behaves as expected by showing a preference for bare infinitives in AmE and for full infinitives in BrE, as illustrated in Figure 9.

Our finding is contrary to that of Lind (1983: 270), who observes that even when *it* functions as the real subject the infinitive marker *to* is not omitted. Lind's observation is based on nine examples that have *it* as the real subject. These examples are taken from a corpus composed of 50 English novels, mostly detective stories, published in the decade 1960-1970. While Lind's conclusion might be accounted for by his skewed corpus, we believe it is more likely to be a result of small dataset: it just happened that *to* was not omitted in those nine examples. In our data, however, such examples are not uncommon. For example:

(22) (a) So it's a safety feature and it (the tap) *helps control* the experiment.

(BNC)

(b) Like all of our cultural institutions, it (Fernbank) *helps us come* to terms with a mystifyingly complex world. (Frown)

6 Conclusion

In this paper, we used six corpora to study various factors that may influence the choice of a full or bare infinitive when it functions as the object or object complement of *HELP*. Based on the above discussion, our main findings can be summarized as follows.

AmE shows a stronger preference for bare infinitives after *HELP* than BrE. Language change over the 3 decades from 1961 to 1991 favours bare infinitives after *HELP* in both AmE and BrE. While the proportion of bare infinitives are slightly higher in spoken English than in written English, the influence of the

spoken/written distinction is not statistically significant. The alleged semantic distinction between the full and bare infinitives is not supported by our corpus data, nor is the claim justified that *HELP* is in the process of grammaticalizing as a modal auxiliary. An intervening NP may increase the proportion of bare infinitives after *HELP*, but an intervening adverbial does not. The number of intervening words is not correlated to the choice of a full or bare infinitive. The infinitive marker preceding *help* increases the proportion of bare infinitives. When *help* is preceded by the infinitive marker *to*, nevertheless, an intervening NP or adverbial may lead to an increase in the proportion of full infinitives. The passive construction exclusively selects bare infinitives. Inflections of the controlling verb *HELP* are related to the choice of a full or bare infinitive, but their influence is only consistently reliable in spoken English. Finally, while the provisional subject *it* exclusively selects *to*-infinitives, the real subject *it* does not. By taking the corpus-based approach to studying the factors that may influence the language user's choice between the infinitive variants following *HELP*, we believe that we have demonstrated the role corpora have to play in generating accurate description of language use, language variation and language change.

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Notes

¹ We would like to thank Susan Hunston and other readers of an earlier version of this paper for their useful comments. In this paper we use capitals to distinguish the lemma of *HELP* from the word form *help*.

² This paper is based on BNC version 2 (<http://escorp.unizh.ch/cgi-bin/bnc2/BNCquery.pl>).

³ Biber, Johansson, Leech & Finegan (1999: 735) note that *dare* and *help* are the two main clause verbs that can control either a *to*-clause or a bare infinitive. Only *help*, however, can take an intervening noun phrase followed by either a full or bare infinitive (cf. also Chalker 1984: 149). Thus, while *to* in (1d) can be left out, it cannot in *Ernest...dared Archie to punch him in the stomach* (Frown).

⁴ As a reader of an earlier version of this paper points out, when an NP intervenes between *help* and an infinitive (as in patterns 1b and 1d), the intervening NP can possibly be analyzed as the object of the first clause or the subject of the second clause (biclausal analysis). In our monoclausal analysis, this NP is the object of *help* while the infinitive functions as the object complement. When there is no intervening NP, the infinitive functions as the object of *help*. This paper will not include infinitives functioning as adverbials of purpose.

⁵ See corpus manuals (<http://khnt.hit.uib.no/icame/manuals/index.htm>).

⁶ A detailed description and a sample of the corpus is available online at <http://www.athel.com/cpsa.html>.

⁷ Considering that a time span of less than ten years is not likely to change the grammar of a language drastically, we assume that the slight difference in the sampling periods of the two spoken corpora will not affect our results significantly.

⁸ In addition to the factors discussed in this paper, infinitival verbs and text categories may also influence the choice of a full or bare infinitive. For example, *pay* tends to take the bare form as in *help pay*. However, the discussion of collocation and distribution needs much larger corpora to achieve reliable quantification. In the four written corpora used in this paper, the most frequent verb *make* only occurs 23 times in the positions of 1st-4th collocates on the right side of *help* as a verb. We would like to thank Professor Wolfgang Teubert for suggesting this line of inquiry.

⁹ A *normalized frequency* (NF) refers to a weighted frequency measure that allows for easy and reliable comparison of data sets of different sizes (cf. Ball 2002: 11).

¹⁰ The counts do not include i) the instances with *it* as the provisional subject; ii) infinitives functioning as adverbials of purpose. The same applies to all of the frequencies given in this paper unless otherwise stated.

¹¹ Unless otherwise specified, the values for significance tests and significance levels in this paper are calculated using SPSS Release 10.1.

¹² While it may be desirable to group the four corpora by the creation date or language variety in the figure, SPSS automatically arranged them alphabetically.

¹³ The relatively low frequency of bare infinitives in written BrE is attributable to the unusually higher frequency of full infinitives in LOB, data of the 1960s (77.87%).

¹⁴ In addition to (11a), Duffley (1992:26) provides two other examples in which ‘only the bare infinitive seems appropriate’. But we cannot see any difference between his examples and (i) and(ii). Duffley appears to have come to this conclusion because the pattern is rare in AmE and is simply absent in Brown, the corpus he used in his study.

(i) Table 1.6 helps to provide an overall picture of the content, pattern and distribution of first degree courses (BNC)

(ii) [...] aid programs that are helping to provide immunization for children around the world [...] (CPSA)

¹⁵ Here are some more examples, which are all cited from the BNC corpus: *to undermine the Weimar Republic and open the way to Hitler, to*

accelerate global warming, to destroy the market, to destroy the precious rain forest, to disrupt international trade.

¹⁶ We have purposefully chosen examples with *help* without the preceding infinitive marker to avoid the influence of the preceding *to* (see section 5.3).

¹⁷ Degree of freedom (df) in the cases of Brown and LOB is one less than others because no instance was found in the two corpora where infinitives are spaced more than 5 words apart from the controlling verb *help*.

¹⁸ Note, however, that verbs of perception like *see* and *hear* may take a full infinitive (e.g., *I saw them to be obnoxious*, Duffley 1992: 30) when they undergo a lexical shift, i.e., denoting the mental realization by inference. Likewise, while it is the norm for a full infinitive to follow *make* and *let* in the passive, bare infinitives are occasionally found, e.g., *It wasn't pleasant to be made feel like a good-for-nothing little brat* (cited from Duffley 1992: 78). This usage must be obsolete or dialectal now, if acceptable at all.

¹⁹ Lind (1983: 267) also claims that the pattern *helping V* is rare. This claim, however, is not supported by our corpus data, as can be seen in Figure 8. We believe Lind's conclusion is a consequence of skew in his corpus (cf. section 5.6).

²⁰ In the case of provisional subject *it* is a dummy pronoun (i.e. non-referential) while the infinitive clauses are sometimes referred to as 'extraposed

to-clause' (e.g. Biber *et al* 1999: 724). The meaning of example (21b) is equivalent to *Sometimes for them to have the United States as the mediator helps both parties*, though the two are different stylistically.