Change in the English infinitival perfect construction

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1   Introduction

The availability of searchable electronic corpora composed of textual material from different periods in time has made studying change in the English language easier. However, as is reflected in chapters of this volume, there are a number of methodological dimensions to the use of corpora in the study of current change. For some   this volume), while for others   Hundt and Leech, this volume; Smith and Leech, forthcoming). Our own position is that, while we can see the distinct advantages of using large corpora, detailed analysis of small corpora, especially if they are parsed, can reveal trends that may be missed by other approaches. Furthermore, in studying changes over short periods we believe that spoken language corpora are particularly valuable, as spoken language is primary, and changes in grammar are likely to manifest themselves in that medium first.

This paper explores short-term changes in the English infinitival perfect construction. It first examines changing frequencies of occurrence, comparing the various tense forms (present, past and non-finite) of the perfect

since the election and (2) to a simple past (where a specific time in the past is under discussion):

(1) tick off for me the main things that you would claim to **have achieved** as a government since the election [DL-E02#0027][2]

(2) **have heard** a great deal of noise from this motor-cycle as it came along followed by the bang [DL-J04#0099]

Examples of the perfect construction can be retrieved in DCPSE by using Fuzzy Tree Fragments (FTFs), a search facility within the ICECUP software (Aarts et al. 1998; Nelson et al. 2002). This facility allows the user to construct partial tree diagrams and to choose the level of detail . Perfect auxiliaries can be found through a simple FTF search for a single Different tense features can then be added to this node to search more specifically for instances occurring in present tense, past tense, or one of the non-finite forms. Figure 1 shows an FTF used to search for the infinitival form. Categorial information (such as word or phrase class) is shown in the upper righthand box of an FTF, functional information (such as direct object, noun phrase head) in the top lefthand box, and additional features in the lower box. In this instance the function has been left unspecified.
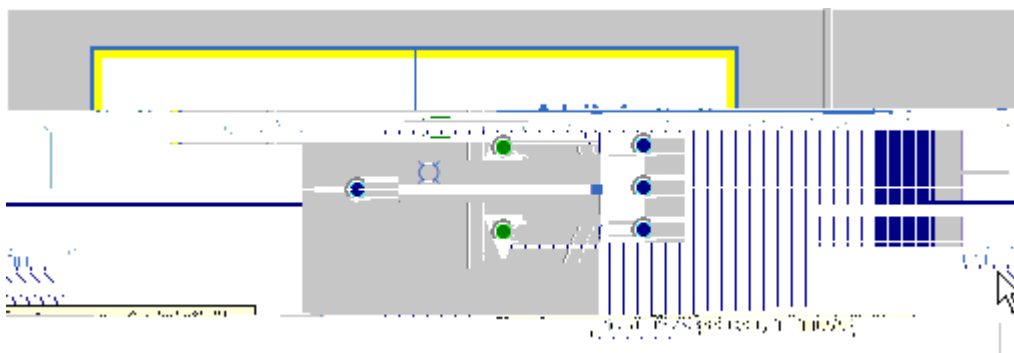

Figure 1: A simple FTF to search for perfect infinitive auxiliaries.

Frequencies (normalised per million words) can then be compared for LLC (the earlier subcorpus) and ICE-GB (the later subcorpus). The results show that the perfect auxiliary falls in frequency by nearly 8% across the two subcorpora (Table 1, Total row).[3]

Tense category	LLC		ICE-GB		Change in frequency		
	raw	pmw	raw	pmw	%	A: [2] (words)	B: [2] (perfect)
present	3,572	8,020.17	3,343	8,277.17	3.20%	1.72 ns	**21.71 s**
past	835	1,874.82	484	1,198.37	36.08%	**62.40 s**	**41.74 s**
infinitive	652	1,463.93	413	1,022.58	30.15%	**32.90 s**	**19.71 s**
-ing participle	78	175.13	58	143.61	18.00%	1.31 ns	0.46 ns
Total	5,137	11,534.05	4,298	10,641.72	7.74%	**15.18 s**	

Table 1. Frequencies of perfect auxiliaries in DCPSE 1.04 Tf1 0 0n DCPSE 1.04 Tf1ID 166reW*ňBT/F1 11.04 ˀ

of a 10% random sample showed that a majority are stative or ambiguous (cf. Biber et al. 1999: 463 7, who include stative examples in their present perfect counts, and note their high frequency in British English conversation). Occurrences with *got* comprise less than 7% of our data for each of the other tense form categories; some of the past tense examples are stative or ambiguous, but there are no clear stative examples (and only one or two possible candidates) for the infinitive, and none for the *-ing* participle (cf. Huddleston and Pullum et al. (2002: 112), who describe the stative idiom in these two forms as respectively very marginal and non-occurring).

For present purposes it is the overall pattern shown in Table 1 which is of interest. Our calculations show that this overall pattern is not altered by either (i) excluding all instances of the combination HAVE + *got*, or (ii) excluding estimated numbers of stative and ambiguous examples only. The two methods produce similar results (since few examples are clearly non-stative): they reduce the change in frequency for the present perfect category to around 0.8 0.9%, slightly reduce the change in the past perfect to about −

3   The infinitival perfect in DCPSE

The infinitival perfect occurs in two main kinds of context: a bare infinitival construction with a preceding modal auxiliary (as in *we should **have brought** Dilys along*), or a *to*-infinitival construction (as in *she seems to **have been** far less tired*). A number of FTFs were constructed for these contexts. Figure 3 shows an FTF used to retrieve examples occurring within a VP after a modal auxiliary (the tree is displayed with branching from left to right, rather than from top to bottom). Note that a VP, in the parsing system used in the corpus, consists of the main verb and any preceding auxiliaries, with intervening material such as adverb phrases included (it does not include complements or adjuncts that follow the main verb). Intervening material is allowed for , shown by the white arrow (so including examples like *might quite well **have died** in childbirth*). For the modal context, a second FTF (not shown) was used to find additional examples (far fewer in number) where the modal auxiliary preceded the subject and was therefore separated from the VP (in interrogatives such as *How old would you **have been***).
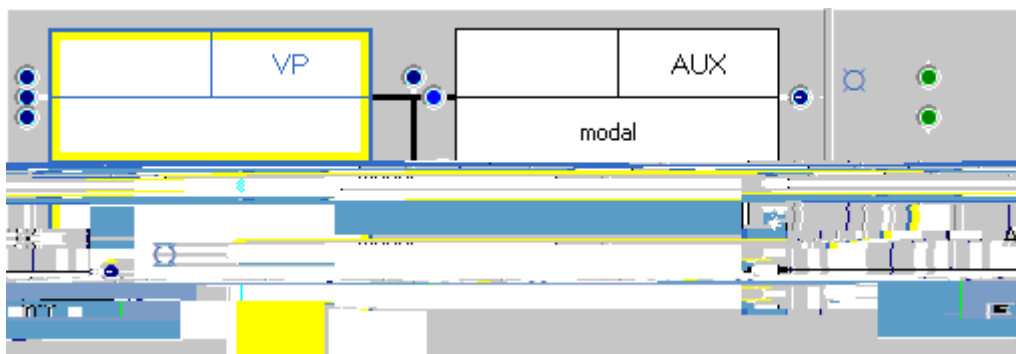

Figure 3: FTF for a perfect infinitive auxiliary following a modal auxiliary under a VP.

To-infinitival examples were found using several FTFs. The first pattern was as in Figure 3, but - includes items such as BE *supposed to*, HAVE *to*, and SEEM *to* (discussed by Quirk et al. (1985: 141 7) as modal idioms, semi-auxiliaries, and catenatives). A second FTF looked for interrogative examples involving semi-auxiliaries, but no examples occurred in the corpus (a possible example would be *what was he supposed to **have done***). The third FTF, shown in Figure 4   *to* within a clause, and found examples within a variety of larger structures (e.g.   ***have met** her*; *what would you claim to **have achieved***).
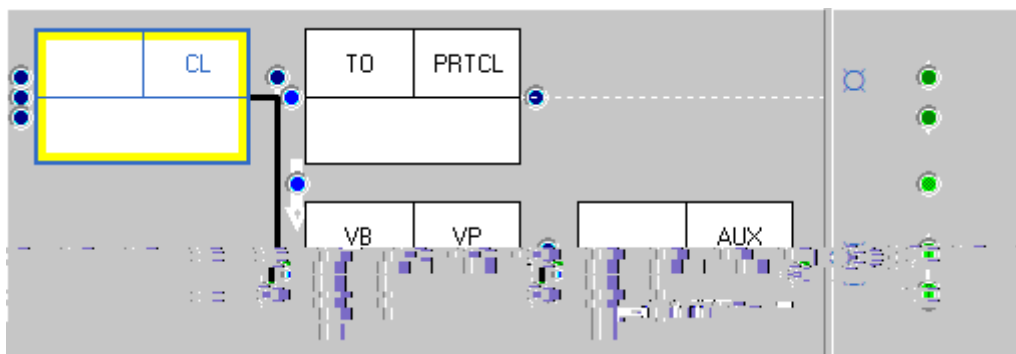

Figure 4: FTF for a perfect infinitive preceded by a *to*-particle under the same host clause.

The searches showed that, across the corpus, the great majority of examples of the perfect infinitive (88%) occur following a modal auxiliary. A decline in frequency has been observed

This study has shown the importance of considering changes in a linguistic category like the perfect in relation to its interaction with other categories like tense and modality. The interaction of categories is likely to be important in change processes, especially in areas where form meaning mappings are complex. The linguistic contexts of occurrence of a category can themselves change in frequency, and this needs to be taken into account   a process which is facilitated by use of a parsed corpus with a flexible facility for searching for structural patterns.

Acknowledgements

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