## A corpus of Late Modern English texts\*

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#### 1 Introduction

It has on occasion been observed that the Late Modern English period is the most neglected period in the history of the English language (Rydén 1984; Denison 1998: 92). Interestingly, however, this is not only true as far as descriptive efforts are concerned, but also at the methodological basis of linguistic research. Symptomatic of a certain neglect of anything beyond the 17<sup>th</sup> century is the fact that the Helsinki Corpus, until now the most important electronic corpus for the study of the history of English, takes its final cut-off point in 1710. The apparent neglect is, in a way, surprising, since the Late Modern English period is a very well-documented one, and is much more easily accessible to the speaker of Present-Day English than – say – the Middle English period. It is only natural that more recent corpora have begun to fill the gap between Early Modern English and the present day, especially as it has become increasingly clear that historical change can often be tracked over relatively short time spans in the form of shifting frequencies of use (see e.g. Mair 2000; Nevalainen and Raumolin-Brunberg 2003). Thus, the Lampeter Corpus covers the transition from Early to Late Modern English (Siemund and Claridge 1997); the ARCHER Corpus covers the entire period from Late Modern to Present-Day English (Biber et al. 1994); the Corpus of Late Modern English Prose is representative of the latter half of the 19<sup>th</sup> and the beginning of the 20<sup>th</sup> centuries (Denison 1994); and more corpora could be added to this list.

The purpose of the present paper is to contribute to the study of Late Modern English by exploring an additional means of gathering and investigating Late Modern English language data. In particular, large amounts of Late Modern English data are available on the World Wide Web through, for instance, the *Project Gutenberg* or the *Oxford Text Archive*. The texts are often in the public domain and can, therefore, be freely downloaded and used for all kinds of noncommercial purposes, including linguistic ones. In this paper, I present a corpus of Late Modern English, compiled on the basis of texts drawn from the *Project*  *Gutenberg* and the *Oxford Text Archive*. For ease of reference, I will refer to the corpus as the *Corpus of Late Modern English Texts* (CLMET), but the reader should be reminded that the corpus is not exactly a fixed body of texts in the same way conventional corpora of English are; the corpus can be extended or reduced at wish, and similar – though not necessarily identical – corpora can be compiled without much effort by anyone who is interested in the study of Late Modern English. The corpus presented here is what I consider an acceptable and useful offshoot of a continual attempt to open up the rich resources of the Internet to historical linguistic research.

In what follows, I will discuss the make-up of the corpus as it has been compiled by myself (section 2); discuss some of its advantages and disadvantages (section 3); and briefly illustrate the potential of the corpus by surveying some of the research in which it has already been used (section 4).

#### 2 Corpus make-up

The CLMET has been entirely compiled on the basis of texts from the *Project Gutenberg* and the *Oxford Text Archive* and covers the period from 1710 to 1920. It is subdivided into three sub-periods of 70 years each, i.e. 1710–1780; 1780–1850; and 1850–1920. On the notion that a corpus is a principled collection of texts (Sinclair 1992), the process of data collection has been guided by four principles.

First, the texts included within one sub-period of the CLMET are written by authors born within a correspondingly restricted time-span. This is schematically represented in Figure 1. The purpose of this measure is to increase the homogeneity within each sub-period – and accordingly, to decrease the homogeneity between the sub-periods. Historical trends should, as a result, appear somewhat more clearly. An additional advantage is that no author can be represented in two subsequent sub-periods of the corpus. A slight disadvantage is that the work of some authors is lost for inclusion in the corpus. To give an example, by birth the Victorian novelist George Eliot (1819-1880) belongs to the second sub-period of the corpus, but because all of her work falls within the third sub-period of the corpus by its date of publication, none of it could be excerpted for the corpus.

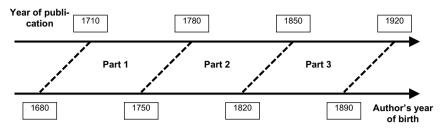


Figure 1: Corpus sub-periods

Second, all authors are British and are native speakers of English. The purpose of this measure is evident: it puts some (moderate) restriction on dialectal variation. The specific choice for British authors should facilitate comparison of the data from the CLMET to data from other historical corpora and from the large corpora of Present-Day English, which are mostly corpora of British English. Nevertheless, it should be pointed out here that the Internet could be used as a rich resource for other varieties of English as well, especially American English.

Third, any one author can only contribute a restricted amount of text to the corpus. The idea is, obviously, to avoid thwarting of the data by the idiosyncrasies of individual authors. The maximum amount of text per author is 200,000 words. This may seem a rather liberal cut-off point when compared to the maximum of 10,000 words per text in the *Helsinki Corpus* (Kytö 1996), but it should be pointed out that the problem of idiosyncratic language use is also counteracted by excerpting a large variety of authors, especially if all authors provide roughly the same amount of text. In that respect, the cut-off point could be laid at 200,000 words per author, because for many Late Modern English authors at least half of that amount of text is fairly easily available – especially for the second and third sub-period of the corpus.

Fourth, some attention has gone to insuring variation in terms of text genre and authorial social background. The texts found on the *Project Gutenberg* and the *Oxford Text Archive* have been collected and made publicly accessible on the Internet for other reasons than their linguistic interest, and are, partly as a result of that, typically literary, formal texts, mostly written by men who belonged to the better-off layers of 18<sup>th</sup> and 19<sup>th</sup> century English society. To counteract this bias, I have deliberately favoured non-literary texts over literary ones and texts from lower registers over texts from higher registers, whenever a choice could be made among the texts produced by a particular author. Further, I have paid some special attention to including texts written by women authors. However, in spite of these efforts, it will be evident that the corpus continues to be biased to literary texts written by higher class male adults.

The application of the four principles just described has yielded the list of texts that is rendered in Table 1, and that constitutes the CLMET as it stands today. Table 1 specifies for each sub-period the authors, the amount of text they contribute, the specific works used, and their date of publication. The indication '(s)' signals that only part of a particular work has been selected for inclusion in the corpus.

Author	Title and year of first publication		No. of words
Gay, John (1685–1732)	1728	The Beggar's Opera	17,427
Pope, Alexander (1688–1744)	1733–34	An Essay on Man	46,995
Chesterfield, Philip Dormer Stanhope (1694–1773)	1746–71	Letters to his Son (s)	199,819
Fielding, Henry (1707–54)	1749	The History of Tom Jones, a Foundling (s)	100,242
	1751	Amelia (s)	99,569
Johnson, Samuel (1709–84)	1740–41	Parliamentary Debates (Vol. 1) (s)	163,695
	1759	Rasselas, Prince of Abyssinia	37,070
Fielding, Sarah (1710–68)	1749	The Governess; or, The Little Female Academy	50,708
Hume, David (1711–76)	1739–40	A Treatise of Human Nature (s)	113,935
_	1751	An Enquiry Concerning the Principles of Morals	48,245
—	1779	Dialogues Concerning Natural Religion	35,972

Table 1: Contents of the CLMET

Sterne, Laurence (1713–68)	1759–67	The Life and Opinions of Tristram Shandy (s)	158,135
—	1768	A Sentimental Journey through France and Italy	42,249
Walpole, Horace (1717–97)	1735–48	Letters (Vol. 1) (s)	162,799
	1764	The Castle of Otranto	36,171
Smollett, Tobias George (1721–71)	1751	The Adventures of Peregrine Pickle (s)	99,421
_	1771	The Expedition of Humphrey Clinker (s)	100,675
Smith, Adam (1723–90)	1766	An Inquiry into the Nature and Causes of the Wealth of Nations (s)	200,667
Reynolds, Joshua (1723–92)	1769–76	Seven Discourses on Art	39,563
Burke, Edmund (1729–97)	1770	Thoughts on the Present Discontents	30,386
	1775	On Conciliation with America	26,883
Goldsmith, Oliver (1728–74)	1766	The Vicar of Wakefield	63,730
	1773	She Stoops to Conquer	22,962
Gibbon, Edward (1737–94)	1776	The Decline and Fall of the Roman Empire (Vol. 1) (s)	199,087
TOTAL 1710-1780			2,096,405
Inchbald, Elisabeth (1753–1821)	1796	Nature and Art	47,126
Burns, Robert (1759–96)	1780–96	The Letters of Robert Burns	124,247
Wollstonecraft, Mary (1759–97)	1792	Vindication on the Rights of Woman	86,670
_	1796	Letters on Norway, Sweden, and Denmark	48,219
_	1798	Maria	45,428

Beckford, William (1760–1844)	1783	Dreams, Waking Thoughts, and Incidents	80,746
Malthus, Thomas (1766–1834)	1798	An Essay on the Principle of Population	54,451
Edgeworth, Maria (1767–1849)	1796– 1801	The Parent's Assistant	168,182
Hogg, James (1770–1835)	1824	The Private Memoirs and Con- fessions of a Justified Sinner	84,166
Owen, Robert (1771–1858)	1813	A New View of Society	34,124
Southey, Robert (1774–1843)	1813	Life of Horatio Lord Nelson	96,781
_	1829	Sir Thomas More	39,124
Austen, Jane (1775–1817)	1796– 1817	Letters to her Sister Cassandra and Others (s)	77,989
_	1811	Sense and Sensibility (s)	61,546
_	1813	Pride and Prejudice (s)	60,141
Lamb, Charles (1775–1834)	1807	Tales from Shakespeare	100,349
_	1808	Adventures of Ulysses	33,727
Smith, James (1775–1839), and Horace Smith (1779–1849)	1812	Rejected Addresses	28,759
Hazlitt, William (1778–1830)	1821–22	Table Talk	160,700
	1823	Liber Amoris	30,911
Galt, John (1779–1839)	1821	The Ayrshire Legatees	50,072
	1821	Annals of the Parish	65,613
De Quincey, Thomas (1785–1859)	1822	Confessions of an English Opium-Eater	38,839
Byron, George Gordon (1788–1824)	1810–13	Letters 1810–1813	110,243
Marryat, Frederick (1792–1848)	1841	Masterman Ready	99,705

(1795–1881) Shelly, Mary Woll-	1818	Frankenstein	75,082
stonecraft (1797–1851)			
Bulwer-Lytton, Edward (1803–73)	1834	The Last Days of Pompeii	151,692
Borrow, George Henry (1803–81)	1842	The Bible in Spain (s)	199,199
Ainsworth, William Harrison (1805–82)	1843	Windsor Castle	117,072
Darwin, Charles (1809-82)	1839	The Voyage of the Beagle (s)	199,777
Kinglake, William (1809–91)	1844	Eothen, or Traces of Travel Brought Home from the East	89,058
Gaskell, Elizabeth (1810–65)	1848	Mary Barton	160,888
Thackeray, William Make- peace (1811–63)	1847–48	Vanity Fair (s)	200,907
Dickens, Charles (1812–70)	1841	Barnaby Rudge (s)	78,226
	1843	A Christmas Carol in Prose	28,673
	1848	Dombey and Son (s)	93,352
Brontë, Emily (1818–48)	1847	Wuthering Heights	116,760
Brontë, Anne (1820–49)	1847	Agnes Grey (s)	50,133
_	1848	The Tenant of Wildfell Hall (s)	150,730
TOTAL 1780-1850			3,739,657

Hughes, Thomas (1822–96)	1857	Tom Brown's Schooldays	105,982
Freeman, Edward Augustus (1823–92)	1888	William the Conqueror	57,067
Yonge, Charlotte Mary (1823–1901)	1873	Young Folk's History of England (s)	51,339
_	1865	The Clever Woman of the Family (s)	74,807

_	1870	The Caged Lion (s)	77,241
Collins, William Wilkie (1824–89)	1859–60	The Woman in White (s)	96,398
	1868	The Moonstone (s)	101,932
Huxley, Thomas Henry (1825–95)	1894	Discourses	95,883
Blackmore, Richard Doddridge (1825–1900)	1869	Lorna Doone, A Romance of Exmoor (s)	202,593
Bagehott, Walter (1826–77)	1867	The English Constitution	97,933
—	1869	Physics and Politics	56,554
Meredith, George (1828–1909)	1870	The Adventures of Harry Richmond (s)	97,677
	1895	The Amazing Marriage (s)	98,235
Booth, William (1829–1912)	1890	In Darkest England and the Way out	126,065
Rutherford, Mark (1831–1913)	1893	Catherine Furze	67,367
	1896	Clara Hopgood	48,987
Carroll, Lewis (1832–98)	1865	Alice's Adventures in Wonderland	26,699
_	1871	Through the Looking Glass	29,639
_	1889	Sylvie and Bruno	65,579
Butler, Samuel (1835–1902)	1880	Unconscious Memory (s)	51,231
	1903	The Way of All Flesh (s)	74,069
_	1912	Note-Books (s)	76,734
Abbott, Edwin (1838–1926)	1884	Flatland	33,805
Pater, Walter Horatio (1839–94)	1885	Marius the Epicurean (Vol. 1)	56,847
_	1886– 1890	Essays from 'The Guardian'	24,020

_	1896	Gaston de Latour, An Unfinished Romance	38,212
Hardy, Thomas (1840–1928)	1873	A Pair of Blue Eyes (s)	101,665
_	1874	Far from the Madding Crowd (s)	100,100
Grossmith, George (1847–1912), and Weedon Grossmith (1852–1919)	1894	The Diary of a Nobody	42,276
Gosse, William Edmund (1849–1928)	1907	Father and Son, A Study of Two Temperaments	79,185
Haggard, Henry Rider (1856–1925)	1887	She	111,944
Gissing, George (1857–1903)	1891	New Grub Street (s)	94,810
_	1893	The Odd Woman (s)	101,691
Jerome, Jerome K. (1859–1927)	1889	Three Men in a Boat	67,445
	1909	They and I	70,125
Hope, Anthony (1863–1933)	1894	The Prisoner of Zenda	54,157
	1898	Rupert of Hentzau	83,351
Kipling, Rudyard (1865–1936)	1894	The Jungle Book	51,162
	1897	Captains Courageous	53,452
Wells, Herbert George (1866–1946)	1888	The Time Machine	32,507
	1897	The War of the Worlds	60,308
	1902–03	Mankind in the Making	103,549
Bennett, Arnold (1867–1931)	1902	The Grand Babylon Hotel (s)	51,852
_	1908	The Old Wives' Tale (s)	149,599

Galsworthy, John (1867–1933)	1904	The Island Pharisees	70,492
	1906	The Man of Property	110,623
Churchill, Winston (1874–1965)	1899	The River War, An Account of the Reconquest of the Sudan	126,807
Chesterton, Gilbert Keith (1874–1936)	1912	What's Wrong with the World	60,318
	1914	The Wisdom of Father Brown	71,935
Forster, Edward Morgan (1879–1970)	1905	Where Angels Fear to Tread	49,988
_	1908	A Room with a View (s)	49,518
	1910	Howards End (s)	100,510
TOTAL 1850-1920			3,982,264

#### 3 Advantages and disadvantages

In addition to being freely available, I believe the corpus outlined above has two main advantages. First, the corpus is highly manipulable; texts can be added to or excluded from the corpus, or can be expanded or reduced in size with a simple text browser – all at wish. The most important consequence of this is that the corpus can continue to grow, as new texts are drawn from the Internet. Second, the corpus is fairly large. As shown in the previous section, it comprises slightly less than ten million words. This means that in terms of size the CLMET belongs somewhere in between the traditionally small historical corpora of English, such as the *Helsinki Corpus*, and the synchronic 'monster' corpora of Present-Day English, such as the *British National Corpus*. Consequently, while it is presumably too small for lexicographic purposes, the corpus is large enough for the study of relatively infrequent syntactic patterns, or borderline phenomena between grammar and the lexicon, such as lexico-grammatical patterning, grammaticalisation, and lexicalisation – all of which are of interest in current linguistic theory.

At the same time, it is important to recognise some of the disadvantages of the corpus. One problem is that the corpus make-up is evidently not ideal. As already remarked above, the corpus is biased both sociolinguistically and in terms of genre and register, which makes it unfit for any fine-grained sociolinguistic analysis. However, as long as a sociolinguistic analysis is not the purpose of one's research, this may not be a fundamental problem, if (and only if) the sociolinguistic make-up of the corpus remains more or less consistent over the different sub-periods – which seems to be the case for the CLMET. In addition, if the corpus is further extended, it may, among other things, become possible to make diachronic comparisons between British and American English, so that a coarse kind of sociolinguistic research comes within the range of what the corpus can do. Against this optimism it must be pointed out that, although a sociolinguistic bias is, perhaps, not a problem as such, the particular tendency for the CLMET to be largley made up of formal writings by highly schooled (and linguistically self-conscious) authors is unfortunate, because these are exactly the type of texts where one expects language change to be kept at a tight leash.

Another, rather different problem of the CLMET is that the exact bibliographical history of the corpus texts is often highly unclear. Internet sources tend to provide no specification as to which version of a text lies at the basis of its electronic edition, who the intermediate editors have been, and what they might have done to the original text. It is clear from occasional editorial footnotes and modernised spellings that the texts scanned in for electronic publication are often late  $19^{th}$  or early  $20^{th}$  century editions of earlier prints or manuscripts. For this reason, the corpus had better not be used for the study of phenomena that might lightly attract editorial interventions – for example, matters of punctuation, spelling-related issues such as the alternation between *a* and *an* in the indefinite pronoun, or anything that might be seen by an editor as a production error. On the other hand, it seems unlikely that an editor should introduce radically new constructions into a text – for instance, a finite instead of a non-finite clause – or that editorial intervention could have any bearing on the timing of semantic developments within specific words or constructions.

### 4 Research

Eventually, the value of a corpus is measured by what it can do. In this respect, it is useful to briefly discuss some of the research in which the CLMET described in this paper has been or is being used. It must be added that in most cases the data drawn from the corpus have been complemented with data from other, conventional corpora, or from the *Oxford English dictionary*. As will be clear from the following survey, the CLMET has so far been mainly, and most successfully, used in studies involving qualitative change in the history of English, and has been less extensively 'tested' when it comes to quantitative studies of language change.

De Smet (2005) and De Smet and Cuyckens (2004; forthcoming) have used a slightly extended version of the CLMET to investigate changes in the English system of verbal complementation. These include semantic changes, such as the semantic development of the construction '*like* + to-infinitive' from a volitional to a habitual construction; and syntactic changes, such as the emergence and spread of *for...to*-infinitives from Early Modern to Present-Day English. They have also used the corpus to study the impact of entrenchment or routinisation on the long-standing competition between infinitives and gerunds as verbal complements in English.

Breban (forthcoming) has made use of the CLMET in her work on adjectives of comparison such as *similar*, *comparable*, *other*, *different*, etc. In particular, she has used the corpus to document changes in the function these adjectives fulfil within the noun phrase, tracking developments from more lexical attribute uses to more grammatical post-determiner and classifier uses.

Vanden Eynde (2004), finally, has used data from the CLMET to investigate historical developments in so-called *edge*-noun constructions. Such constructions – e.g. *on the edge of, on the verge of, on the brink of* – show a trend to develop from purely lexical constructions indicating location at the edge of something to aspectual constructions expressing the imminent occurrence of an event.

#### 5 Conclusion

The study of the history of the English language can, I believe, only benefit from exploiting the extensive amounts of Late Modern English data available from Internet sources such as the *Project Gutenberg* or the *Oxford Text Archive*. In this paper I have therefore proposed a more systematic, or principled, way of doing so, offering a first version of a corpus of Late Modern English based entirely on material freely available from the Internet. It is evident that the corpus described in the preceding sections has its disadvantages, and, in many respects, it cannot stand the comparison with some of the so-called 'small but beautiful' corpora already available for the study of the history of English. On the other hand, given its size, the corpus may still complement the smaller corpora. As pointed out above, the corpus lends itself best for the study of lexico-grammatical phenomena that are somewhat less frequent, and for which smaller corpora tend not to provide sufficient data. In this sense, the corpus could be seen as an electronic counterpart to the vast quotation databases used by the traditional grammarians of the early 20<sup>th</sup> century. It is hoped, in any case, that a

more systematic use of Internet data could further the study of the allegedly most neglected period in the history of the English language.

### Availability

Anyone interested can compile a corpus from the texts available through the *Project Gutenberg*, the *Oxford Text Archive*, or any other electronic archiving project whose texts are publicly accessible. They can, obviously, follow the principles outlined here, or choose to apply a different set of principles. However, the version of the CLMET described in this paper can also be obtained in a less time-consuming manner, by contacting the author of the paper.

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