

The Verb *profess* and Its Complementation in Late Modern and Present-Day English

Titta Knuuttila
University of Tampere
School of Modern Languages and Translations Studies
English Philology
Pro Gradu Thesis
Spring 2010

Tampereen yliopisto
Kieli- ja käännöstieteiden laitos
Englantilainen filologia

KNUUTTILA, TITTA: “The Verb *profess* and Its Complementation in Late Modern and Present-Day English.”

Pro gradu –tutkielma, 77 sivua
Kevät 2010

Tämä korpuspohjainen tutkielma keskittyy englannin kielen verbin *profess* merkityksien ja komplementaation kehitykseen 1700-luvun alusta nykypäivään. Tutkimus rajoittuu verbin käyttöön kirjoitetussa brittienglannissa.

Ensin tutkielmassa esitellään ja määritellään korpuksat ja korpuslingvistiikka. Seuraavaksi kerrotaan komplementaatioon liittyvistä asioista, kuten valenssiteoriasta sekä komplementin ja adjunktin välisestä erosta. Lisäksi esitellään muita komplementaatioon vaikuttavia tekijöitä, kuten *horror aequi*-periaate ja Rohdenburgin The Great Complement Shift.

Vuosien 1710-1920 *profess*-materiaali saatiin CLMETEV-korpuksesta (Corpus of Late Modern English Texts, Extended Version), ja nykyenglannista tilanteesta kertova aineisto on peräisin BNC-korpuksesta (The British National Corpus). CLMETEV on jaettu kolmeen, kukin 70 vuotta kattavaan osioon, joista tässä tutkimuksessa käytettiin ensimmäistä ja viimeistä. BNC-korpuksesta käytettiin ensisijaisesti kahta eri tekstityyppiä, jotka parhaiten vastasivat CLMETEV:n sisältöä, sekä lisäksi tutkittiin vielä kolmatta tekstityyppiä ensisijaisen aineiston niukkuuden takia. Ensin aineistoja eri aikakausilta tarkastellaan erikseen, ja lopuksi tulokset laitetaan yhteen.

Teoreettisena viitepohjana tutkimukselle toimivat *profess*-verbistä kertovat englannin kielen sanakirjat ja kieliopit.

Tutkimus osoittaa, että verbin *profess* komplementaatio on muuttunut ajan saatossa usealla tavalla. Kenties tärkein havainto on, että alkujaan komplementaatiota hallitseva NP-lauseke on saanut väistyä *to*-infinitiivin tieltä. *To*-infinitiivi-komplementin suosion kasvua on siivittänyt osaltaan myös gerundikomplementin täydellinen poissaolo, sekä *profess*-verbin refleksiivisen muodon väheneminen, joka on sidoksissa myös verbin semanttiseen kehitykseen.

Semanttisesti *profess* pitää läpi aikakausien saman merkityksen yleisimpänä, ja ajan kuluessa yleisimpään merkitykseen sulautuu myös osa verbin ennen refleksiivisistä muodoista. Lisäksi uskon tai uskollisuuden tunnustamista merkitsevä *profess* on säilyttänyt suhteellisen yleisyytensä läpi aikakausien.

Avainsanat: korpuslingvistiikka, *profess*, komplementaatio, korpus, verbi, BNC, CLMETEV

Table of Contents

List of Tables	iv
1 Introduction.....	1
2 Method and data	2
2.1 Corpus linguistics.....	2
2.2 What is a corpus?	3
2.2.1 The diversity of corpora.....	4
2.2.2 The size of corpora.....	5
2.3 Corpora used.....	6
2.3.1 The Corpus of Late Modern English, Extended Version.....	6
2.3.2 The British National Corpus.....	8
3 On complementation.....	10
3.1 Valency theory.....	10
3.2 Complements versus adjuncts.....	11
3.3 The classification of complements.....	12
3.3.1 The formal and functional properties of complements.....	12
3.3.2 The semantic and lexical properties of complements.....	13
3.3.3 The obligatoriness of complements.....	14
3.4 Thematic relations, theta roles and control.....	15
3.5 Cognitive complexity: extractions and insertions.....	16
3.6 The <i>horror aequi</i> principle.....	19
3.7 The Great Complement Shift.....	19
3.8 Bolinger's Principle.....	20
4 The senses and complementation of <i>profess</i>	21
4.1 The etymology of <i>profess</i>	21
4.2 <i>Profess</i> in dictionaries.....	21
4.3 Complementation patterns in the <i>OED</i> and the grammars.....	25
4.4 Summary.....	27
5 <i>Profess</i> in the Corpus of Late Modern English Texts, Extended Version.....	30
5.1 Part 1 of the CLMETEV.....	30
5.1.1 The senses of <i>profess</i> found in the corpus data.....	30
5.1.2 Complementation of <i>profess</i>	31
5.1.2.1 <i>That</i> -clause.....	32
5.1.2.2 <i>To</i> -infinitive.....	33
5.1.2.3 NP+NP, NP+AdjP and NP+ <i>to</i> -inf[+PP].....	33
5.1.2.4 NP complements.....	34
5.1.2.5 Other complements.....	36
5.1.2.6 Intransitive use.....	36
5.1.3 Extractions, insertions and <i>horror aequi</i>	37
5.1.3.1 Extractions.....	37
5.1.3.2 Insertions.....	39
5.1.3.3 <i>Horror aequi</i>	40
5.1.4 Summary of the findings in part 1 of the CLMETEV.....	40
5.2 Part 3 of the CLMETEV.....	40

5.2.1	The senses of <i>profess</i> found in the corpus data.....	41
5.2.2	Complementation of <i>profess</i>	42
5.2.2.1	<i>That</i> -clause.....	43
5.2.2.2	<i>To</i> -infinitive.....	44
5.2.2.3	NP+NP, NP+AdjP and NP+ <i>to</i> -inf[+NP].....	45
5.2.2.4	NP complements.....	45
5.2.2.5	Other complements.....	47
5.2.2.6	Intransitive use.....	47
5.2.3	Extractions, insertions and <i>horror aequi</i>	47
5.2.3.1	Extractions.....	48
5.2.3.2	Insertions.....	49
5.2.3.3	<i>Horror aequi</i>	50
5.2.4	Summary of the findings in part 3 of the CLMETEV.....	51
5.3	Summary of the findings in the CLMETEV.....	51
6	<i>Profess</i> in the BNC.....	54
6.1	The senses of <i>profess</i> found in the primary corpus data.....	54
6.2	Complementation of <i>profess</i>	55
6.2.1	<i>That</i> -clause.....	56
6.2.2	<i>To</i> -infinitive.....	56
6.2.3	NP+NP and NP+AdjP.....	57
6.2.4	NP complements.....	57
6.2.5	Other complements.....	59
6.2.6	Intransitive use.....	59
6.3	Extractions, insertions and <i>horror aequi</i>	59
6.3.1	Extractions.....	60
6.3.2	Insertions.....	61
6.3.3	<i>Horror aequi</i>	61
6.4	Additional BNC data: <i>Informative: World affairs</i>	61
6.4.1	The senses of <i>profess</i> found in <i>Informative: World affairs</i>	62
6.4.2	Complementation of <i>profess</i>	63
6.4.3	Extractions, insertions and <i>horror aequi</i>	66
6.5	Summary of the findings in the BNC.....	67
7	Changes in the senses and the complementation of <i>profess</i> from the CLMETEV to the BNC.....	69
8	Conclusion.....	74
	References.....	76
	List of Tables.....	
1	CLMETEV sub-periods.....	7
2	Thematic relations.....	15
3	Types of extraction.....	17
4	Senses of <i>profess</i> in the <i>OED</i>	22
5	Senses of <i>profess</i> , their glosses and relevant complements.....	28
6	Complements of <i>profess</i> and associated senses.....	29
7	Senses of <i>profess</i> in the first part of the CLMETEV.....	31

8	Distribution of the <i>OED</i> senses of <i>profess</i> in CLMETEV, part 1 between complement patterns.....	32
9	Extractions, insertions and <i>horror aequi</i> in the first part of the CLMETEV.....	37
10	Types of extraction in relation to complement in the first part of the CLMETEV.....	37
11	Insertions by type of complement in the first part of the CLMETEV.....	39
12	Senses of <i>profess</i> in the third part of the CLMETEV.....	42
13	Distribution of the <i>OED</i> senses of <i>profess</i> in CLMETEV, part 3 between complement patterns.....	43
14	Extractions, insertions and <i>horror aequi</i> in the third part of the CLMETEV.....	48
15	Types of extraction in relation to complement in the third part of the CLMETEV.....	48
16	Insertions by type of complement in the third part of the CLMETEV.....	49
17	Senses of <i>profess</i> in the BNC.....	55
18	Distribution of the <i>OED</i> senses of <i>profess</i> in the BNC between complement patterns.....	55
19	Extractions, insertions and <i>horror aequi</i> in the BNC.....	59
20	Types of extraction in relation to complement in the BNC.....	60
21	Senses of <i>profess</i> in the domain <i>Informative: World affairs</i> of the BNC.....	63
22	Distribution of the <i>OED</i> senses of <i>profess</i> in the domain <i>Informative: World affairs</i> of the BNC between complement patterns.....	64
23	Extractions, insertions and <i>horror aequi</i> in the domain <i>Informative: World affairs</i> of the BNC.....	66
24	Relativization in relation to complement in the domain <i>Informative: World affairs</i> of the BNC.....	67
25	Sense distribution of <i>profess</i> in the CLMETEV and the BNC as percentages and, in parentheses, as normalized frequencies.....	69
26	Complement distribution of <i>profess</i> in the CLMETEV and the BNC as percentages and, in parentheses, as normalized frequencies.....	71
27	Types of extraction in the CLMETEV and the BNC.....	72
28	Insertions in the CLMETEV and the BNC.....	72

1 Introduction

In this thesis, I will examine the verb *profess* and the development of its complementation from the 18th century to the present day with the help of corpus data. First I will discuss corpus linguistics and text corpora in general. I will then introduce the corpora used in this study, the extended version of Corpus of Late Modern English texts and the British National Corpus, in more detail. Next I will talk about some matters concerning complementation, such as valency theory, the difference between complements and adjuncts, the classification of complements, and theta roles. Additionally, I will discuss cognitive complexity, *horror aequi*, the Great Complement Shift and Bolinger's Principle.

I will then move on to taking a closer look at the verb *profess*. First I will explain its etymology, after which I will introduce the different senses of the verb listed in dictionaries. Next I will examine what grammar books say about the verb and its complementation. Based on the dictionaries and the grammars, I will determine the complementation patterns associated with the verb and its individual senses.

After all the theory concerning corpora, complementation and *profess* itself has been laid out, I will move on to examine authentic data of the verb based on the findings from the extended version of the Corpus of Late Modern English texts as well as the British National Corpus. I will investigate distribution of the senses of *profess* within the data. Additionally, I will look at the complementation of the verb to see how well this corresponds with the image given by dictionaries and grammars, and to see if there are any additional complements that come up in the corpora which were not mentioned in the literature. I will also examine the instances of extraction, insertion and *horror aequi* that come up in the data, and discuss how they affect the complementation of *profess*.

2 Method and data

Although diachronic studies refer to grammatical and linguistic sources such as historical and contemporary grammars, it is still important to examine authentic data, which in the case of the study at hand means looking at data from text corpora. In this section, I will give an overview of corpus linguistics, as well as introduce the two corpora from which data for this study has been collected.

2.1 Corpus linguistics

McEnery and Wilson (1996, 3) regard the history of corpus linguistics as beginning as early as in the late 19th century, when studies of child language acquisition were being carried out by means of “primitive corpora” which were composed of parents’ transcriptions, and analyses of German spelling conventions were also being conducted using a corpus surprisingly large for its time. In the first half of the 20th century, corpus-based studies were also being conducted in areas such as language pedagogy, comparative linguistics, as well as syntax and semantics (ibid., 4).

Despite having flourished through many decades, the situation changed in the latter half of the 1950s. There was a discontinuity in the development of corpus linguistics, and the field underwent a long period of virtually complete disregard (ibid.). As Meyer (2002, 1) accounts, in the early 1960s, W. Nelson Francis and Henry Kučera were compiling the Brown Corpus, which was the first computer corpus ever to be created. At the time, the field of linguistics was dominated by generative grammar, and as a consequence, any linguistic practice not adhering to the existing norm was deemed unacceptable. That is why the compiling of this electronically accessible corpus did not receive a very warm welcome in the linguistic community of the time (ibid.). In spite of how they were viewed in the 1960s, Francis and

Kučera are, as Meyer (ibid.) puts it, “now regarded as pioneers and visionaries in the corpus linguistics community”.

There are numerous different definitions by different linguists of what corpus linguistics actually is and what it entails. One of the simplest, yet quite fundamental descriptions is provided by Johansson (1995, 19), who explains it as “the study of language through corpora”.

Leech (1992, 105) regards corpus linguistics “a methodological basis for pursuing linguistic research”. Thus, as Meyer (2002, xi) expresses it, corpus linguistics is not so much an individual linguistic paradigm as it is a methodology. Johansson (1995, 19) gives support to this view by the observation that what separates corpus linguistics from other subdisciplines of the field like, for instance, sociolinguistics or psycholinguistics is the fact that “it is not defined by the object of study”.

Comparing theoretical linguistics and corpus linguistics, Aarts (2000, 7) states that whereas theoretical linguists utilize a particular theoretical model when doing their research, corpus linguists may or may not use one. He emphasizes that what is most important in the work of corpus linguists is that “they use data from corpora in their claims about language”(ibid.).

2.2 What is a corpus?

In the online version of the *Oxford English Dictionary*, six different senses are given to the word *corpus*, all of which denote some kind of a body. The sense which is the most relevant for this study defines it as “[t]he body of written or spoken material upon which a linguistic analysis is based” (s.v.).

Biber et al. (1998, 12) give a somewhat more specified definition, calling it “a large and principled collection of natural texts”. Additionally, it is specified that the texts in the

collection which make up the corpus aim to reflect a language or some part thereof. (ibid., 246) Therefore the suitable corpus design depends on what the corpus seeks to represent, and the representativeness of the corpus dictates the research questions that may be addressed and the extent to which the results are generalizable (ibid.).

Leech (1968, 94) points out that no corpus can possibly contain all the sentences that it is possible to produce within a language. He goes on to say, however, that “this does not in any way diminish [the] importance [of a corpus] as a tool of empirical confirmation: complete verifiability has long been acknowledged to be too high a goal in the testing of scientific theories”(ibid.).

These days it is precisely electronic corpora that play an important role in the study of features of language. The corpora are fairly easily available, contain a significant amount of data, and also retrieving the data from a collection of texts in electronic form is quite simple. In fact, McEnery and Wilson (1996, 19) point out that “the term *corpus* is almost synonymous with the term **machine readable** corpus”. As Hunston (2002, 167) remarks on the convenience of electronic sources, “[t]he availability of large, electronic corpora allows studies of [transitivity and the complementation behaviour of verbs] to be carried out more extensively and in greater detail and to take account of variation between registers”.

2.2.1 The diversity of corpora

According to Biber et al. (1998, 248), when it comes to designing corpora, diversity is a very noteworthy concern. There are crucial differences concerning the use of lexical, grammatical and discourse features in different varieties of language, and as a matter of fact, such a thing as “general language” does not really exist, because all registers have their own usage patterns (ibid.). This leads Biber et al. (ibid.) to infer that “any corpus that is used for studies of

variation or that seeks to represent a language needs to be concerned with the diversity of texts it includes.”

There are certain paradigms that should be taken into consideration when aiming for diversity. The first is register. According to Biber et al. (ibid.), a well-designed corpus should represent the different registers of a language, since all speakers of it control many of them. It is also recommended that different dialects be represented in the corpus (ibid.).

Additionally, subject matter plays a pivotal role in diversity, because it may cause fluctuation in the frequencies of some words (ibid.).

The two corpora used in this thesis also diverge to an extent in the types of texts they contain. The extended version of the Corpus of Late Modern English texts mainly contains written prose, whereas the British National Corpus contains a wider variety of texts of both written and spoken language. These differences will be addressed in more detail in section 2.3 below.

2.2.2 The size of corpora

The discussion on the size of corpora does not solely include the number of words, but also takes account of how many different texts, samples from each text, and words in each sample the corpora contain (Biber et al. 1998, 248-249).

If there are not enough texts included in a corpus, individual texts may have too great an influence on the outcome of the results. It is important to include a sufficient amount of texts by many different authors or speakers in each category to ensure variation (ibid., 249). Insufficient sampling from each text may also shape the outcome, “because the characteristics of a text can vary dramatically internally” (ibid.). An adequate word count in the samples is also important to give an accurate count of the features of the text (ibid.).

Biber et al. (ibid.) point out, however, that no matter the type of research, size cannot compensate for lacking diversity.

Because corpora come in varying sizes, comparing the results from several corpora using merely raw numbers does not give an accurate picture of the situation. Thus, the corpora must be brought to the same level before attempting to compare the results. The formula for norming frequency counts, or normalized frequencies as they will henceforth be known, adapted from Biber et al. (1998, 263) is as follows:

$$\text{frequency per } n \text{ words} = \left(\frac{\text{number of tokens}}{\text{total number of words}} \right) \times n \text{ words}$$

The way the formula works is that, for instance, if we were to have 50 tokens of a certain feature in a corpus the size of three million words, and we would like to know how many tokens there were per million words, the calculation would look like this:

$$16.7 \text{ tokens per } 1,000,000 \text{ words} = \left(\frac{50}{3,000,000} \right) \times 1,000,000$$

2.3 Corpora used

The data for this study has been collected from two different corpora. The first corpus used is the Corpus of Late Modern English, Extended Version (henceforth CLMETEV). The second corpus used is the British National Corpus (henceforth BNC). The corpora will be discussed in more detail below.

2.3.1 The Corpus of Late Modern Texts, Extended Version

Compiled by Hendrik de Smet at the University of Leuven, the CLMETEV consists of texts from 1710 to 1920 and its total word count is 15,013,400 words (Helsinki University CLMETEV webpage). The texts have been chronologically divided into three parts. Each part

is made up of texts from a 70-year period of time (De Smet 2005, 70). The texts of the extended version of the corpus have been collected from the *Project Gutenberg*, the *Oxford Text Archive*, and the *Victorian Women Writers project*.¹

The first part of CLMETEV consists of texts from the time period 1710-1780, and its size is approximately three million words from altogether 32 different texts by 23 authors. The second part of the corpus has roughly 5.7 million words from 64 texts written by 46 authors, and its time period is 1780-1850. The third part covers the years 1850-1920, and it is comprised of altogether 6.3 million words in 80 texts by 51 authors.

	Part 1	Part 2	Part 3
Number of words	3,037,607	5,723,988	6,251,564
Year of publication	1710-1780	1780-1850	1850-1920
Birth year of author	1680-1750	1750-1820	1820-1890
Number of authors	23	46	51
Number of texts	32	64	80

Table 1: CLMETEV sub-periods

De Smet (ibid.) mentions four principles which were adhered to in compiling the CLMETEV. First of all, it is required that the author of a particular text be born within a 70-year span which is parallel to the span of a particular sub-period in the corpus, as illustrated in Table 1 above. The aim of this is to increase the homogeneity within a specific part of the corpus to reveal historical trends characteristic of the period (ibid.). Secondly, the authors must be British and native speakers of English in order to restrict dialectal variation. Thirdly, the amount of text one author can contribute is limited to 200,000 words, the purpose which is to prevent the idiosyncrasies of one author from influencing the data too much (ibid., 71).

The fourth and final principle dictates that some attention be paid to making sure that there is diversity as regards text genre and the social background of the authors (ibid.). Discussing the earlier, not extended version of the corpus, De Smet (ibid, 71-72) states that, despite the

¹ <https://perswww.kuleuven.be/~u0044428/clmetev.htm>

fourth principle, “it will be evident that the corpus continues to be biased to literary texts written by higher class male adults”, because the *Project Gutenberg* and *Oxford Text Archive* collections also have this bias. I suspect that some attempt has been made to balance out the gender bias, since the corpus has since been extended to also include texts from the *Victorian Women Writers project*. Nevertheless, it is stated on the Helsinki University CLMETEV webpage, that “the typical text in the corpus is a novel written by an adult literate high-class male”. Additionally, it is pointed out that there has been no attempt to resolve the imbalance of the genders of the authors and genres of texts in the three different sub-periods in any systematic way.

2.3.2 The British National Corpus

The British National Corpus is the source for the Present-Day English data. The *Reference Guide for the British National Corpus* (Burnard, 2000) states the size of the corpus to be approximately 100 million words. The texts in the BNC date from the 1960s to the 1990s. The period with the heaviest emphasis, however, is 1984-1994, as 91.7 percent of the material of the corpus is from those years. Unlike in the CLMETEV, both written and spoken language are represented. The written texts account for 90 percent (90 million words) and spoken for the remaining 10 percent (10 million words).

Besides the difference that the BNC also documents spoken language, the domains and the backgrounds of authors or speakers are also more varied than in the CLMETEV. These differences are crucial, and they should be taken into account when it comes to examining, comparing and interpreting data from the two corpora. For the sake of making the corpora examined correspond to each other more closely, the search in the BNC will be limited to text domains which most closely resemble the types of texts in the CLMETEV, that is, the

domains of written text called *Imaginative prose* and *Informative: Belief and thought*. These account for 19.5 million words of the entire corpus.

3 On complementation

In this section, I will shed light on complementation. First I will introduce valency theory. I will then explain the difference between complements and adjuncts, and also illustrate how to distinguish complements and adjuncts using tests. Next, I will discuss different types of complements. I will also take a brief look at theta roles. Finally, I will discuss cognitive complexity, the *horror aequi* principle and the Great Complement Shift.

3.1 Valency theory

Valency theory is a model of language based on the framework of dependency grammar, first developed by the French linguist Lucien Tesnière, and adopted to and expanded on in various European countries (Herbst et al. 2004, xxiii). Herbst et al. (ibid.) state that it has been applied to English by surprisingly few scholars, first of whom was Emons who designed the first valency model for English verbs in the 1970s.

In valency theory, the basic assumption is that the verb has a central position in the sentence because it establishes the number of other elements that are required to form a grammatical sentence (ibid, xxiv). The required elements for a particular verb are demonstrated in the following way by Herbst et al. (ibid.):

- (1) I put paper and kindling by the fire last night.
- (2) *I put by the fire.
- (3) *I put paper and kindling.

As the above sentences demonstrate, if either one of the elements *paper and kindling* or *by the fire* is omitted, the sentence is ungrammatical. The required elements are called **complements**, and the number of complements any particular verb takes is its valency (ibid.). Herbst et al. (ibid.) say that “[s]ince it is the valency of the verb that largely determines the structure of the sentence, the verb is given a central status in the sentence hierarchy and the complements are seen as being dependent upon the governing verb.”

In addition to complements, other elements which are not dependent on the valency of the verb may also appear in sentences, exemplified by *last night* in sentence (1) above. Valency theory calls such elements **adjuncts** (ibid.).

The distinction between complements and adjuncts will be discussed more closely below.

3.2 Complements versus adjuncts

According to Herbst et al. (2004, xxiv), the difference between complements and adjuncts is fundamental to valency theory. Adjuncts have two essential features. Firstly, they can occur without much restraint, and secondly, their form is not determined by the governing verb in the sentence (ibid.). This is exemplified again by the adjunct *last night* which can be freely omitted from or added to the following sentences (ibid.):

- (4) I walked along the cliff-path.
- (5) I walked along the cliff-path *last night*.

Additionally, the notion of considering mobility in the sentence structure as an additional criterion for adjuncts is mentioned (ibid.), italics mine:

- (6) *Last night* I walked along the cliff-path.

Furthermore, Herbst et al. (ibid, xxiv-xxv) demonstrate that the adjunct *last night*, which is a noun phrase, is replaceable by a prepositional phrase, an adverb phrase or an adverbial clause:

- (7) I put paper and kindling by the fire *at 5 p.m.*
- (8) I put paper and kindling by the fire *then*.
- (9) I put paper and kindling by the fire *before I went to bed*.

It is concluded that “a sentence [...] can then be seen as consisting of a subject (which is a complement of the governing verb), a predicate (comprising the verb and any further complements apart from the subject) and the adjuncts” (ibid., xxv). It should be pointed out that in this thesis the complements that are being examined are the complements within the

predicate, and thus, the subject of any given sentence is not included in the analysis of complementation.

The distinction between complements and adjuncts is perhaps not as clear cut as the explanation above might lead us to assume. Somers (1984, 508) points out that whether an element is an adjunct or a complement of the verb depends on the verb. That is, in association with one verb, the element may be given adjunct status, but with another it is, in fact, a complement. Somers (ibid.) states that this is something many valency grammarians ignore when defining the difference between the two elements. He exemplifies this with the prepositional phrase *in London*:

(10) He looked for his friend *in London*.

(11) James lives *in London*.

In sentence (10) the prepositional phrase is eliminable, an adjunct, but in sentence (11) above the prepositional phrase cannot be eliminated because it is a complement of the verb *live*.

3.3 The classification of complements

In Herbst et al. (2004, xxv), it is stated that there are three ways in which complements can be classified: by their *formal and functional* properties, by their *semantic and lexical* properties and by their *obligatoriness*. These will be looked at in the following subsections

3.3.1 The formal and functional properties of complements

There are three criteria for best describing complements in terms of their formal realizations. The first criterion is the *functional label* of the complement, e.g. *object* (Herbst et al. 2004, xxv). The *formal categories*, like *adjective phrase* or *that-clause*, are the second criterion (ibid., xxv-xxvi). The third one is *position*, which relates to the order of complements in cases where there are two noun phrase complements, for instance (ibid., xxvi).

Huddleston and Pullum (2002, 219-220) use the term *licensing* when discussing the functional labels and formal categories of complements, because the complements need an appropriate verb to be present in the sentence to ‘license’ them. For example, monotransitive verbs license an object (e.g. *She mentioned the letter*), and complex-transitive verbs license an object and a predicative complement (e.g. *She thought him unreliable*) (ibid.).

When it comes to formal categories, especially prepositional phrases as complement cause some problems. Herbst et al. (2004, xxvi) note that complementation in sentences like *We spoke about painting* is sometimes approached as *speak* + prepositional phrase, whilst some interpret it as *speak about* + noun phrase. It is stated that identifying verbs as prepositional verbs, like *speak about* has been in the latter interpretation, is not theoretically convincing from the point of view of valency, and, additionally, it is not economic for lexicographical purposes (ibid.). Herbst et al. (ibid.) do admit, however, that in some cases reasons can be found to separate the noun phrase from the preposition in the analysis. The first reason are passives, where the subject function is taken over by a noun phrase and the preposition comes only after the verb. The second reason is that prepositions can also be followed by *-ing*-clauses, *wh*-clauses and *wh to*-infinitives, in which cases the prepositional phrases may be perceived as complex complements which comprise of more than one constituent (ibid.).

3.3.2 The semantic and lexical properties of complements

Herbst et al. (2004, xxviii) point out that, in order for a valency description to be comprehensive, not only must it specify the formal properties of the complements (see 3.3.1 above) but also the semantic and collocational properties.

There are two issues the semantic analysis of valency complements primarily focuses on. The first issue is the meanings of complements, particularly the differences and similarities in the meanings of the various complements of a single word (ibid., xxix). The second issue is

that of examining which lexical items it is or is not possible to have as a particular complement (ibid.).

It is also mentioned that semantic features like ‘-Animate’, ‘+Human’, for instance, may be utilized in accounting for the difference in meaning of a verb with an inanimate and a human subject (ibid.).

3.3.3 The obligatoriness of complements

The final component in the classification of complements is their obligatoriness. There are three types of necessity listed in Herbst et al. (2004, xxx-xxx) in regard to complement obligatoriness.

The first type of necessity is called *communicative necessity*. This refers to elements which are necessary in a particular context in order to prevent irrational sentences (ibid., xxx). The second type, *structural necessity*, signifies that particular clauses require the presence of particular elements (ibid.). Examples of this would be declarative and interrogative main clauses which are composed of a subject and a predicate. Thirdly, there is *necessity at the level of valency*, according to which a certain complement must be present because a governing element requires it (ibid.).

It is specifically necessity at the level of valency, which distinguishes between *obligatory complements* and *optional complements*. Obligatory complements are needed in order to form a grammatical sentence, whereas optional ones do not necessarily have to be present for the sentence to be grammatical (ibid., xxx). Nevertheless they are indeed complements, not adjuncts, because they still demonstrate the qualities characteristic of complements, as distinguished in section 3.2.

3.4 Thematic relations, theta roles and control

As Cowper (1992, 55) points out, “[i]n much of the literature, the terms *thematic relation* and *θ-role* are used interchangeably, but this is a potentially dangerous error”. As semantic terms, *thematic relations* denote the role of the argument in relation to the predicate (Carnie 2002, 168). In the following table some of the most common thematic relations are presented, adapted from Carnie (ibid., 168-169):

Thematic role	Example
<i>agent</i> (the initiator or doer of an action)	<i>Brad</i> hit Andrew.
<i>experiencer</i> (an argument that feels or perceives an event)	<i>Becki</i> saw the eclipse. Syntax frightens <i>Jim</i> .
<i>theme</i> (an entity that undergoes an action, is moved, experienced or perceived)	Shelley kept <i>her syntax book</i> .
<i>goal</i> (an entity towards which motion takes place)	Millie went <i>to Chicago</i> .
<i>recipient</i> (a special kind of goal; only occur with verbs denoting a change of possession)	Julie gave <i>Jessica</i> the book.
<i>source</i> (an entity from which a motion takes place)	Stacy came directly <i>from sociolinguistics class</i> .
<i>location</i> (an object with which an action is performed)	Patrick hacked the computer apart <i>with an axe</i> .
<i>beneficiary</i> (one for whose benefit an event took place)	She cooked <i>Matt</i> dinner.

Table 2: Thematic relations

More than one thematic relation may exist between a verb and a noun phrase (Cowper 1992, 55; Carnie 2002, 169). This is exemplified by Carnie (ibid.) using the following sentence, in which *Jason* holds two thematic relations, those of agent and of source:

(12) *Jason* gave the books to Anna.

Whereas thematic relations are defined in semantic terms, theta roles are defined, as Cowper (ibid.) explains, in syntactic terms. She goes on to say that theta roles are sets of thematic relations which are selected by a particular element to a particular position. This means that a theta role may contain more than one thematic relation, but the fundamental

point is that a particular theta role “must be assigned by a single element to a single position” (ibid.). Thus, in (12) above, *Jason* has two thematic relations, but only one theta role. Cowper (ibid.) states that the important thing for syntactic theory is not the number of thematic relations, but the number of theta roles.

As has been established, the theta criterion dictates that there can only be one theta role per noun phrase. Consider the following sentence:

(13) Jean is reluctant to leave.

Carnie (2002, 260) says that this sentence seems to violate the theta criterion, because the noun phrase *Jean* is assigned two of the three theta roles in the sentence. He deduces that there must be a third argument, which cannot be heard, to which one of the theta roles *Jean* seemingly has is given. The unheard NP argument is called PRO, and it is only found in the subject position of non-finite clauses (ibid.). Thus, to distribute the three theta roles evenly, the sentence should look like this:

(14) Jean is reluctant [PRO to leave].

As Brinton (2000, 252) puts it, “the nonfinite clause has a subject PRO controlled by the subject of the upper clause”. Cases of control like this are called *subject control*. There exists also *object control*, in which the subject PRO of the nonfinite clause is controlled by the object of the upper clause, like in the following example:

(15) Jean persuaded John [PRO to leave].

In (14) Jean, the upper clause subject, is leaving, and in (15) the person leaving is John, the object of the upper clause.

3.5 Cognitive complexity: extractions and insertions

As far as the complexity of sentence structures is concerned, extractions and insertions represent the more complex end of the spectrum. When the structures are more complex, the

sentential complements tend to be more explicit. Thus, Rohdenburg (1996, 151) outlines the Complexity Principle as follows: “In the case of more or less explicit grammatical options, the more explicit one(s) will tend to be favoured in cognitively more complex environments.”

Vosberg (2003, 202) defines extraction as meaning that “the object of the dependent verb is extracted from its original position and crosses clause boundaries”. He gives a list of examples to illustrate different structures involving extractions² (ibid., 201-202):

TOPICALIZATION	ever her acquaintance with the Belfield’s _i ; she remembered [not ever mentioning t _i]
RELATIVIZATION	it is the worthy Spencer _i , whom _i I’m sure you remember [to have often heard [me mention t _i in the relation of my private misfortunes]]
CLEFTING	It was the bangle _i that she remembered [having seen t _i on Francie’s wrist]
COMPARATIVIZATION	‘Twas her Charming Face and modest Look, that represented to him a thousand more Beauties and taking Graces _i , than he remembered ever [to have seen t _i in his Unconstant and Faithless Mistress]
INTERROGATION	Now, how many _i do you remember [to have heard named t _i]?
Other types	PSEUDO-CLEFTING, NEGATIVE NP EXTRACTION, EXCLAMATORY EXTRACTION

Table 3: Types of extraction

It is stated that the above extraction concepts provide “a syntactic niche in which an earlier and recessive infinitival complement can survive longer, whereas the otherwise pervasive establishment of the new *-ing* form is substantially delayed” (ibid., 202). Vosberg (ibid., 217) hypothesizes that the reason why extraction contexts favor infinitival complements over *-ing* forms is that extraction frequently causes the dependent verb to shift to the very end of the utterance. He says the exposed position to be common for infinitives whereas for the newer *-ing* form it seems more awkward (ibid.).

² “These examples show fillers indexed ‘i’, and gaps by the correspondingly indexed zero-form t_i.” (Vosberg 2003, 201)

In his article, Vosberg (ibid., 204) does, however, go beyond his own definition by using an example where the extracted item is not the object of the dependent verb. In the following example, the extracted item is something other than the object, italics and gap markings mine:

- (16) he had moved his free hand to a side pocket, *in which_t* he remembered to have some bread and meat t

This suggests that extraction is not limited to objects, but extends to other constituents as well.

Insertions represent a more accessible and obvious type of cognitive complexity than extractions. Returning to the definition of the Complexity Principle, it is stated that “[t]he less directly the dependent clause is linked to its superordinate clause or the more complex the dependent clause turns out to be the greater is the need to make its sentential status more explicit” (Rohdenburg 1995, 368). Vosberg (2003, 210) interprets this as meaning that discontinuous constructions, like ones involving insertion, may be assumed to generate more cognitive complexity.

When there are insertions, the sentential complements tend to be as explicit as possible. This manifests itself, for example, as *that*-clauses where the conjunction *that* is present instead of being ellipted which would be considered far less explicit (ibid., 211):

- (17) I recollect, as I passed by one of the pier-glasses, *that* I saw in it his clenched hand offered in wrath to his forehead:

Additionally, using the *to*-infinitive is more favorable in insertion contexts than using the *-ing*-form, as the former is more clearly a verb whereas the latter derives from a noun and is less sentential (ibid.):

- (18) upon taking a survey of my past life, I do not recollect *ever to have been* willfully guilty of an action contrary to the duty

It is also mentioned that one word insertions, as in the sentence above, can also be considered a complexity factor, but they are still easier to handle than longer insertions (ibid., 210).

3.6 The *horror aequi* principle

Rohdenburg (2003, 236) defines the *horror aequi* principle in the following way:

[...], the *horror aequi* principle involves the widespread (and presumably universal) tendency to avoid the use of formally (near)identical and (near-) adjacent grammatical elements or structures [...]

When it comes to non-finite complement clauses, this means that after a verb in the *to*-infinitive the *-ing*-complement is preferred over the *to*-infinitival one, and after a verb which is in the *-ing*-form the *to*-infinitive is favored. With other verb forms, there are no *horror aequi* effects (Rohdenburg 2006, 158).

3.7 The Great Complement Shift

Rohdenburg (2006, 143) notes that, in the course of the past few centuries, the English language has undergone a change in its system of sentential complementation, which he calls the Great Complement Shift. Rohdenburg (*ibid.*) considers the establishment of the gerund as a second type of non-finite complement as the most important of the changes associated with the Great Complement Shift. That is, the *-ing* complement has gained ground at the expense of the infinitival complement, and also to an extent, the *that*-clause.

Rohdenburg (*ibid.*, 160) observes, however, that the aforementioned Complexity Principle, extractions and *horror aequi* are factors that play an important part in the development of the rivalling complement clauses. On one hand, the advance of the gerund is delayed in extraction contexts (*ibid.*, 154), and on the other, as *horror aequi* leads us to expect, it is quite noticeable after *to*-infinitives, and least pronounced after an *-ing*-form (*ibid.*, 158).

3.8 Bolinger's Principle

Bolinger's Principle, also known as Bolinger's Generalization, states that "a difference in syntactic form always spells a difference in meaning" (Bolinger 1968, 127). In relation to the difference between *-ing*-form and the infinitive, Bolinger (ibid., 126) concludes that although he has not charted the entire range between those forms, what can be said is that when a semantic contrast can be seen, it appears to be that of reification versus hypothesis.

4 The senses and complementation of *profess*

This section covers the background information of the verb *profess*. First, I will introduce the etymology of *profess*, after which I will present its different senses as given in dictionaries. Finally, I will discuss the complements associated with each sense, using information and examples given in the dictionaries and the grammars consulted.

4.1 The etymology of *profess*

According to *The Barnhart Dictionary of Etymology* (1988, s.v.), the verb *profess* has its roots in French and Latin. It is stated that before 1333, it had the form *professen*, which meant ‘to take the vows of a religious order’. This was partly a back formation of the earlier *profession*, and possibly partly borrowed from Old French *profes*³, which was an adjective, meaning ‘that has taken a religious vow’. This, in turn, was derived from the Medieval Latin word *professus*, ‘professed, avowed’, which was also in Latin the past participle of *profitēri*⁴, ‘declare openly, lay claim to’ (ibid.). *The Concise Oxford Dictionary of English Etymology* (1986, s.v.) explains that *prōfess-* is the stem of the Latin past participle.

4.2 *Profess* in dictionaries

In this section I will look into the different senses of the verb *profess* in the online version of the *Oxford English Dictionary* (henceforth *OED*) and the *Collins Cobuild Advanced Learner’s Dictionary* (hereafter *Cobuild*).

The *OED* divides the verb *profess* into 12 different senses which it groups into three main categories. Of the senses, 11 are relevant to the time period that is being examined, that is, from the 18th to the 20th century. The relevant senses are listed in the table below.

³ *The Concise Oxford Dictionary of English Etymology* (1986, s.v. *profess*) gives the spelling as *profès*

⁴ *The Concise Oxford Dictionary of English Etymology* (ibid.) gives the spelling as *prōfitēri*

Additionally, keeping the time period in mind, the example sentences chosen from the *OED* to represent the complementation patterns found with each sense are from the 18th century onward.

The arrangement and definitions of the senses, the markings, as well as the example sentences of the table are as they are stated in the *OED*. My own conclusions about the complement structures associated with each sense are represented in the rightmost column of the table.

Sense of <i>profess</i>			Examples	Complement structures in the OED
I. Senses relating to the taking of religious vows.	1.	a. <i>trans.</i> (in <i>pass.</i>). To have taken the vows of a religious order; to be admitted or received into a religious order by making a profession; <i>esp.</i> to become a monk or nun. Also in extended use.	1797 A. RADCLIFFE <i>Italian</i> I. xi. 306 Vivaldi..was told that a nun was going to be professed.	+NP
		†b. <i>trans.</i> To admit (a person) into a religious order by receiving his or her profession. <i>Obs.</i>	1886 J. MONAHAN <i>Rec. Ardagh & Clonmacnoise</i> 6 The Bollandists hold that St. Mel professed St. Bridget in his own church at Ardagh.	+NP

		<p>c. Originally [†]<i>trans.</i> (<i>refl.</i>); subsequently <i>intr.</i> To make a profession; to take the vows of a religious order.</p>	<p>1745 R. POCOCKE <i>Descr. East</i> II. II. I. i. 4 They [<i>sc.</i> Calamarians] cannot profess before they are twenty-five years old.</p>	+Ø
<p>II. Senses relating to other declarations, avowals, or professions.</p>	<p>2.</p>	<p>b. <i>trans.</i> (<i>refl.</i>). To declare, affirm, acknowledge, or confess oneself <i>to be</i> something. Sometimes with reflexive pronoun or infinitive understood, or (occas.) both.</p>	<p>1795 W. PALEY <i>View Evidences</i> <i>Christianity</i> (ed. 3) II. II. vii. 198 He probably was, what he professes himself to be. 1838-9 F. A. KEMBLE <i>Jrnl. Resid.</i> <i>Georgian Plantation</i> (1863) 75 She professed herself much relieved. 1890 ‘R. BOLDREWOOD’ <i>Colonial Reformer</i> (1891) 220 He..professed himself to be snugly lodged.</p>	<p>+NP+<i>to-inf</i>[+NP] +NP+AdjP +NP+<i>to-inf</i> [+AdjP]</p>
		<p>c. <i>trans.</i> To declare, affirm, avow (something); to acknowledge (someone). Freq. with clause as object.</p>	<p>1716 J. ADDISON <i>Freeholder</i> No. 50. 1 He profess'd it was his Design to save Men by the Sword. 1796 F. BURNEY <i>Camilla</i> III. VI. ii. 167 He professed his intention of sitting by her, for the rest of the evening.</p>	<p>+<i>that</i>-clause +NP</p>

	3.	a. <i>trans.</i> To make profession of, to lay claim to (often with implication of insincerity); to make protestation of (some quality or feeling). Also with infinitive as object: to claim or pretend (<i>to be</i> or <i>to do</i> something)	1742 H. FIELDING <i>Joseph Andrews</i> I. Pref. p. viii, But perhaps, I have less Abhorrence than he professes for it. 1785 W. COWPER <i>Tirocinium</i> in <i>Task</i> 194 Whose only care..Is not to find what they profess to seek. 1869 E. A. FREEMAN <i>Hist. Norman Conquest</i> III. xiii. 269 William professed, and in many respects honestly practised, a devotion to religion beyond that of other men.	+NP ⁵ +to-inf +NP
		†b. <i>intr.</i> and <i>trans. (refl.)</i> . To make a profession or professions; <i>esp.</i> to profess friendship or attachment. <i>Obs.</i>	1775 R. B. SHERIDAN <i>Duenna</i> III. iii, In religion, as in friendship, they who profess most are ever the least sincere. 1849 J. L. H. MCCRACKEN <i>Earning Living</i> IV. xii, <i>Miss Dubarre</i> ..Some people profess to think it is...	+ Ø +to-inf
	4. <i>trans.</i> To affirm or declare one's faith in or allegiance to; to acknowledge or formally recognize as an object of faith or belief (a religion, principle, God, etc.). Formerly also † <i>intr.</i>	1773 E. IVES <i>Voy. India</i> 317 The Sanjacks..once professed Christianity, then Mahometanism, and last of all Devilism.	+NP	
III. Senses relating to professional function or status	5.	a. <i>trans.</i> To teach (a subject) as a professor.	1799 C. COLLIGNON tr. Vosgien <i>Hist. & Biogr. Dict.</i> I. (at cited word), <i>Bannes (Dominic)</i> , an eminent Spanish divine of the Dominican order..was confessor to St. Theresa, and professed divinity at Alcala, Valladolid and Salamanca.	+NP

⁵ But perhaps, I have less Abhorrence than [what] he professes for it.

	b. <i>intr.</i> To perform the duties of a professor.	1850 R. BROWNING <i>Christmas-eve</i> xvi. 56 Down to you, the man of men, Professing here at Göttingen.	+ Ø
	6. <i>trans.</i> To make profession of, or claim to have knowledge of or skill in (some art, field, or science); to declare oneself expert or proficient in; to make (a thing) one's profession or business. Formerly also † <i>intr.</i> Now <i>rare</i> .	1776 GIBBON <i>Decline & Fall</i> I. xiii. 358 War was the only art which he professed.	+NP

Table 4: Senses of *profess* in the *OED*

Cobuild only gives two different senses for the verb, combining some of the different senses from the division made by the *OED*. Of the senses for *profess* given in *Cobuild*, the first one, to claim to do or have something (s.v.), corresponds to 2.c and 3.a, and the second one, expressing “a feeling, opinion, or belief” (s.v.), corresponds most closely to senses 2.b and 4 in the *OED* classification. Both senses are labelled formal and all examples feature only the transitive use of the verb.

4.3 Complementation patterns in the *OED* and the grammars

Depending on the sense, *profess* can be either intransitive, marked +Ø in table 4 above, or transitive, or both, as is the case with *OED* sense 3.b.

Sense 2.b is the only sense where *profess* is used reflexively anymore. The *OED* notes in the complement pattern +NP+*to*-inf[+NP], in which the first NP is always a reflexive pronoun, the reflexive pronoun and the *to*-infinitive can be omitted. It should be noted here that the reason why I have chosen to mark the second NP (or in some cases AdjP) separately although it is a part of the *to*-infinitival complement is precisely because of the omissible

nature of the infinitival complement. The latter NP or AdjP is present in this pattern regardless of whether the *to*-infinitive itself is, and so it must be pointed out individually.

In relation to reflexive pronoun omission, Poutsma (1904, 575) states that “when the accusative [i.e. the first NP complement] is a reflexive pronoun, it is sometimes dropped”. In my opinion, however, in those cases where the reflexive pronoun is omitted, the sentences become more ambiguous to an extent, and it would be preferable to classify them under sense 3.a. Two arguments can be found in the *OED* to support this: firstly, there are no examples given of reflexive pronoun omission with sense 2.b after the year 1627, and secondly, there is an example associated with sense 3.a which resembles the complement structure of sense 2.b with the first NP omitted:

- (1) **1915** J. BUCHANAN *Thirty-nine Steps* x. 244 They seemed exactly what they professed to be.

Additionally, Huddleston and Pullum (2002, 264) mention the possibility of having the complement structure +NP+*to*-inf[+NP] with *profess* instead of only having +NP+NP, which indicates that the infinitival complement is often left out.

Based on the grammars, in the complementation pattern +NP+*to*-inf[+NP], an adjectival phrase may also occur instead of the final noun phrase. This is mentioned in Quirk et al. (1985, 1196), and an example of this can be found in Poutsma (1904, 575), italics mine:

- (2) A free Portuguese gamekeeper who professes himself to be *unworthy* to communicate directly with any person [...]

This is illustrated in the example sentences from the *OED* for sense 2.b as well. In one of the *OED* illustrations, the infinitival complement has been omitted, as was mentioned to be possible.

It also seems that the *to*-infinitive connected with the sense 2.b is specifically *to be*. None of the grammars state this explicitly, but the *OED* definition of the sense would suggest that

this is indeed the case, as there are no other verbs used within the infinitival complement in the illustrations for the sense.

According to table 4, *to*-infinitive complements with *profess*, specifically ones without a preceding NP complement, are found with senses 3.a and 3.b. The infinitival complements are mentioned by Quirk et al. (1985, 1187) in relation to subject control verbs. Thus, in the case of *profess*, the ‘understood’ subject in the complement should always be the same as in the superordinate clause (ibid.).

Additionally, Quirk et al. (ibid., 1188) say that *profess* can also have an *-ing*-clause complement. This is contrary to Huddleston and Pullum’s (2002, 1229) statement that *profess* would not take an *-ing*-complement, which is consistent with the *OED* examples in table 4, as none of them indicated this kind of tendency for the verb. In *An Historical Syntax of the English Language* (Visser 1969, 1326-1327), *profess* is listed as a verb which does take an *-ing*-complement. However, there are no examples of its use given in the book beyond the 17th century, which leads one to suspect that perhaps this complement in association with *profess* has died out after that point or at least become very rare since then.

The intransitive use of *profess* and the monotransitive NP complementation are not discussed in the grammars consulted. Monotransitive NP complements seem to appear with many different senses, so it could be expected that NP complements will arise in many different senses in the corpus data. *That*-clauses are only touched upon as much as to say that they can be complements of *profess* (Quirk et al. 1985, 1197), and the *OED* classification suggests that they are only found with sense 2.c.

4.4 Summary

To summarize the above sections, I have provided in the table below a revision of the senses of *profess* and the complements that are associated with each sense. I have also provided

glosses for the senses, which will be used henceforth to recapitulate the meaning of *profess* which is being discussed.

Sense of <i>profess</i>		Gloss	Complement structures
1.	a. To have taken the vows of a religious order; to be admitted or received into a religious order by making a profession; <i>esp.</i> to become a monk or nun.	To have taken the vows of a religious order	+NP
	†b. To admit (a person) into a religious order by receiving his or her profession.	To admit into a religious order	+NP
	c. To make a profession; to take the vows of a religious order.	To make a religious profession	+Ø
2.	b. To declare, affirm, acknowledge, or confess oneself <i>to be</i> something.	To declare oneself to be something	+NP+ <i>to</i> -inf[+NP] +NP+ <i>to</i> -inf+[AdjP] +NP+NP +NP+AdjP
	c. To declare, affirm, avow (something); to acknowledge (someone). Freq. with clause as object.	To declare	+ <i>that</i> -clause +NP
3.	a. To make profession of, to lay claim to (often with implication of insincerity); to make protestation of (some quality or feeling). Also with infinitive as object: to claim or pretend (<i>to be</i> or <i>to do</i> something)	To claim, to make protestation of	+NP + <i>to</i> -inf
	†b. To make a profession or professions; <i>esp.</i> to profess friendship or attachment.	To make a profession	+ Ø + <i>to</i> -inf
4. To affirm or declare one's faith in or allegiance to; to acknowledge or formally recognize as an object of faith or belief (a religion, principle, God, etc.).		To declare faith in or allegiance to	+NP
5.	a. To teach (a subject) as a professor.	To teach (a subject)	+NP
	b. To perform the duties of a professor.	To be a professor	+ Ø
6. To make profession of, or claim to have knowledge of or skill in (some art, field, or science); to declare oneself expert or proficient in; to make (a thing) one's profession or business.		To have knowledge of or skill in	+NP

Table 5: Senses of *profess*, their glosses and relevant complements

The table below illustrates the senses which are expected to be associated with each complement of *profess*.

Complement structure	Associated senses
+ <i>to</i> -infinitive	3.a To claim 3.b To make a profession
+ <i>that</i> -clause	2.c To declare
+NP	1.a To have taken the vows of a religious order 1.b To admit into a religious order 2.c To declare 3.a To claim, to make protestation of 4 To declare faith in or allegiance to 5.a To teach (a subject) 6 To have knowledge of or skill in
+NP+ <i>to</i> -inf[+NP/AdjP], +NP+NP/AdjP	2.b To declare oneself to be something
+ Ø	1.c To make a religious profession 3.b To make a profession 5.b To be a professor

Table 6: Complements of *profess* and associated senses

5 *Profess* in the Corpus of Late Modern English Texts, Extended Version

I will be concentrating my examination on data collected from the first and third parts of the corpus, that is, the time periods 1710-1780 and 1850-1920.

5.1 Part 1 of the CLMETEV

The data was collected using four different search strings, one for each form of *profess*: *profess*, *professed*, *professes* and *professing*. Altogether the searches found 142 tokens. Of the found tokens, 28 were irrelevant, as they were cases of the adjectival use, *professing* or *professed*, as illustrated below:

- (1) But King Charles II being of an humour more sprightly than his father, was a professed encourager of poetry [...]
1703 cibber 1753 - the lives of the poets 3.txt

Eliminating the irrelevant data, a total of 114 tokens of the verb *profess* remain. The normalized frequency of the relevant data is 38 instances per million in a corpus of approximately three million words. The relevant items will be examined more closely below.

5.1.1 The senses of *profess* found in the corpus data

There are five different senses of *profess* distinguishable within the corpus data from the CLMETEV. As some of the senses come quite close to each other, it was not always the easiest task of assigning each token a sense. The *OED* sense of the verb that occurred most frequently was 3.a, which accounted for 50 tokens of the 114. The second most common was sense 2.b with 22 occurrences. The rest of the clear instances were divided amongst sense 2.c, which came up 13 times, sense 4 with 14 instances, and sense 6 with 9 instances. These figures along with normalized frequencies per million words are illustrated in table XX in section 5.1.2.

There were also six unclear cases of *profess*, the most puzzling being this one:

- (2) [...] all which confirms me in your opinion, that no honour is meant you, let what will be professed; and I am glad you want no caution on that head.
1689 richardson 1740 - pamelat.txt

When analysing the senses of the instances of *profess* in the corpus data, the biggest difficulty was deciding, whether a NP complement should fall under sense 2.c or 3.a, as this was at times a matter of interpretation of a sentence with limited context.

The following table illustrates instances of each sense of *profess* found in the data:

Sense	Example
2.b 'to declare oneself to be something'	This young nobleman professed himself deeply enamoured of me (1721 smollett 1751 - the adventures of peregrine pickle.txt)
2.c 'to declare'	Now there have been persons in all ages who have professed that they found satisfaction in the exercise of charity (1692 butler 1726 - human nature and other sermons.txt) and their authority is often so much the greater, as they do not directly profess that intention.(1711 hume 1779 - dialogues concerning natural religion.txt)
3.a 'to claim, to make protestation of'	In this art, as in others, there are many teachers who profess to show the nearest way to excellence (1723 reynolds 1769-76 - seven discourses on art.txt) but did it without the least parade [...] where he had professed love and respect; (1701 doddridge 1750 - the life of col. james gardiner.txt)
4 'to declare faith in or allegiance to'	and we shall be left to stand alone against all the powers that profess a different religion (1709 johnson 1740-1 - parliamentary debates 1.txt)
6 'to have knowledge of or skill in'	The reason why I did not acquaint you last night that I professed this art, was, that I then concluded you was under the hands of another gentleman (1707 fielding 1749 - tom jones.txt)

Table 7: Senses of *profess* in the first part of the CLMETEV

5.1.2 Complementation of *profess*

The following table contains the distribution of the senses of *profess* given by the *OED* between the complement patterns that came up in analysing data from the first part of the

CLMETEV. The numbers are presented as raw figures with normalized frequencies, hits per million words, in parentheses.

	2.b	2.c	3.a	4	6	Unclear	Total
+ <i>to</i> -infinitive			18 (6)				18 (6)
+ <i>that</i> -clause		6 (2)					6 (2)
+NP		6 (2)	32 (10.7)	14 (4.7)	9 (3)	4 (1.3)	65 (21.7)
+NP+NP	13 (4.3)						13 (4.3)
+NP+AdjP	8 (2.7)						8 (2.7)
+NP+ <i>to</i> -inf+PP	1 (0.3)						1 (0.3)
<i>as</i>		1 (0.3)					1 (0.3)
+ <i>to</i> NP						1 (0.3)	1 (0.3)
+AdvP						1 (0.3)	1 (0.3)
Total	22 (7.3)	13 (4.3)	50 (16.7)	14 (4.7)	9 (3)	6 (2)	114 (38)

Table 8: Distribution of the *OED* senses of *profess* in CLMETEV, part 1 between complement patterns

As can be seen from table 8 above, the most common complement for *profess* is +NP, which is also the complement that is most widely dispersed among the different senses of the verb. All other complementation patterns seem to be confined to a single sense of *profess*. The lack of *-ing*-complements in the data appears to support Huddleston and Pullum's statement that *profess* does not take *-ing*-complements.

The complementation patterns will be examined in more detail below.

5.1.2.1 *That*-clause

That-clause complements were only found with sense 2.c, 'to declare', which was also what table 6 above had indicated. There were six instances of *that*-clause complements. Example:

- (3) and I profess [...] that I never knew one of them find fault with it.
1728 goldsmith 1766 - the vicar of wakefield.txt

The conjunction *that* was present in three of the cases and omitted in the remaining three.

5.1.2.2 *To*-infinitive

This was the second most common type of complement found with *profess* with altogether 18 instances, all of which fell under the sense 3.a, ‘to claim’. Additionally, all 18 cases of *profess+to*-infinitive complement were indeed cases of subject control, which was in accordance with what was said in section 4.3.

- (4) how extremely incongruous with a religion which professes to know no difference of degree
1707 fielding 1751 - amelia.txt

In section 4.3, it was mentioned that there was an example with sense 3.a in the OED which resembled the complement structure of sense 2.b, ‘to declare oneself to be something’ with the reflexive pronoun omitted. As I noted, the *to*-infinitival complement with sense 2.b appeared to be *to be* without exception. There was only one case in the corpus data where the *to*-infinitival complement associated with the *profess* sense 3.a was precisely *to be*:

- (5) [he] Set Virtue in its loveliest form to view, And still professed to be the sketch he drew.
1717 walpole 1735-48 - letters 1735-1748.txt

In this sentence, it might be possible to add the reflexive pronoun, “professed *himself* to be the sketch”, in which case it would fall under sense 2.b, but as Bolinger’s Principle reminds us, a difference in form always spells a difference in meaning, which is I have chosen to file this instance under sense 3.a instead of 2.b. It will be interesting to see whether cases like the one above will increase or decrease in frequency as time goes on.

5.1.2.5 NP+NP, NP+AdjP and NP+*to*-inf[+PP]

These complements have been grouped together, because they are all related to each other, and because they are all instances of sense 2.b, ‘to declare oneself to be something’. The first NP in the pattern is a reflexive pronoun in all of the cases. Instances of these

complementation patterns came up in the data altogether 22 times. The most common pattern of these was +NP+NP complementation, which occurred 13 times:

- (6) In short, my rascal Dutton professed himself her admirer [...]

1721 smollett 1771 - the expedition of humphrey clinker.txt

The noun *admirer* was the head of the second NP in the complement five times in two different texts.

The complementation pattern +NP+AdjP occurred eight times:

- (7) Mr. Langbaine professes himself ignorant from whence the plot is taken [...]

1703 cibber 1753 - the lives of the poets 1.txt

The two patterns above could have easily been of the form +NP+*to*-inf[+NP] or +NP+*to*-inf+[AdjP], but it seems the infinitive *to be* is almost always omitted. There was, however, one instance where the *to*-infinitive was present, but the last part of the complement pattern was a prepositional phrase:

- (8) [...] and St Gregory, upon good works, professes himself to be of the same opinion.

1728 goldsmith 1766 - the vicar of wakefield.txt

5.1.2.4 NP complements

As already mentioned, this is the most common type of complementation with *profess* with 65 instances. It occurred with senses 2.c, 3.a, 4 and 6.

There were six instances of the NP complement with sense 2.c, ‘to declare’, two of which were the noun *intention*, and they were found in two different texts:

- (9) [...] and their authority is often so much the greater, as they do not directly profess that intention.

1711 hume 1779 - dialogues concerning natural religion.txt

The noun *wishes* also occurred twice, but they were in identical sentences within the same text.

Sense 3.a, ‘to make protestation of’, had 32 occurrences of *profess* with a NP complement, usually expressing a feeling or a personal quality:

- (10) He professes great zeal and affection to your service [...]
1689 richardson 1740 - pamela.txt

In eleven instances, the NP complement was postmodified by a *+for+NP* structure. In eight of these cases, the NP complement of *profess* described some type of affection or regard for someone or something, for example:

- (11) Thus did he for a mere trifle embarrass the woman for whom he professed the most unlimited love [...]
1721 smollett 1751 - the adventures of peregrine pickle.txt

Some of the instances of NP complementation with sense 3.a could also be considered as being closely related to this construction, with the modifying *+for+NP* omitted:

- (12) But did be [sic] profess any attachment [for you]?
1728 goldsmith 1773 - she stoops to conquer.txt

All 14 complements associated with sense 4, ‘to declare faith in or allegiance to’, were, as expected, noun phrases. Eight of those referred to a religion, seven times the head of the NP actually being the word *religion*, and four times to principles. The remaining two NP complements referred to faith and doctrine. Here are examples of the most common types of NP complements associated with sense 4:

- (13) The majority of the natives still profess the Protestant religion.
1728 cook 1768-71 - captain cook's journal.txt
- (14) And as it is certain that no man is in earnest when he professes the latter principle, I would fain hope that there are as few who seriously maintain the former.
1711 hume 1779 - dialogues concerning natural religion.txt

There were also 9 instances of sense 6, ‘to have knowledge of or skill in’, all of them being noun phrases, as was to be expected:

- (15) War was the only art which he professed.
1737 gibbon 1776 - decline and fall of the roman empire 1.txt

5.1.2.5 Other complements

Perhaps the most interesting case of complementation in the data from the first part of the corpus was the use of *as* as a complement that came up in one of the sentences:

- (16) and I am well assured all this good woman did was, as she professed, out of regard to the reputation of her house.
1707 fielding 1749 - tom jones.txt

I classified the sentence under sense 2.c, ‘to declare’, because the statement could be rephrased with the help of a *that*-clause, in the following way:

- (17) [this good woman] professed that all [she] did was out of regard to the reputation of her house

Additionally, there was one *to* NP complement in the data:

- (18) My lord, who has always professed particularly to me, turned his back on me, and retired for an hour into a whisper with young Hammond, at the end of the room.
1717 walpole 1835-48 - letters 1735-1748.txt

This sentence was not clear enough to be classified under a particular sense.

Finally, there was one instance where the complement of *profess* was an adverbial phrase. Unfortunately there was not enough context to determine in what sense *profess* was used in the sentence.

- (19) The French expression professes more than it performs.
1713 sterne 1768 - a sentimental journey through france and italy.txt

The instances above demonstrate that the complementation of *profess* is perhaps not as clear-cut as the initial analysis based on dictionaries and grammars might lead to assume.

5.1.2.6 Intransitive use

There were no cases of intransitive *profess* found in the data from the first part of the CLMETEV. However, this hardly proves conclusively that there was no intransitive use of

the verb in the time period 1710-1780. First of all, this part of the CLMETEV has the least amount of words, approximately three million, which may be a factor in there being no intransitive use of *profess*. Additionally, table 4 in section 4.2 illustrates intransitive use of the verb just prior to and within the time period at hand in the example sentences for senses 5.b and 3.b respectively.

5.1.3 Extractions, insertions and *horror aequi*

There were altogether 31 instances of *profess* involving extraction in the first part of the CLMETEV. In normalized frequencies that amounts to 10.3 instances per million. Additionally, there were six insertions with *profess* found in the data, which is approximately 1.7 insertions per million. There were no instances of *horror aequi* violations in the data.

				Total
Extraction	Relativization	Topicalization	Interrogation	31 (10.3)
	29 (9.7)	1 (0.3)	1 (0.3)	
Insertion	6 (2.0)			6 (2.0)
<i>Horror aequi</i>	-			-

Table 9: Extractions, insertions and *horror aequi* in the first part of the CLMETEV

5.1.3.1 Extractions

Most of the instances of extraction were cases of relativization. There were also one topicalization and one interrogation found in the data. The table below illustrates the distribution of the types of extraction by the different complementation patterns of *profess*:

	Relativization	Topicalization	Interrogation	Total
+ <i>to</i> -infinitive	5 (1.7)	-	-	5 (1.7)
+NP	23 (7.7)	1 (0.3)	1 (0.3)	25 (8.3)
+NP+AdjP	1 (0.3)	-	-	1 (0.3)
Total	29 (9.7)	1 (0.3)	1 (0.3)	31 (10.3)

Table 10: Types of extraction in relation to complement in the first part of the CLMETEV

Most of the cases of extraction concerned the pattern *profess*+NP, and it is also that pattern that had the most varied range of extraction types. In 20 of the 23 instances of NP complementation involving relativization, the extracted element was the NP complement of *profess*:

- (20) [...] but we thought ourselves obliged, by that historic integrity which we profess, shortly to hint a matter which we would otherwise have been glad to have spared.
1707 fielding 1749 - tom jones.txt

Here is also an example of the remaining three cases of relativization with *profess*+NP, in which the complement was not the extracted element. They were all fairly similar in their structure, because the extracted element was a *for*+NP structure:

- (21) How is it, Sir, that this poor man, for whom I know you professed a friendship, is used thus hardly?
1728 goldsmith 1766 - the vicar of wakefield.txt

Additionally, there were two other types of extraction in the data in relation to the *profess*+NP pattern, one topicalization and one interrogation:

- (22) [...] Yet for small turbot's such esteem profess?
1688 pope 1733-4 - an essay on man.txt
- (23) 'In the name of God, captain Lismahago (cried she), what religion do they profess?'
1721 smollett 1771 - the expedition of humphrey clinker.txt

The larger context of (22) explains the topicalization: we are dealing with a line from a poem.

In both cases, the extracted element is the noun phrase complement.

One relativization relating to NP+AdjP complementation occurred in the data as well:

- (24) [...] with laws and ends, and principles of life and action, quite contrary to those which the world professed themselves at that time influenced by.
1692 butler 1726 - human nature and other sermons.txt

There were also five cases of extraction with the sentential complements of *profess*. All of them concerned the *to*-infinitival complement and the type of extraction was relativization:

- (25) [...] when people seem to take a pleasure in relating and describing scenes of vicious indulgence, which they yet profess to have disapproved and forsaken
1701 doddridge 1750 - the life of col. james gardiner.txt

The presence of the *to*-infinitival complement is consistent with Vosberg's extraction principle in section 3.5 according to which infinitival complements are favoured in extraction contexts.

5.1.3.2 Insertions

Table 11 below shows the distribution of the six instances of insertion found in the data for the verb *profess* in the first part of the CLMETEV in relation to the type of complement.

+ <i>to</i> -infinitive	3 (1.0)
+ <i>that</i> -clause	1 (0.3)
+NP	2 (0.7)
Total	6 (2.0)

Table 11: Insertions by type of complement in the first part of the CLMETEV

Two times the insertion was between *profess* and a NP complement:

- (26) [...] seemed to mark them out as distinct species of men, who boldly professed, or who faintly disguised, their implacable habits to the rest of human kind
1737 gibbon 1776 - decline and fall of the roman empire 1.txt

The final four insertions involved sentential complements. Three of those were *to*-infinitives:

- (27) for I believed the value he expressed for me, would give me credit with one who professed in every thing to serve him, right or wrong
1689 richardson 1740 - pamela.txt

The fourth insertion involving the sentential complements of *profess* was with a *that*-clause:

- (28) and I profess with the veracity of an historian that I never knew one of them find fault with it.
1728 goldsmith 1766 - the vicar of wakefield.txt

As the Complexity Principle states, the more complex the structure, the more explicit the form of the sentence, which holds true in the case of the *that*-clause complement in sentence (28), since the omissible conjunction *that* is present in the sentence.

5.1.3.3 *Horror aequi*

Horror aequi violations did not appear at all in the data for the first part of the CLMETEV. I suspect this is partly due to there being no *-ing*-complements with *profess* in the data and partly due to the relatively small amount of *to*-infinitival complements.

5.1.4 Summary of the findings in part 1 of the CLMETEV

There were only five different senses of *profess* found in the corpus data, sense 3.a, ‘to claim, to make protestation of’, being the most frequent, although there were eleven senses listed in the *OED* that were relevant to the time period of the 18th century.

Profess takes many different kinds of complements, but based on the corpus data, it does not appear to take an *-ing*-complement, or at least did not do so in the 18th century. The most frequent complement in the first part of the CLMETEV was the NP complement, and of the sentential complements, the *to*-infinitive was more prevalent than the *that*-clause. It will be interesting to see, if and how these things change when investigating more recent data.

There was quite a lot of extraction in the data, 31 instances or 10.3 per million. Most of these, 25 to be exact, involved a NP complement, and in most cases the element extracted was the noun phrase complement of *profess* itself. No *horror aequi* violations were present in the data, but there were some instances of insertion found, and the one instance of insertion involving a *that*-clause complied with the Complexity Principle.

5.2 Part 3 of the CLMETEV

In the same manner as with the first part of the corpus, the data from the third part of the CLMETEV were collected using four different search strings: *profess*, *professed*, *professes* and *professing*. Altogether the searches produced 209 hits. There were as many as 51

irrelevant instances, which were adjectival uses of the forms *professed* and *professing*, as illustrated below:

- (29) In like manner, the professed shopkeeper has generally a taint of the artist somewhere about him which he tries to conceal as much as the professed artist tries to conceal his shopkeeping.
1835 butler 1912 - notebooks.txt
- (30) Doubtless there are thousands of professing Christians who live in perpetual strife with their consciences and with the Holy Spirit on this subject
1829 booth 1879 - papers on practical religion.txt

The seemingly large number of irrelevant data is, however, slightly misleading. On closer inspection it becomes evident that 19 of the instances of adjectival *professing* are from one source, that is, the text which was also used as an example above, and three more are from another text by the same author. Therefore it must be stated that here the idiosyncrasies of a single author have had an effect on the appearance of the data. Luckily, the idiosyncrasies came about in the irrelevant part of the data, and as such they will not affect the examination of the use and complementation of *profess* as a verb.

Eliminating the irrelevant data, we are left with 158 relevant instances of the verb *profess* to examine. This means that the normalized frequency of *profess* as a verb in the third part of the CLMETEV is 25.1 instances per million. The findings will be analysed in more detail below.

5.2.1 The senses of *profess* found in the corpus data

Six different senses of *profess* can be discerned within the corpus data from part 3 of the CLMETEV. Again, some of the senses are rather closely related to one other, and consequently the analysis into senses had its challenges. The most frequently found *OED* sense of the verb was 3.a, which accounted for 116 of the 158 instances. The second most common was sense 4 with 19 tokens. The remaining instances were divided amongst sense 2.b, which came up nine times, sense 2.c with 12 occurrences, and sense 6 with one instance.

There were no cases that were too unclear to classify. These numbers along with normalized frequencies may be found in table 13 in the section below.

Each sense of *profess* that came up in the data is exemplified in the following table:

Sense	Example
2.b 'to declare oneself to be something'	[...] but he professed himself unable to spare any rifles for the army which Ali-Wad-Helu aspired to lead. (1874 churchill 1899 - the river war.txt)
2.c 'to declare'	I cannot myself profess that I admire the contents as much as some Western readers (1841 cheyne 1914 - the reconciliation of races and religions.txt)
	She must be professing one thing and aiming at another. (1879 forster 1905 - where angels fear to tread.txt)
3.a 'to claim, to make protestation of'	Frank professed to know everything about the pictures, and turned out to know nothing. (1851 ward 1894 - marcella 1.txt)
	He professed a total ignorance of the crime and the whole question (1874 chesterton 1914 - the wisdom of father brown.txt)
3.b 'to make a profession'	Other nations have professed will with their lips while their hearts have been set on wealth and pleasure. (1853 caine 1897 - papers on aggressive christianity.txt)
4 'to declare faith in or allegiance to'	I find the nicest and best people generally profess no religion at all, but are ready to like the best men of all religions. (1835 butler 1912 - notebooks.txt)
6 'to have knowledge of or skill in'	there are, for example, those who profess the artistic temperament and follow the impulse of the moment (1866 wells 1902-3 - mankind in the making.txt)

Table 12: Senses of *profess* in the third part of the CLMETEV

5.2.2 Complementation of *profess*

The table below shows the distribution of the senses of the verb *profess* given by the *OED* in association with the complement patterns that came up in analysing data from the third part of the CLMETEV. The numbers are presented as raw figures with normalized frequencies, hits per million words, in parentheses.

	2.b	2.c	3.a	3.b	4	6	Total
+ <i>to</i> -infinitive			94 (14.9)				94 (14.9)
+ <i>that</i> -clause		4 (0.6)					4 (0.6)
+NP		8 (1.3)	22 (3.5)		19 (3)	1 (0.2)	50 (7.9)
+NP+NP	2 (0.3)						2 (0.3)
+NP+AdjP	6 (1)						6 (1)
+NP+ <i>to</i> -inf+NP	1 (0.2)						1 (0.2)
+∅				1 (0.2)			1 (0.2)
Total	9 (1.5)	12 (1.9)	116 (18.4)	1 (0.2)	19 (3)	1 (0.2)	158 (25.1)

Table 13: Distribution of the *OED* senses of *profess* in CLMETEV, part 3 between complement patterns

As can be seen from table 13 above, the most common complement for *profess* is the *to*-infinitive. Monotransitive NP complements are the second most common pattern, covering many different senses, whereas other complementation patterns are associated with only one sense of *profess*. Again, there are no *-ing*-complements in the corpus data.

The complementation patterns will be looked at more closely below.

5.2.2.1 *That*-clause

Four *that*-clause complements came up in the data. Expectedly, they were all associated with sense 2.c, ‘to declare’:

- (31) Here, for the last twenty years, have these so-called Great Powers been standing round, all professing that their one desire is peace [...]
1844 carpenter 1915 - the healing of nations and the hidden sources of their strife.txt

The conjunction *that* was present in all four instances.

5.2.2.2 *To*-infinitive

The most common complement of *profess* in the third part of the CLMETEV, the *to*-infinitive, is only associated with the sense 3.a, ‘to claim’. There were altogether 94 instances of the infinitival complement:

- (32) I do not profess to know, without the rule, what is right and what is not.
1831 rutherford 1896 - clara hopgood.txt

As expected, all *to*-infinitival complements were instances of subject control.

In the data for the first part of the corpus, only one *to be* complement appeared, as mentioned in section 5.1.2.2. In the third part of the corpus, however, the amount rose to 31 instances of *to be* as the *to*-infinitival complement:

- (33) I had to listen. The lady professed to be hurt. The payment, however, put an end to the visit of this couple.
1828 meredith 1870 - the adventures of harry richmond.txt

As I stated earlier, these complements somewhat resemble the reflexive use of *profess*, that is, sense 2.b, ‘to declare oneself to be something’. The following sentence is a fairly clear demonstration of how these *profess to be* constructions are closer to the sense ‘to claim’ than ‘declare oneself to be something’:

- (34) The allegory halts continually; it professes to be spiritual, but nothing can be more carnal than the golden splendor of the eternal city
1835 butler 1912 - notebooks.txt

As Bolinger’s Principle states, when there is a difference in form there is a difference in meaning. In this case, it would appear as the loss of the reflexive pronoun makes the argument of the complement less sincere, shifting the meaning to sense 3.a, ‘to claim’.

5.2.2.3 NP+NP, NP+AdjP, NP+ *to*-inf[+NP]

There were altogether nine cases of the three complex patterns associated with sense 2.b of *profess*, ‘to declare oneself to be something’. The first NP of all the patterns indicates a reflexive pronoun. Two of them were of the kind +NP+NP:

- (35) stories of ghosts, wraiths, apparitions, and second sight; but he professed himself a disbeliever, and I thought I had failed to make any impression on him
1831 bird 1856 - the englishwoman in america.txt

There were six cases of +NP+AdjP complementation:

- (36) She professed herself deeply interested in microscopy, and desired that some of her young ladies should study it also.
1849 gosse 1907 - father and son.txt

As displayed by the data above, the often omissible *to*-infinitive, more accurately *to be*, associated with sense 2.b appears to be absent from most of the instances here. There was, however, one instance of the pattern +NP+*to*-inf[+NP] found in the data:

- (37) As late as the middle years of the reign of Queen Victoria, there were many in England who were, and who openly professed themselves to be, Republicans
1866 wells 1902-3 - mankind in the making.txt

5.2.2.4 NP complements

The monotransitive noun phrasal complements have gone from the most frequent complement occurring with *profess* to the second most frequent. In the third part of the CLMETEV, there were 50 NP complements associated with four different senses, 2.c, 3.a, 4 and 6.

There were eight instances of the NP complement with sense 2.c, ‘to declare’. Despite there being a few more instances with this sense than in the first part of the corpus, no particular NP occurred more than once:

- (38) She must be professing one thing and aiming at another.
1879 forster 1905 - where angels fear to tread.txt

Most frequently, 22 times, NP complements came up with sense 3.a, ‘to make protestation of’, expressing qualities and feelings:

- (39) The Hadenoa and other tribes who lived under the walls of the town professed loyalty to the Egyptian Government [...]
1874 churchill 1899 - the river war.txt
- (40) Tina, to whom the elegant Anthony Wybrow has been secretly professing love, suffers tortures of jealousy [...]
1841 blind 1883 - george eliot.txt

The head word *ignorance* appeared with sense 3.a in three NP complements in three different texts, twice modified by *total*:

- (41) He professed total ignorance of the crime and the whole situation
1874 chesterton 1914 - the wisdom of father brown.txt

The pattern where the complementing NP was followed by a modifying *+for+NP* structure was less frequent in this part of the corpus than in the first one, as it only appeared three times:

- (42) My Father had never been very much attracted to him, but the man professed, and I think felt, an overwhelming admiration for my Father.
1849 gosse 1907 - father and son.txt

This perhaps displays a decline in using the *profess+NP* structure to acknowledge ones affection or regard for something.

There were also 19 instances of the NP complement with sense 4, ‘to declare faith in or allegiance to’. Most of them had a religious connotation, some of the most frequent keywords in the complementing noun phrases being *religion* and *creed*, both appearing four times, and three times *faith*. *Christianity* appeared twice, along with some other miscellaneous branches of the Christian faith. Three times the complement referred to political views. Here are some examples of the NP complements associated with sense 4:

- (43) Yet you profess a creed--you join in the Church's service?
1826 craik 1850 - olive 1-3.txt
- (44) These people speak the French language, and profess the Romish faith.
1831 bird 1856 - the englishwoman in america.txt

- (45) If an able Stuart had with credible sincerity professed Protestantism probably he might have overturned the House of Hanover.
1826 bagehot 1867 - the english constitution.txt

Finally, there was also one instance of *profess*+NP with sense 6, ‘to have knowledge of or skill in’:

- (46) there are, for example, those who profess the artistic temperament and follow the impulse of the moment [...]
1866 wells 1902-3 - mankind in the making.txt

5.2.2.5 Other complements

No unexpected additional complements arose in the data for the third part of the CLMETEV.

5.2.2.6 Intransitive use

There was one case of intransitive *profess* in the corpus data. This instance was analyzed to be a case of sense 3.b, ‘to make a profession’:

- (47) Other nations have professed well with their lips while their hearts have been set on wealth and pleasure.
1853 booth 1880 - papers on aggressive christianity.txt

5.2.3 Extractions, insertions and *horror aequi*

In the third part of the CLMETEV, there were 28 cases involving extraction with *profess*, which is 4.4 instances of extraction per million. There were also six insertions found in the data. In normalized frequencies, there was approximately one insertion per million found with the verb *profess*. *Horror aequi* violations were present twice, or 0.3 times per million, in the data.

				Total
Extraction	Relativization	Topicalization	Comparativization	28 (4.4)
	25 (4)	1 (0.2)	2 (0.3)	
Insertion	6 (1)			6 (1)
<i>Horror aequi</i>	2 (0.3)			2 (0.3)

Table 14: Extractions, insertions and *horror aequi* in the third part of the CLMETEV

5.2.3.1 Extractions

The most frequent type of extraction was relativization. Also present in the data were instances of comparativization and topicalization. Table 15 below shows, how the instances of extraction are distributed amongst the complements of *profess*:

	Relativization	Topicalization	Comparativization	Total
+ <i>to</i> -infinitive	14 (2.2)	-	2 (0.3)	16 (2.5)
+NP	11 (1.7)	1 (0.2)	-	12 (1.9)
Total	25 (4)	1 (0.2)	2 (0.3)	28 (4.4)

Table 15: Types of extraction in relation to complement in the third part of the CLMETEV

The occurrences of extraction in the data from the third part of the CLMETEV for *profess* are divided between two different complements, the *to*-infinitival complement and the NP complement.

To-infinitival complements appeared in an extraction context 16 times. 14 of them were cases of relativization:

- (48) His wife, whom he professed to love, was dying of consumption.
1831 rutherford 1893 - catherine furze.txt

The remaining two instances of *profess+to*-infinitive involved comparativization:

- (49) Neither men nor things are, as a rule, better than they profess to be.
1829 booth 1879 - papers on practical religion.txt

Eleven of the NP complements involving extraction were instances of relativization. In eight cases, the extracted element was the NP complement itself:

- (50) [...] and proclaiming her own intention of one day practising what she professed!
1822 linton 1885 - the autobiography of christopher kirkland.txt

Thus, in the remaining three cases, the extracted element in the relativizations was something other than the NP complement:

- (51) [...] awaiting the arrival of a person for whom he professed extraordinary respect.

1828 meredith 1870 - the adventures of harry richmond.txt

As regards the instance of topicalization with *profess*+NP, the extracted item was an +*of*+NP construction relating to the NP complement:

- (52) None but the governess and servants, as far as she knew, and of these he had professed a total ignorance.

1840 hardy 1873 - a pair of blue eyes.txt

5.2.3.2 Insertions

The six instances of insertion come across in the data are listed in table 16 below according to the complement of *profess* they were associated with.

+ <i>to</i> -infinitive	1 (0.2)
+ <i>that</i> -clause	1 (0.2)
+NP	4 (0.6)
Total	6 (1)

Table 16: Insertions by type of complement in the third part of the CLMETEV

Insertions occurred most frequently in between *profess* and a NP complement. In one case, the insertion was a fairly long one, as illustrated in (53), and in the other three cases a prepositional phrase:

- (53) My Father had never been very much attracted to him, but the man professed, and I think felt, an overwhelming admiration for my Father.

1849 gosse 1907 - father and son.txt

- (54) [...] and the great ‘closeness’ of their man of business, who, with some sagacity, would profess to Nicholas ignorance of James’ income

1867 galsworthy 1906 - the man of property.txt

Additionally, there were two insertions involving sentential complements. Firstly, there was a short insertion between *profess* and a *to*-infinitival complement:

- (55) And when the Master comes [sic] to His Temple, that glorious blessed Holy Saviour, whom you profess so to long after and to love
1829 booth 1880 - papers on aggressive christianity.txt

Secondly, there was a longer insertion involving the complementation pattern *profess+that*-clause:

- (56) A large proportion of the scholastic profession will profess, and a still larger proportion of the public believes, that it is possible by talk and specially designed instruction , to give a boy or girl a definite bias towards "truth,"
1866 wells 1902-3 - mankind in the making.txt

Again, the longer insertion brings forth the quality presupposed by the Complexity Principle, as the conjunction *that* is present in the sentence, making it more explicit than it would be with the conjunction omitted.

5.2.3.3 *Horror aequi*

The two instances of *horror aequi* violations in the third part of the CLMETEV, 0.6 occurrences per million words, naturally involved the pattern *profess+to*-infinitive, as no *-ing*-complements appeared in the data. Both occurrences are exemplified in (57) and (58) below:

- (57) For a master to be a bad witness--to profess to be a Christian, and to be a bad witness before his men;
1829 booth 1880 - papers on aggressive christianity.txt
- (58) But we who call ourselves by the name of Christ are not worthy to profess to be His disciples until we have set an open door before the least and worst of these [...]
1829 booth 1890 - in darkest England and the way out.txt

The fact that *horror aequi* violations appear in this part of the timeline is perhaps a result of the frequency of the *to*-infinitive as a complement of *profess* in the third part of the CLMETEV. Covering almost 60 percent of all complements found with the verb, and the normalized frequency of the complement being 14.9 instances per million words, it is really no wonder that some *horror aequi* violations are found in association with *profess+to*-infinitive in this time period.

5.2.4 Summary of the findings in part 3 of the CLMETEV

In the third part of the CLMETEV, the search for *profess* yielded 158 relevant hits, 25.1 per million words.

The tokens of *profess* were divided between six different senses of the verb, of which sense 3.a, ‘to claim, to make protestation of’ was the most frequent. The most common complement of *profess* was the *to*-infinitive, which accounted for more than half of all complements found with the verb. One reason for both sense 3.a and the *to*-infinitival complement being so popular may be connected to some instances of *profess* losing their reflexivity, thus becoming instances of *to*-infinitival complementation and shifting their meaning from sense 2.b, ‘to declare oneself to be’, to sense 3.a, ‘to claim’.

Some extractions and insertions came up in the data, and they were in compliance with the Complexity Principle. Additionally, two instances of *horror aequi* violation were found, involving the repetition of *to*-infinitives, which is not particularly surprising considering the amount of *to*-infinitival complements present in the data.

5.3 Summary of the findings in the CLMETEV

In the two parts of CLMETEV investigated, there were six different senses of the verb present. There was one sense of *profess* present in the third part which was not found in the first one. That was sense 3.b, ‘to make a profession’. Since altogether eleven different senses of *profess* were given in section 4.2, five of them were not encountered in the CLMETEV data. The senses not found in the CLMETEV were senses 1.a, 1.b and 1.c, all relating to the taking of religious vows, and also senses 5.a, ‘to teach (a subject), and 5.b, ‘to be a professor’.

As regards sense distribution, sense 3.a, ‘to claim, to make protestation of’, was the most frequent one in both parts of the CLMETEV, and, in fact, it developed an even more

prominent lead compared to other senses from part 1 to part 3. This is linked to the *to*-infinitival complement gaining ground and even surpassing the monotransitive NP complement as the most common complement of *profess*, since all of the *to*-infinitive complements are cases of sense 3.a. There were 6 instances per million of the infinitival complements in the period 1710-1780, and in the period 1850-1920, the frequency more than doubled to 14.9 instances per million. One possible reason for the rise of the *to*-infinitive is the lack of *-ing*-clause complements which *profess* has had at least in the 17th century, as mentioned in section 4.3, although there has been no sign of them in the corpus data from the 18th century onwards, and I doubt any will be found in the BNC data either. Another reason for the prominence of the *to*-infinitival complement could have something to do with the verb often appearing in extraction contexts, where, as the Complexity Principle presupposes, *to*-infinitives are preferred over *-ing*-clauses.

There were not that many instances of *that*-clauses even in part one of the CLMETEV, and the number has decreased in part three. The normalized frequencies reveal a drastic drop in the amount of NP complements from 21.7 to 7.9 instances per million. The reflexive use of *profess* is also severely in decline, which may be linked to the rise in frequency of the *to*-infinitival complements containing the verb *be*.

There were no cases of *horror aequi* in the first part of the corpus, but two were found in the third part. As the data included no *-ing*-complements, the instances of *horror aequi* were of the type *to profess+to*-infinitive. With the *to*-infinitival complement being the most frequent in part 3 of the CLMETEV, it can be expected that some *horror aequi* should come up.

In raw numbers, the instances of *profess* seem more numerous in the third part of the corpus, but the normalized frequencies reveal that, with 25.1 hits per million, there are less occurrences of the verb in the third part than the first part, in which there were as many as 38

hits per million words. Between *Cobuild* labelling the verb formal, the *OED* marking some of its senses obsolete, and the CLMETEV searches yielding less instances as time goes on, the question arises, whether the senses and complements of *profess* will become even less numerous, as my investigation moves closer to the present.

6 BNC

The BNC data on the verb was retrieved using a lemma search of *profess* restricted to the domains *Imaginative prose* and *Informative: Belief and thought*, as they are the domains which most closely correspond to the types of texts in the CLMETEV. The two domains account for 19.5 million words of the BNC. The search yielded 64 matches in 51 different texts. There were only three instances of the irrelevant adjectival form *professing* in the data:

- (1) [...] Christian circles must surely be deeply saddened by the large numbers of people who were once professing Christian but who now claim to have ‘lost their faith’.
C8V 1527

After eliminating the irrelevant cases, we have 61 instances of *profess* which are relevant to the study. Thus the normalized frequency of *profess* in the relevant domains of the BNC is approximately 3.1 instances per million words. The BNC data from the relevant domains will be looked at more closely in the following subsections.

Because the amount of data on *profess* in the most relevant domains is quite low, I will also be taking a glance at one additional domain, *Informative: World affairs* after the analysis of the primary data, in order to get a better picture of the Present-Day English situation of the verb.

6.1 The senses of *profess* found in the primary corpus data

There were six senses of *profess* in the data. The fact that there is still this much variation in senses is slightly surprising, when the relatively small amount of data is taken into consideration.

The most frequent *OED* sense in the BNC was 3.a, which covered more than two thirds of all the hits. There were seven instances of sense 4, followed by sense 2.b with five instances. Sense 2.c only appeared three times, and there was one instance each of senses 5.a and 5.b.

There were no unclear cases. The distribution of senses is displayed in table 18 of the following section.

Table 17 below gives examples of the senses of the verb *profess* that came up in the corpus data.

Sense	Example
2.b 'to declare oneself to be something'	Charlotte Ladram was more obviously nervous than he had known her to be on any previous occasion and professed herself reluctant to remain indoors, let alone cook a meal. (G0N 1710)
2.c 'to declare'	How about that rare bird, the man who professes that he is a 'complete sceptic'[sic]? (C8V 705)
3.a 'to claim, to make protestation of'	And it was I who stood in his way - I, who professed to want this as much as he... (FAT 2581)
	One morning a man walked in clutching our details; we showed him round, he professed great enthusiasm and by early evening we had sold. (CES 819)
4 'to declare faith in or allegiance to'	The Gentile had professed a faith that no Jew had, believing that Jesus had the authority and power to help. (CEJ 1784)
5.a 'to teach (a subject)'	'A professor? What does he profess?' (CKC 2679-2680)
5.b 'to be a professor'	But in October 1951, when Ramsey had professed at Cambridge for exactly a year, Churchill came back to power. (A68 1784)

Table 17: Senses of *profess* in the BNC

6.2 Complementation of *profess*

The following table displays the complementation patterns associated with each *OED* sense of *profess* present in the data. The quantities are shown as raw figures, followed by the normalized frequencies per million words in parentheses.

	2.b	2.c	3.a	4	5.a	5.b	Total
+to-infinitive			34 (1.7)				34 (1.7)
+that-clause		3 (0.15)					3 (0.15)
+NP			10 (0.5)	7 (0.4)	1 (0.05)		18 (0.9)
+NP+NP	1 (0.05)						1 (0.05)
+NP+AdjP	4 (0.2)						4 (0.2)
+Ø						1 (0.05)	1 (0.05)
Total	5 (0.3)	3 (0.15)	44 (2.3)	7 (0.4)	1 (0.05)	1 (0.05)	61 (3.1)

Table 18: Distribution of the *OED* senses of *profess* in the BNC between complement patterns

As table 18 above illustrates, *to*-infinitival complements are the most numerous, covering roughly a half of all complements of *profess*. The second most common complement for the verb is the NP complement, and again the NP complements are dispersed into different senses of *profess*. There is also the odd instance of other complements, but the *to*-infinitive and the NP complement are the dominant ones in the data.

The patterns will be examined further in the following subsections.

6.2.1 *That*-clause

There were only three *that*-clause complements found in the data. They were all instances of sense 2.c, ‘to declare’:

- (2) Jesus Christ professed, according to the writings which are still currently accepted, that he believed in this ‘god’.
BM2 986

All three *that*-clause complements had the omissible conjunction *that* present.

6.2.2 *To*-infinitive

There were 34 instances of the *to*-infinitive in the BNC data of *profess*, and they are all classified as belonging under sense 3.a, ‘to claim’:

- (3) Patrick professed to scoff at ‘sappy love stuff’ in films; but he suspected that he was disappointed by its absence from this film.
GVT 424

The verb *be* appeared in the *to*-infinitival complement nine times. As I have pointed out earlier, *to be* complements of *profess* somewhat resemble the reflexive sense 2.b, ‘to declare oneself to be something’, cf. section 6.2.3 below. The difference is that, with the reflexive pronoun missing, the meaning of *profess* acquires somewhat of an undertone of uncertainty or misgiving, which qualifies it as sense 3.a, ‘to claim’:

(4) I don't profess to be an expert.

GOP 540

(5) Dunlop professed to be well satisfied with the outcome but the dispute had probably left his business irretrievably damaged.

BM6 1224

6.2.3 NP+NP and NP+AdjP

There are altogether five +NP+NP and +NP+AdjP complements, and all of them are related to sense 2.b of *profess*, which is the reflexive use of the verb, 'to declare oneself to be something'. Thus it follows that the first NP of the two patterns is, in fact a reflexive pronoun.

There was only one instance of the +NP+NP complement:

(6) Thoroughly biddable, and mostly Christian (to a degree which would put to shame most people who profess and call themselves such [ie. Christians]), they make admirable soldiers – intelligent, willing, energetic, brave...

CDC 979

The remaining four reflexive complementation patterns of *profess* were of the type +NP+AdjP:

(7) It was remembered long after Anselm's death that he had professed himself afraid to die [...]

CKR 1331

There were no cases in the investigated domains of the BNC in which the optional *to*-infinitival complement *to be* between the reflexive pronoun and the following NP or AdjP would have been present. In other words, there were no +NP+*to*-inf[+NP/AdjP] complements.

6.2.4 NP complements

The second most frequent complement in the BNC data, the NP complement, came up altogether 18 times in association with three different senses of *profess*, that is, senses 3.a, 4, and 5.a.

The NP complements appeared most commonly with sense 3.a, ‘to make protestation of’.

There were ten instances of NPs denoting feelings and qualities associated with this sense:

- (8) Mr. Hogan would wash his hands in the downstairs cloakroom and always profess pleasure at the lamb chops, the bacon and cabbage or the plate of cod and parsley sauce on a Friday.
CCM 1001

Amongst the ten occurrences of *profess*+NP the noun *innocence* came up twice, as did the noun *love*:

- (9) You make a statement denying everything, professing innocence, know what I mean?
HRA 4468
- (10) She wondered at her own weakness in craving for a man who had professed his love for her and made her with child, only to walk away without even a backward glance.
FPK 958

Love was in both cases postmodified by a *for*+NP structure. The only other case in the data where the postmodifying *for*+NP was found was the following:

- (11) [...] if their inclination is in that direction and that those who profess distaste for homosexuality are denying them human rights.
B1J 1006

There were seven instances of NP complementation of *profess* with sense 4, ‘to declare faith in or allegiance to’. In five of them, the headword of the NP was *faith*, and the remaining two headwords were *religion* and *beliefs*:

- (12) Often a new convert will receive the fullness of the Spirit at the same time as they profess faith in Christ.
C8L 1368
- (13) [...] which would not take account of the then one thousand, and now ten thousand or more of the population in the Southern state who professed no religion.
A07 719
- (14) [...] then the beliefs we suppose in practice are out of line with the beliefs we profess in theory [...]
C8V 1225

In addition to the two senses above, there was also one instance of sense 5.a, which did not come up at all in the CLMETEV data. It has the meaning ‘to teach (a subject)’:

- (15) ‘A professor? What does he profess?’
CKC 2679-2680

6.2.5 Other complements

No unexpected additional complements were found in the BNC data.

6.2.6 Intransitive use

There was one instance of *profess* used intransitively in the BNC. The intransitive use is associated with sense 5.b, ‘to be a professor’:

- (16) But in October 1951, when Ramsey had professed in Cambridge for exactly a year, Churchill came back to power.
A68 1784

6.3 Extractions, insertions and *horror aequi*

In the BNC, there were altogether 13 extractions and only two insertions in the data for the verb *profess*. In normalized frequencies, those figures amount to 0.7 and 0.1 instances per million, respectively. There were no instances of *horror aequi*.

				Total
Extraction	Relativization	Interrogation	Comparativization	13 (0.7)
	11 (0.6)	1 (0.05)	1 (0.05)	
Insertion	2 (0.1)			2 (0.1)
<i>Horror aequi</i>	-			-

Table 19: Extractions, insertions and *horror aequi* in the BNC

6.3.1 Extractions

Relativizations were the most frequent type of extraction, and there were also interrogation and comparativization found in the corpus data. The distribution of types of extraction amongst complements of *profess* are presented in table 20 below.

	Relativization	Interrogation	Comparativization	Total
+ <i>to</i> -infinitive	7 (0.4)	-	1 (0.05) ⁶	8 (0.4)
+NP	4 (0.2)	1 (0.05)	-	5 (0.3)
Total	11 (0.6)	1 (0.05)	1 (0.05)	13 (0.7)

Table 20: Types of extraction in relation to complement in the BNC

The extractions in the BNC data are divided amongst two complements, the *to*-infinitive and the NP.

There were altogether eight occurrences of *to*-infinitival complements in extraction contexts, seven of which were instances of relativization:

- (17) Once again I have attracted the wrath of many supporters who think they know more about football than the eleven ‘Stiffs’ they profess to follow.
FR9 937

Additionally, there was one case of *to*-infinitival complementation with comparativization.

However, the *to*-infinitive has been omitted:

- (18) I had the feeling that Signe hadn’t dismissed Harvey’s words of caution about me as completely as she professed [to have done] and I carefully refrained from asking about the parcel.
CKC 2680

In addition to the *to*-infinitives, there were also five cases of extraction involving NP complements. Four of these were relativizations, and in all cases the extracted element was the NP complement itself:

- (19) He stared at the T’ang, wondering if he knew what he had become; if the doubt that he professed was as thorough, as all-inclusive as it ought to be.
FRF 905

The final instance of extraction in association with NP complements was an interrogation:

⁶ note: *to*-infinitival complement omitted

- (20) What does he profess?
CKC 2680

6.3.2 Insertions

There were only two insertions found in the BNC data. Both were associated with *that*-clause complements. Both of the insertions were also relatively long:

- (21) But to be made a deacon was for the first time to profess before a multitude that the soul undertook the cause of God in a special ministry [...]
A68 1015
- (22) Jesus Christ professed, according to the writings which are still currently accepted, that he believed in this 'god'.
BM2 986

As the Complexity Principle says, the more complex the construction the more explicit it aims to be, which is also the case here, as the conjunction *that*, which could be omitted, is present in both sentences above.

6.3.3 *Horror aequi*

There were no instances of *horror aequi* violations in the BNC data. The reason for this can probably be found in the scarceness of data, and the formality of the verb *profess*.

6.4 Additional BNC data: *Informative: World affairs*

Due to the search in the domains *Imaginative prose* and *Informative: Belief and thought* yielding a relatively small amount of data, 64 tokens, to analyse, I am now introducing some additional data from the BNC. Although the domain *Informative: World affairs* is not as close a match to the content of the CLMETEV as the two aforementioned domains, which is also the reason why I have chosen to look at it separately instead of integrating it with the primary BNC data, it is perhaps the closest match of the remaining domain options.

The domain *Informative: World affairs* consists of 17,244,523 words of written text in altogether 483 different texts. The search for *profess* in the domain yielded 85 hits in 59 texts. There was only one irrelevant token, the adjectival form *professing*, found in the data:

- (23) He was the first professing Jew to be knighted in England.
GT1 57

Additionally, the sentence illustrated in (24) below appeared three times in the exact same form in one text:

- (24) WEALTHY Lady Alethea Savile never recovered from hearing her lover James Gilbey profess his undying love for Princess Diana, it was revealed yesterday.
GBF 14143

I have decided to include the above sentence in the analysis as only one instance, because it appears to be repetition which would interfere with the statistics as regards sense and complement distribution. Seeing as the three instances were in the same text and also identical in form, it would be like counting one instance three times.

After eliminating the irrelevant data and unnecessary repetition, we are left with 82 instances of *profess*, that is, 4.8 instances per million words, which is a slight increase in frequency from the primary data, in which the normalized frequency was 3.1 instances per million.

6.4.1 The senses of *profess* found in *Informative: World affairs*

There were five separate senses of the verb found in the data.

Sense 3.a came up most frequently in the data with 50 instances. The second most common sense was sense 4 with 16 tokens, followed by sense 2.c with nine occurrences. There were also five cases of sense 2.b and one instance of sense 6. There was, however, one case where the sense was unclear because of the complementation. I will discuss the case

further in section 6.4.2 below. The sense distribution along with the normalized frequencies can also be seen in table 22 in the following section.

In table 21 below, example sentences of each sense found in the data are given.

Sense	Example
2.b 'to declare oneself to be something'	The artificial strip has now been laid at Linford Cricket Club's Broxhead ground and club members profess themselves very pleased with it. (B03 2521)
2.c 'to declare'	Immediately after the fall of the eastern bloc regimes, even the top nomenklatura professed that they had been closet democrats all along [...] (CAF 1215)
	Defence was excluded because it was controversial, given the presence as founder members of two states, Sweden and Ireland, which still professed a policy of neutrality. (CLR 136)
3.a 'to claim, to make protestation of'	Before Tiananmen, Britain had ducked the question by professing to believe that most Hong Kong people cared little about politics, and that those who did favoured little or no change. (A1V 253)
	It was a recording of a phone conversation allegedly between the Princess and an admirer, who professed his love for her. (K97 15924)
4 'to declare faith in or allegiance to'	Romanian Orthodoxy was professed by around 85 per cent of Romanian Christians. (HKP 1207)
6 'to have knowledge of or skill in'	Almost all of them were supplied with sound testimonials and professed a proper trade. (HXC 697)
Unclear	Commenting publicly after the recent appointment of a part-time woman and two men to a partnership comprising one woman and 30 men, the senior partner professed the firm 'comfortable' with the 'entirely natural progression of women.' (K5D 12606)

Table 21: Senses of *profess* in the domain *Informative: World affairs* of the BNC

6.4.2 Complementation of *profess*

In the following table are displayed the complementation patterns that arose in the data in association with the different senses of *profess*. The numbers are given as raw figures as well as normalized frequencies per million words, which are in parentheses.

	2.b	2.c	3.a	4	6	Unclear	Total
+ <i>to</i> -infinitive			24 (1.4)				24 (1.4)
+ <i>that</i> -clause		2 (0.1)					2 (0.1)
+NP		7 (0.4)	23 (1.3)	16 (0.9)	1 (0.06)		47 (2.7)
+NP+AdjP	3 (0.2)					1 (0.06)	4 (0.2)
+NP+PP	1 (0.06)						1 (0.06)
+NP+ <i>to</i> -inf[+AdjP]	1 (0.06)						1 (0.06)
+NP+ <i>to</i> -inf			1 (0.06)				1 (0.06)
+ <i>to</i> - <i>ing</i>			1 (0.06)				1 (0.06)
+AdvP			1 (0.06)				1 (0.06)
Total	5 (0.3)	9 (0.5)	50 (2.9)	16 (0.9)	1 (0.06)	1 (0.06)	82 (4.8)

Table 22: Distribution of the *OED* senses of *profess* in the domain *Informative: World affairs* of the BNC between complement patterns

I will begin by discussing the instance of *profess*+NP+AdjP classified as ‘unclear’ in the above table, as it is somewhat connected to the discussion of sense in section 6.4.1 above. The puzzling sentence is the following:

- (25) [...] the senior partner professed the firm ‘comfortable’ with the ‘entirely natural progression of women.’
K5D 12606

First I would like to note that I feel the complement could be of the form +NP+*to*-inf[+AdjP], *professed the firm to be comfortable*. One approach would be to classify (25) as sense 2.b, ‘to declare oneself to be something’. The problem with this is that that sense represents the reflexive use of the verb, and in this case the NP is not a reflexive pronoun but *the firm*. My other choices concerning this case would be senses 2.c, ‘to declare’, which normally takes *that*-clause and NP complements, and 3.a, ‘to claim’, which has been proven above to take complements similar to sense 2.b, with the reflexive pronoun omitted. I feel as if the sense of *profess* here is closer to declaring than claiming something, which would bring it closer to 2.c, but the (omitted) *to*-infinitive makes sense 3.a feel like the better choice. In the case of (25) I decided it best not to forcefully classify it under any particular sense, and thus, in this analysis its sense will remain ‘unclear’.

There was one case similar to (25). I am referring to the +NP+*to*-infinitive complement that came up in the data:

- (26) [many] profess their heroes to be self-made men who have succeeded by their own efforts.
ADB 464

In the case above, I felt that it was more explicitly a case of sense 3.a, since the *to*-infinitive was actually present in the complement.

As regards *to*-infinitival and *that*-clause complements presented in table 22, the normalized frequencies show the figures to be fairly similar to the ones found in table 18 showing the data from the other domains of the BNC investigated. Also numbers for the complementation patterns associated with sense 2.b appear to reflect those found in table 18. In the rest of this section, I will focus on the dissimilarities between the primary BNC data and the data from the BNC domain *Informative: World affairs*.

The biggest difference between these findings and the ones in section 6.2 is the amount of NP complements. All in all, noun phrases are the most common complement in the domain at hand. With sense 3.a, ‘to make protestation of’, the amount of NP complements is more than double that of the primary BNC data:

- (27) The new Conservative government cannot profess terrible shock at discovering the truth, blame the last tenants and administer some swift, foul-tasting medicine like devaluation.
AK2 264

Also the amount of NP complements with sense 2.c, ‘to declare’, was greater here:

- (28) They profess wholehearted support for clean coal technology [...]
HHW 9523

In fact, there were no NP complements associated with this sense present in the primary BNC data, which may have been simply due to the small amount of data to begin with. Unfortunately I cannot offer any other explanation for this increase in NP complements

regarding senses 3.a and 2.c than to state that perhaps this merely demonstrates the different ways in which different domains choose complements for the same verb.

One reason for the increase in the amount of NP complements with sense 4, ‘to declare faith in or allegiance to’, is more noticeable in the data. In five of the instances *profess* was used as a part of what looks like a standardized statistical report, as exemplified by (29) and (30):

- (29) Religion: Christianity (62% — 36% Roman Catholic, 26% Protestant); most of the rest do not profess a religion.
HKX 2570
- (30) Religion: Christianity (76% — Anglican Roman Catholic, other Protestant, Orthodox); most of the rest do not profess a religion.
HLD 5162

Finally, there was also one more complement which had not come up in any other data, a *to -ing* complement:

- (31) When ninety-five per cent of the population of the Republic profess to being Roman Catholic, the Catholic Church does not need a constitutional commitment to dominate moral and social legislation.
AD2 858

I classified this as sense 3.a, because I felt that it was quite similar to some *to*-infinitival complements that had come up.

6.4.3 Extractions, insertions and *horror aequi*

There were seven extractions in the data, all of which were relativizations. In normalized frequencies, the amount of extractions here was slightly lesser than in the primary BNC data.

There were also two insertions and no instances of *horror aequi* violations.

	Total
Extraction (Relativization)	7 (0.4)
Insertion	2 (0.1)
Horror aequi	-

Table 23: Extractions, insertions and *horror aequi* in the domain *Informative: World affairs* of the BNC

The following table shows how the relativizations have been distributed amongst the complements of *profess*.

	Relativization
+ <i>to</i> -infinitive	2 (0.1)
+NP	5 (0.3)
Total	7 (0.4)

Table 24: Relativization in relation to complement in the domain *Informative: World affairs* of the BNC

The two insertions found were divided between a *to*-infinitival complement and a NP complement.

6.5 Summary of the findings in the BNC

Because of the relatively small amount of data for *profess*, 61 relevant instances or 3.1 per million words, in the BNC domains most closely corresponding to the contents of the CLMETEV, namely *Imaginative prose* and *Informative: Belief and thought*, some additional data was needed. Thus a supplementary search in the BNC domain *Informative: World affairs* was completed, yielding a further 82 instances, or 4.8 per million words in normalized frequencies. These data were not discussed together, however, because the data from *Informative: World affairs* did not correspond closely enough to the text types covered by the CLMETEV.

As regards sense distribution, sense 3.a, ‘to claim, to make protestation of’ was the most commonly appearing sense in the data. The only differences relating to sense distribution between the so-called primary data and the *Informative: World affairs* data was that in the primary data, senses 5.a, ‘to teach (a subject)’, 5.b, ‘to be a professor’, appeared and in the additional data they did not, but sense 6, ‘to have knowledge of or skill in’, did. However, each of these senses only came up once in the data, so this difference has no major impact on the sense distribution overall.

There were some differences in the two sets of data concerning complementation. *To*-infinitival complements were the most frequent complement of *profess* in the primary data, and as far as normalized frequencies are concerned, there were approximately as many *to*-infinitive complements in the additional data as well. However, they were not the most frequent complement in the extra data. NP complements took the position of most frequent complement in the extra data with 2.7 instances per million, as opposed to 0.9 instances per million in the primary data. Reasons for this difference may lie in the way *profess* is used in the type of language, reporting language, associated with the domain *Informative: World affairs*.

The figures for the reflexive use of *profess* showed no discrepancy in the different data.

Profess did not take any *-ing*-complements in the primary data, but one case of *to -ing* complementation was found in the additional data.

There were instances of extraction in both sets of data, the normalized frequency being slightly lower in the additional data than in the primary one, 0.4 and 0.7 instances per million, respectively. There were no *horror aequi* violations found in the domains examined, and the instances of insertion found complied with the Complexity Principle.

7 Changes in the senses and the complementation of *profess* from the CLMETEV to the BNC

In this section, I will draw together the findings from the two parts of the CLMETEV as well as the BNC to give a clearer picture of the changes in the distribution of the senses and the complementation of *profess* from the 18th century onwards.

In normalized frequencies per million words, the amount of tokens of *profess* declines as time goes on. In the first part of the CLMETEV, the verb occurs 38 times per million words, and already in the third part of the corpus the number has declined to approximately 25.1 occurrences per million words. In the BNC data, that is, from the 1960s onwards, the verb *profess* only comes up about 3.1 times per million words. The explanation for the ever diminishing number of occurrences may be the formal connotation of the verb, which was noted in section 4.2.

To provide the best basis for comparison between the different time periods, the following table shows the distribution of the senses of *profess* in percentages and normalized frequencies. The primary data, domains *Imaginative prose* and *Informative: Belief and thought* are marked “BNC”, and the additional data from the domain *Informative: World affairs* is marked as “BNC+” in the table.

	CLMETEV1 1710-1780	CLMETEV3 1850-1920	BNC 1960-1994	BNC+ 1960-1994
2.b	19.2 % (7.3)	5.7 % (1.5)	8.2 % (0.3)	6.1 % (0.3)
2.c	11.4 % (4.3)	7.6 % (1.9)	4.9 % (0.15)	11.0 % (0.5)
3.a	43.9 % (16.7)	73.4 % (18.4)	72.1 % (2.3)	61.0 % (2.9)
3.b	-	0.6 % (0.2)	-	-
4	12.3 % (4.7)	12.0 % (3)	11.5 % (0.4)	19.5 % (0.9)
5.a	-	-	1.6 % (0.05)	-
5.b	-	-	1.6 % (0.05)	-
6	7.9 % (3)	0.6% (0.2)	-	1.2 % (0.06)
Unclear	5.3 % (2)	-	-	1.2 % (0.06)
Total	100 % (38)	100 % (25.1)	100 % (3.1)	100 % (4.8)

Table 25: Sense distribution of *profess* in the CLMETEV and the BNC as percentages and, in parentheses, as normalized frequencies

Of the eleven senses relevant to the time periods under examination, eight came up in at least one part of the data. The three senses missing from the data are senses 1.a, 'to have taken the vows of a religious order', 1.b, 'to admit into a religious order', and 1.c, 'to make a religious profession'.

The proportion of sense 2.b, 'to declare oneself to be something', drops significantly from the first to the third part of the CLMETEV, but increases a little again in the BNC data. The drop appears to be due to the loss of the reflexive pronoun associated with the sense, which, in turn, shifts the meaning of *profess* to sense 3.a, 'to claim', which can be seen to significantly increase in popularity, as table 25 shows. Also senses 2.c, 'to declare', and 6, 'to have knowledge of or skill in', appear to become less frequently used as time goes on, which helps sense 3.a to gain more popularity. The relative amount of sense 4, 'to declare faith in or allegiance to', remained quite steady all through the data.

Senses 5.a and 5.b, 'to teach (a subject)' and 'to be a professor', only appear in the BNC data. It is interesting that no instances of these senses came up in the CLMETEV data, that is, when the verb was still in more frequent use.

Moving on to the complementation of *profess*, the distribution of the complements associated with the verb during the different periods of time are presented in the following table as percentages and as normalized frequencies per million words.

	CLMETEV1 1710-1780	CLMETEV3 1850-1920	BNC 1960-1994	BNC+ 1960-1994
+ <i>to</i> -infinitive	15.8 % (6)	59.5 % (14.9)	55.7 % (1.7)	29.3 % (1.4)
+ <i>that</i> -clause	5.3 % (2)	2.5 % (0.6)	4.9 % (0.15)	2.4 % (0.1)
+NP	57.0 % (21.7)	31.6 % (7.9)	29.5 % (0.9)	57.3 % (2.7)
+NP+NP	11.4 % (4.3)	1.3 % (0.3)	1.6 % (0.05)	-
+NP+AdjP	7.0 % (2.7)	3.8 % (1)	6.6 % (0.2)	4.9 % (0.2)
+NP+PP	-	-	-	1.2 % (0.06)
+NP+ <i>to</i> -inf[+PP]	0.9 % (0.3)	-	-	-
+NP+ <i>to</i> -inf[+AdjP]	-	0.6 % (0.2)	-	1.2 % (0.06)
+NP+ <i>to</i> -infinitive	-	-	-	1.2 % (0.06)
<i>as</i>	0.9 % (0.3)	-	-	-
+ <i>to</i> NP	0.9 % (0.3)	-	-	-
+ <i>to</i> - <i>ing</i>	-	-	-	1.2 % (0.06)
+AdvP	0.9 % (0.3)	-	-	1.2 % (0.06)
+∅	-	0.6 % (0.2)	1.6 % (0.05)	-
Total	100 % (38)	100 % (25.1)	100 % (3.1)	100 % (4.8)

Table 26: Complement distribution of *profess* in the CLMETEV and the BNC as percentages and, in parentheses, as normalized frequencies

In the first part of the CLMETEV, the NP complement is the most common type of complement with *profess*. In the third part of the corpus, however, it has already quite clearly lost in popularity to the *to*-infinitival complement, which now dominates the distribution. In the BNC, the initial analysis would indicate that the *to*-infinitive is almost as dominant as in part 3 of the CLMETEV, but the additional data from the domain *Informative: World affairs* would suggest that the NP complement is again on the rise. It must be remembered, however, that the text type of the additional data does not correspond as closely to the CLMETEV data as the other data from the BNC, and as such, these results do not disprove the continuing dominance of the *to*-infinitival complement, but rather cast a slight shadow of doubt on whether it is actually as dominant as it would appear to be.

As I already mentioned in the discussion of sense distribution above, *profess* has suffered a loss in its reflexive sense. This can also be seen in the complementation of the verb. As I said, the *to*-infinitival complement became more popular after the first part of the CLMETEV. This was partly fuelled by the loss of the first NP, the reflexive pronoun, in the constructions

profess+NP(+*to*-inf)+NP/AdjP/PP⁷ and *profess*+NP+*to*-inf[+AdjP/PP], which can be seen to diminish in frequency as well as percentages in table XX above.

The *to*-infinitive remains the most common sentential complement throughout the time periods, while *that*-clauses maintain a smaller but relatively steady presence. No *-ing*-clauses emerge in the primary data from the CLMETEV and the BNC, so it would appear that that complement has died out before the 18th century, as speculated in section 4.3, although there is one *to -ing* complement that comes up in the additional BNC data.

The *to -ing* complement mentioned above, along with the complements *as*, *to* NP, AdvP and the patterns NP+PP and NP+*to*-inf[+PP], were ones that did not come up when discussing the complementation of *profess* in the theory section.

The following table displays the cases of extraction by type in the data in raw figures as well as normalized frequencies. I have also added percentages, which indicate the proportion of all instances of *profess* involving some type of extraction.

	Relativization	Topicalization	Interrogation	Comparativization	Total	%
CLMETEV1	29 (9.7)	1 (0.3)	1 (0.3)	-	31 (10.3)	27.2
CLMETEV3	25 (4)	1 (0.2)	-	2 (0.3)	28 (4.4)	17.7
BNC	11 (0.6)	-	1 (0.05)	1 (0.05)	13 (0.7)	21.3
BNC+	7 (0.4)	-	-	-	7 (0.4)	8.5

Table 27: Types of extraction in the CLMETEV and the BNC

Both the CLMETEV and the BNC data for *profess* involve quite a lot of extraction, and also some instances of insertions, as the table below shows.

CLMETEV1	6 (2)
CLMETEV3	6 (1)
BNC	2 (0.1)
BNC+	2 (0.1)

Table 28: Insertions in the CLMETEV and the BNC

⁷ I have marked the *to*-infinitive in parentheses, because it has been omitted in this construction, but it is still theoretically present.

According to the Complexity Principle, in areas of cognitive complexity like extractions and insertions, the favoured complementation structure is the most explicit one. This holds true in all the instances I came across in the data.

8 Conclusion

The corpus data indicates the use of the verb *profess* being in decline. In present-day English, it unfortunately appears to be so rare that it was difficult to get enough data to make any solid conclusions, especially since the BNC domains had to be restricted to only include those which would correspond to the contents of the CLMETEV.

Perhaps the most noticeable change in the corpus data was the rise of the *to*-infinitival complement over the NP complement to become the most frequent complement of *profess*. Exactly where the turning point between the two complements was is not entirely clear, as the second part of the CLMETEV was not included in the study. Further research would be required to determine which complement pattern was the dominant in the time period from 1780 to 1850. Without the data from the second part, I would call the period of the third part of the corpus, 1850-1920, the “golden age” of the *to*-infinitival complement of *profess*, because that is when it had the most obvious lead to any other type of complement, and also because of the two instances of *horror aequi* that came up in the data from that part, which speaks for the frequency of the complement.

An interesting discovery in the rise of the *to*-infinitival complement with the verb was that it appears to be at least partly connected and due to the decline of the reflexive *profess*. It is also interesting to notice that the sentential complementation of *profess* seems unaffected by the Great Complement Shift at least as far as the establishment of the gerund as a second non-finite complement is concerned; there were no instances of *-ing*-clauses as complements in the CLMETEV, nor were there any in the corresponding domains of the BNC. Perhaps the fact that *profess* only has one non-finite clause complement is one more reason for the popularity of the *to*-infinitival complement.

Semantically speaking, senses 3.a, ‘to claim, to make protestation of’, and 4, ‘to declare faith in or allegiance to’, held their own and remained the steadiest throughout the data, whilst

the numbers of sense 2.b ‘to declare oneself to be something’ and sense 2.c ‘to declare’ dropped slightly as time progressed. The reason for the decline of sense 2.b is linked to the loss of the reflexive pronoun, which turns +NP+*to*-inf[+NP/AdjP/PP] complements into *to*-infinitival complements and consequently shifts the meaning to sense 3.a.

References

- Aarts, Bas. 2000. "Corpus linguistics, Chomsky and Fuzzy Tree Fragments". in Christian Mair and Marianne Hundt (eds.), *Corpus Linguistics and Linguistic Theory: papers from the Twentieth International Conference on English Language Research on Computerized Corpora (ICAME 20) Freiburg im Breisgau 1999*. Amsterdam: Rodopi, 5-14.
- Banhart, Robert K. (ed.). 1988. *The Barnhart Dictionary of Etymology*. New York: The H.W. Wilson Company.
- Biber, Douglas, Susan Conrad and Randi Reppen. 1998. *Corpus Linguistics – Investigating Language Structure and Use*. Cambridge: Cambridge University Press.
- Bolinger, Dwight. 1968. "Entailment and the Meaning of Structures". *Glossa* 2, 119-127.
- Brinton, Laurel J. 2000. *The Structure of Modern English: A linguistic introduction*. Amsterdam/Philadelphia: John Benjamins Publishing Company.
- Burnard, Lou (ed.). 2000. *Reference Guide for the British National Corpus (World Edition)*. [Internet] Available from <http://www.natcorp.ox.ac.uk/archive/worldURG/urg.pdf>. 1-331. [Accessed on 23 March, 2010]
- Carnie, Andrew. 2002. *Syntax: A Generative Introduction*. Oxford: Blackwell Publishers.
- CLMETEV. [Internet] Available from <http://www.helsinki.fi/varieng/CoRD/corpora/CLMETEV/basic.html>. [Accessed on 10 May 2010]
- Cowper, Elizabeth A. 1992. *A Concise Introduction to Syntactic Theory: The Government-binding Approach*. Chicago: Chicago University Press.
- De Smet, Hendrik. 2005. "A Corpus of Late Modern English texts." *ICAME Journal* 29, 69-82.
- Herbst, Thomas, David Heath, Ian F. Roe, and Dieter Götz (eds.). 2004. *A Valency Dictionary of English*. Berlin: de Gruyter.
- Hoad, Terry F. (ed.). 1986. *The Concise Oxford Dictionary of English Etymology*. New York: Oxford University Press.
- Huddleston, Rodney and Geoffrey Pullum. 2002. *The Cambridge Grammar of the English Language*. Cambridge: Cambridge University Press.
- Hunston, Susan. 2002. "Pattern Grammar, Language Teaching and Linguistic Variation: Applications of a Corpus-Driven Grammar." in R. Reppen, S. M. Fitzmaurice, D. Biber (eds.), *Using Corpora to Explore Linguistic Variation*. Philadelphia: John Benjamins Publishing Company.
- Johansson, Stig. 1995. "Mens sana in corpore sano: On the Role of Corpora in Linguistic Research." *The European English Messenger* 4(2), 19-25.

- Leech, Geoffrey. 1968. "Some assumptions in the metatheory of linguistics". *Linguistics* 39, 87-102.
- Leech, Geoffrey. 1992. "Corpora and theories of linguistic performance". in Jan Svartvik (ed.), *Directions in corpus linguistics: Proceedings of Nobel Symposium 82*. Berlin and New York: Mouton de Gruyter. 105-122.
- McEnery, Tony and Andrew Wilson. 1996. *Corpus linguistics*. Edinburgh: Edinburgh University Press.
- Meyer, Charles F. 2002. *English Corpus Linguistics: An Introduction*. Cambridge: Cambridge University Press.
- Oxford English Dictionary Online. 2009. Oxford University Press. Available from <http://oed.com>. [accessed November 2009] (*OED*)
- Poutsma, Hendrik. 1904. *A Grammar of Late Modern English*. Groningen: Noordhoof.
- Quirk, Randolph, Sidney Greenbaum, Geoffrey Leech, and Jan Svartvik. 1985. *A Comprehensive Grammar of the English Language*. London: Longman.
- Rohdenburg, Günter. 1995. "On the Replacement of Finite Complement Clauses by Infinitives in English." *English Studies*, 4, 367-388.
- Rohdenburg, Günter. 1996. "Cognitive Complexity and Increased Grammatical Explicitness." *Cognitive Linguistics*, 7, 149-182.
- Rohdenburg, Günter. 2006. "The Role of Functional Constraints in the Evolution of the English Complement System". in Christiane Dalton-Puffer, Dieter Kastovsky, Nikolaus Ritt and Herbert Schendl (eds.), *Syntax, Style and Grammatical Norms*. Bern: Peter Lang, 143-166.
- Somers, Harold L. 1984. "On the validity of the complement-adjunct distinction in valency grammar." *Linguistics*, 22, 507-530.
- Sinclair, John. (ed.) 2006. *Collins COBUILD Advanced Learner's English Dictionary*. (Fifth edition.) Glasgow: HarperCollins. (*Cobuild*)
- Visser, Fredericus T. 1969. *An Historical Syntax of the English Language. Part three, first half: Syntactical Units with Two Verbs*. Leiden: Brill.
- Vosberg, Uwe. 2003. "Cognitive Complexity and the Establishment of *-ing* Constructions with Retrospective Verbs in Modern English." in M. Dossena and C. Jones (eds.), *Insights into Late Modern English*. Bern: Peter Lang, 1997-220.

Corpora

The British National Corpus. (BNC)

The Corpus of Late Modern English Texts, extended version. (CLMETEV)