

The Complementations Patterns of the Verb *Boast* in the British English of the Last
Three Centuries

University of Tampere
School of Language, Translation and Literary Studies
English Philology
Pro Gradu Thesis
November 2012
Elisa Kärkkäinen

Tampereen yliopisto
Kieli-, käännös- ja kirjallisuustieteiden yksikkö
Englantilainen filologia

Kärkkäinen, Elisa: The Complementations Patterns of the Verb *Boast* in the British English of the Last Three Centuries

Pro Gradu –tutkielma, 77 sivua
Marraskuu 2012

Tämä pro gradu -tutkielma käsittelee englannin kielen verbiä *boast* (suomeksi *kerskua*, *leuhkia*), sen komplementaatioita ja muutoksia komplementaatioiden käytössä 1700-luvun alkupuolelta nykypäivään brittienglannin kielessä. Tarkoituksena oli selvittää useimmin käytetyt komplementit ja se, miten niiden käyttö on muuttunut vuosisatojen kuluessa. Tämän lisäksi tarkastelun kohteena olivat prepositiot *of* ja *about*, joiden käyttöympäristöjen oletettiin eroavan toisistaan, ja rakenne *boast* + NP, jolla on muista verbin komplementaatorakenteista poiketen kaksi mahdollista sanamerkitystä.

Tutkielman teoreettisena pohjana toimivat luvut, jotka käsittelevät korpuksia, korpuslingvistiikkaa ja seikkoja, joita tulee ottaa huomioon, kun näitä käytetään hyväksi lingvistiisessä tutkimuksessa. Valenssiteoriaa ja komplementaatiota tarkemmin esittelevät kappaleet avaavat keskeisiä käsitteitä. *Boast*-verbin keskeisten komplementtien, merkityksien ja muiden ominaisuuksien tutkimisessa apuna käytettiin varsinkin *Oxford English Dictionary*a, mutta myös muita sana- ja kielioppikirjoja.

Tutkielman aineisto kerättiin korpusanalyysi-osioon kahdesta korpuksesta. Hendrik de Smetin kokoama *Corpus of Late Modern English Texts, extended version* toimi lähteenä historiallisen brittienglannin aineistolle, joka ulottuu 1710-luvulta 1920-luvulle. Tämä ajanjakso on jaettu kolmeen 70 vuoden pituiseen osioon, joita tarkastellaan analyysiosiossa erillisinä kokonaisuuksina. Nykypäivän brittienglannin lähteenä toimi *British National Corpus*, jonka tekstit ovat kerätty vuosilta 1960-1993. Tämä laaja korpus on jaettu ensin sekä puhuttuun että kirjoitettuun osioon, jonka jälkeen on vielä mahdollista tarkentaa hakua monien ehtojen mukaan. Koska historiallisen korpuksen lähteenä toimivat tekstit ovat pääasiassa kaunokirjallisuutta, valittiin *BNC*-korpuksen tekstityypiksi ”imaginative prose”, joka parhaiten vastaa historiallisen korpuksen tekstejä.

Tutkimus paljasti, että verbin *boast* komplementit ovat olleet suhteellisen vakiintuneita tutkitun aikajakson alusta saakka, ja että verbillä on kolme pääasiallista komplementtia, jotka kaikki ovat nykyenglannissa lähes yhtä suosittuja: NP-, *of* + NP- ja *that*-lausekomplementti. Prepositioiden *of* ja *about* vertailua pystyttiin tekemään ainoastaan *BNC*-korpuksen materiaalista, mistä tuloksena oli joitain eroja, mutta tutkittava aineisto ei ollut riittävän laaja tällaiseen vertailuun. Kaikkissa kolmessa *CLMETEV*-korpuksen osassa ja *BNC*-korpuksessa esimerkkilauseet rakenteesta *boast* + NP paljastivat tapauksia molemmista mahdollisista sanamerkityksistä.

Asiasanat: komplementaatio, valenssiteoria, korpuslingvistiikka, *boast*

Table of Contents

1. Introduction	1
2. Concerning corpora and corpus linguistics.....	3
2.1 Corpora and their uses	3
2.2 Corpus linguistics	4
2.3 Normalized frequencies.....	8
2.4 The Corpus of Late Modern English Texts, extended version	8
2.5 The British National Corpus.....	9
3. On the complementation of words.....	11
3.1 Valency theory and complementation	11
3.2 Theta theory.....	13
3.3 Control and NP movement	14
3.4 The distinction between complement and adjunct.....	18
3.5 The categories of complements	21
3.5.1 Noun phrase as complement.....	22
3.5.2 Adverbial phrase as complement.....	22
3.5.3 Prepositional phrase as complement.....	23
3.5.4 <i>To</i> -infinitive as complement.....	24
3.5.5 <i>-ing</i> form as complement	25
3.5.6 <i>That</i> -clause as complement	25
3.5.7 <i>Wh</i> -clause as complement	25
4. Issues influencing the complementation of verbs.....	26
4.1 The Great Complement Shift.....	26
4.2 The Complexity Principle.....	26
4.3 Insertions	27
4.4 Extractions.....	27
4.5 Horror aequi.....	28
4.6 Concerning the prepositions <i>of</i> and <i>about</i>	29
5. <i>Boast</i> in dictionaries and grammars.....	31
5.1 The <i>OED</i>	31
5.2 Collins COBUILD Advanced Learner's English Dictionary	33
5.3 Macmillan English Dictionary for Advanced Learners.....	34
5.4 <i>Boast</i> in grammars	34
6. Corpus analysis: the Corpus of Late Modern English Texts, extended version	37
6.1 <i>CLMETEV</i> 1: 1710-1780.....	37
6.1.1 Complementation patterns of <i>boast</i> in <i>CLMETEV</i> 1	38

6.1.2 Extractions and insertions in <i>CLMETEV 1</i>	43
6.2 <i>CLMETEV 2</i> : 1780-1850	44
6.2.1 Complementation patterns of <i>boast</i> in <i>CLMETEV 2</i>	45
6.2.2 Extractions and insertions in <i>CLMETEV 2</i>	50
6.3 <i>CLMETEV 3</i> : 1850-1920	52
6.3.1 Complementation patterns of <i>boast</i> in <i>CLMETEV 3</i>	53
6.3.2 Extractions and insertions in <i>CLMETEV 3</i>	58
6.4 Summary of the findings in the <i>CLMETEV</i>	58
7. Corpus analysis: the <i>BNC</i>	61
7.1 Complementation patterns of <i>boast</i> in the Imaginative prose domain of the <i>BNC</i>	62
7.2 Extractions and insertions in the Imaginative prose domain of the <i>BNC</i>	68
8. Comparison of the <i>BNC</i> and the <i>CLMETEV</i>	70
9. Conclusion	73
Works cited	75

1. Introduction

Consider the following sentences:

- (1) He boasted of his accomplishments.
- (2) He boasted about his accomplishments.
- (3) He boasted that he had accomplished a lot.

The examples above illustrate the fact that the verb *boast* can take more than one complementation pattern and that both sentential and non-sentential complements are possible with *boast*. This thesis is a diachronic study to the complementation patterns of the verb *boast* in British English from the beginning of the 18th century to present day. The historical data comes from the Late Modern English period, by which time many of the changes of the Early Modern English period had come to an end, and some new variations had started to appear. The purpose of this thesis is to investigate how the complementation patterns of the verb *boast* have changed in the course of the centuries, and which complementation patterns are in use in present-day British English.

Boast is an excellent topic to study for example because the prepositions *of* and *about*, in the sense of “on the subject of”, are both possible with *boast*. This study will examine the relative frequencies of the two prepositions, and it is hoped that an analysis can be made of the factors which influence the choice of either preposition. In general, factors such as extraction and insertion are observed to see if they have an influence on the complementation patterns of *boast*. This study will also investigate the meanings of the verb *boast*. Moreover, *boast* is a verb which primarily takes non-sentential complements, which are often neglected in studies of complementation of English verbs, and it is hoped that the findings of this thesis contribute to the study of such verbs.

This thesis consists of two parts: the theory and the corpora analysis. The theory part first explores matters related to corpora in general and introduces the corpora used in this study. Next a number of pages are dedicated to valency theory, control and NP movement, the *complement / adjunct* difference, and the categorisation of complements. Then various issues which have influence on the complementation of verbs are examined, before some results of previous work on

the verb *boast* are presented to function as the basis of the present study. In the analysis part, the corpora under study are the Corpus of Late Modern English Texts, which provides the diachronic data for this thesis, and the British National Corpus, which illustrates the present-day complementation patterns of the verb *boast*. Investigation into the use of *boast* proceeds from the oldest data to the most recent. The thesis concludes with a summary of the findings and some concluding remarks.

2. Concerning corpora and corpus linguistics

There are two main concepts at the heart of this thesis which should be explained: corpus and corpus linguistics. This chapter introduces the field of study, corpus linguistics, explains the concept of normalized frequency, and familiarizes the reader with the corpora used in this study.

2.1 Corpora and their uses

Before the time of computers, a *corpus* was the total works of an individual author or a mass of texts, literary or linguistic, which were written on paper (Lindquist 2009, 3). Now that computers are ubiquitous “*corpus* is almost always synonymous with *electronic corpus*, i.e. a collection of texts which is stored on some kind of digital medium and used by linguists to retrieve linguistic items for research or by lexicographers for dictionary-making” (*ibid.*), which is usually compiled with some use or certain principles in mind. Thus corpora vary in size and content depending what is the purpose for their compilation.

Corpora can be compiled for the study of spoken or written language or a corpus can contain samples of both types, and then it is a general corpus (Lindquist 2009, 15). Specialised corpora are created for studying only certain types of texts, e.g. academic English or the English of foreign language learners (Lindquist 2009, 18). Historical corpora are used to study language change over time, which is a lot quicker process with the help of a corpus than with the old method of manually perusing individual manuscripts (Lindquist 2009, 19).

Susan Hunston (2002, 96) lists some applications for corpora:

- Language teaching
- The production of dictionaries and grammars
- The use of corpora in critical linguistics, illuminating items of importance to the study of ideologies
- The use of corpora in translations
- The contribution of corpora to literary studies and stylistics
- The use of corpora in forensic linguistics
- The use of corpora in designing writer support packages

This list illustrates the many uses of corpora, and looking at the list, it is clear that the use of corpora has developed into an important part of linguistic and literary research. As Hunston (*ibid.*) writes for example about the production of dictionaries and grammars “it is by now virtually unheard-of for a large publishing company to produce a learner’s dictionary or grammar reference book that does not claim to be based on a corpus”.

A significant feature of many a corpus is part-of-speech tagging. POS tags are like price tags which are attached to a word and the tag tells us to which word class the word belongs (Lindquist 2009, 44). The purpose of the POS tags is to aid in finding the right tokens. If one is interested in the verb *boast*, as we are in this thesis, it is possible to search only for the verbal tokens of the word with the help of POS tags and leave out the nominal tokens in the search results. Using a tagged corpus saves a lot of time as one does not have to examine hundreds of irrelevant tokens, but POS tagging is not without its problems. As Lindquist (2009, 44-45) writes, “[i]t is not always obvious what the correct tag should be.... Anybody who has analysed and parsed naturally occurring written language knows that it is often hard to fit authentic language into categories set up by a grammatical theory.” His examples on this are the following (*ibid.*):

- (1) We left **before** the meeting ended.
- (2) He darted **off**.

According to Linquist (*ibid.*) most traditional grammars would call *before* in (1) a conjunction and *off* in (2) an adverb, but it is also possible to interpret both as prepositions. If one searches for the conjunction *before* in a corpus where *before* is tagged as preposition in sentences like (1), one would not get the desired results. Consequently, it is important to know the principles on which the corpus in question is tagged to be able to find the relevant tokens (Lindquist 2009, 45).

2.2 Corpus linguistics

What is *corpus linguistics*? According to Lindquist (2009, 1) it is a methodology, rather than a type of linguistics such as *sociolinguistics* (the relation between language and society), which can be

used in studying various things from different theoretical leanings. At the same time “corpus linguistics is also frequently associated with a certain outlook on language... this outlook is that the rules of language are usage-based and that changes occur when speakers use language to communicate with each other” (*ibid.*). Corpus linguistics as it is now known started developing in the 1960s with the advent of the first corpus, the Brown corpus, and it is often seen as having developed in opposition to formalists’ focus on idealized ‘competence’ (Fries 2010, 90). Fries’ view, however, is that corpus linguistics is also “a reassertion of older traditions in the study of language that were current before the rise of formalist approaches” (*ibid.*). These older traditions include philology, dialect geography, anthropological linguistics, and sociolinguistics which developed at the same time as corpus linguistics, and which applied similar methods now used in (electronic) corpus linguistics (*ibid.*).

When corpora are used to study a language, there are two different ways of approaching the data: corpus-driven research and corpus-based research (Biber 2010, 160). Biber (2010, 163) defines the corpus-based approach in the following way:

The corpus-based approach has some of the same basic goals as research in functional linguistics generally, to describe and explain linguistic patterns of variation and use ... to discover the systematic patterns of use that govern the linguistic features recognized by standard linguistic theory.

According to Biber (*ibid.*), the major strength of the corpus-based approach is that it often refutes linguists’ prior false intuitions about language. In addition, corpus-based research has shown that there are differences in language variation and use depending on the register in question (Biber 2010, 162).

“Corpus-driven analyses exploit the potential of a corpus to identify linguistic categories and units that have not been previously recognized” (Biber 2010, 168). If taken to the extreme, this approach assumes only the existence of word-forms, with the idea that different word-forms may have their own meanings and grammar (*ibid.*). Not all corpus-driven analyses are as extreme as this, and Biber (2010, 169) points out three aspects which may differ in corpus-driven research projects:

- the extent to which they are based on analysis of lemma vs. each word-form
- the extent to which they are based on previously defined linguistic constructs (e.g., part-of-speech categories and syntactic structures) vs. simple sequences of words
- the role of frequency evidence in the analysis

Thus some corpus-driven studies accept some previously defined ideas but the analysis itself does not proceed from established grammatical patterns, rather from the findings that emerge from the data (*ibid.*).

If one has to explain the corpus linguistics method in a few words, many would say that it is a quantitative method. After all, corpus linguists count features of a language to investigate how common or rare they are, usually with the aim of finding the general patterns (Hoffmann 2008, 18). However, counting the frequencies of tokens is only the starting point for corpus linguistic research. When the frequencies have been found, the results have to be interpreted correctly and this part of the research is qualitative analysis (*ibid.*). For example, looking at the overall numbers of a certain feature could hide the fact that different age groups use it differently or that young people use it only rarely or not at all, and thus corpus linguistics is a mix of both quantitative and qualitative techniques (*ibid.*).

In his book, Lindquist (2009, 9) quotes Jan Svartvik's (1992, 8-10) arguments on the advantages of corpus linguistics, which are reproduced here in the shorter form that they appear in Lindquist:

- Corpus data are more objective than data based on introspection.
- Corpus data can easily be verified by other researchers, and researchers can share the same data instead of always compiling their own.
- Corpus data are needed for studies of variation between dialects, registers and styles.
- Corpus data provide the frequency of occurrence of linguistic items.
- Corpus data do not only provide illustrative examples, but are a theoretical resource.
- Corpus data give essential information for a number of applied areas, like language teaching and language technology (machine translation, speech synthesis etc.).
- Corpora provide the possibility of total accountability of linguistic features – the analyst should account for everything in the data, not just selected features.
- Computerised corpora give researchers all over the world access to the data.
- Corpus data are ideal for non-native speakers of the language.

This extensive list of the advantages of corpus linguistics shows that corpus linguistics is an excellent methodology for studying languages, especially the availability and objectivity of the data, and the fact that results are easily verifiable are important for scientific research.

Despite the many advantages, there are also some drawbacks to corpus linguistics. In addition to the advantages of corpus linguistics, Lindquist (2009, 10) has some caveats to using corpora:

- Since the number of possible sentences in a language is not infinite, corpora will never be big enough to contain everything that is known by a speaker of a language.
- Some of the findings may indeed be trivial.
- The intuition of a native speaker will always be needed to identify what is grammatical and what is not.
- Corpora contain all kinds of mistakes, speech errors etc. which may have to be disregarded.
- You will always need a theory of language to know what to search for in a corpus and to explain what you find.

The factors above have to be taken into account when conducting a study on language using corpora, as well as the warnings given by C. N. Ball (1994).

The first warning given by Ball is the problem of representativeness of a corpus. “The results of the analysis hold true for the corpus [in question], and can only be generalized to the extent that the corpus is a representative sample” (Ball 1994, 295). If one does not compile a corpus for a specific research question and uses one compiled by others, it is essential that it is considered whether the samples of text are likely to be representative with respect to the phenomenon under study (*ibid.*). If one investigates a feature of spoken language, then a corpus of spoken language is needed, and if the phenomenon is a rare feature of language, it is vital that the sample is large enough not to skew the results.

Precision is “the proportion of retrieved material that is relevant” (Ball 1994, 295). Precision does not usually cause problems as it is easy for a professional to observe whether the retrieved examples are indeed relevant or not (*ibid.*). The problem with using corpora is *recall* which is “the proportion of relevant information that was retrieved” (*ibid.*). It is impossible to know what has been missed, what the recall of the search was, unless the entire corpus is analysed by hand, which

is an unrealistic goal even with a relatively small corpus (*ibid.*). It is because of this that it is important to report what search strings were used in retrieving tokens, as other researchers may want to test the reliability of the search strings and verify the results (Ball 1994, 296).

2.3 Normalized frequencies

When corpora are used to study patterns of a language, it is important that the frequencies of the patterns are comparable between different (sub-)corpora. Comparing only raw counts of patterns does not give the full picture, and in fact, it might lead to wrong conclusions about the frequency of patterns. To make sure that the numbers are comparable, raw frequency counts are “normalized”. Biber et al. (1998, 263) state that “the raw frequency count should be divided by the number of words in the [corpus], and then multiplied by whatever basis is chosen for norming.” Because of the sizes of the corpora used in this study, the frequencies of the patterns are normed to a basis per one million words. The mathematical formula for normalizing frequency counts is (with example numbers):

$$(15/2,000,000) * 1,000,000 = 7.5,$$

where 15 is the raw count, and 2,000,00 is the number of words in the corpus. Thus the normalized frequency (NF) of the pattern would be 7.5 tokens per million words.

2.4 The Corpus of Late Modern English Texts, extended version

The historical data for this thesis comes from the extended version of the Corpus of Late Modern English Texts, hereafter *CLMETEV*, where EV denotes the extended version of the corpus. The corpus was compiled by Hendrik De Smet, University of Leuven. He was motivated to compile the corpus because the Late Modern English period had, in his opinion, previously been neglected, and he wanted to take advantage of the Internet as a source for data (De Smet 2005, 69). The texts for the extended version of the corpus are from the Project Gutenberg, the Oxford Text Archive, and

the Victorian Women Project. The corpus covers the years 1710-1920, which are then divided into three 70-year periods: the first from 1710 to 1780, the second from 1780 to 1850, and the third from 1850 to 1920 (De Smet 2005, 70).

The *CLMETEV* was chosen as the diachronic corpus for this thesis because its size makes it an excellent basis for diachronic study. In total, the extended version of the corpus is 14.9 million words: the first sub-period is 3 million words, the second 5.8 million words, and the third 6.1 million words. The sub-periods of the corpus are relatively large compared to some other corpora, and thus it can be expected that *boast*, which is not the most common of verbs, and its complements appear in the data.

2.5 The British National Corpus

The British National Corpus (*BNC*) was chosen as the source for material for the investigation of present-day language use. The corpus contains approximately 100 million words of both written and spoken language from a wide range of sources, with the purpose of representing a wide cross-section of British English from the late 20th century (NatCorp). The written part contains 90% of the corpus with material from regional and national newspapers, journals and periodicals, academic books and popular fiction et cetera, and the spoken part consists of 10% of the corpus with samples from unscripted informal conversations, radio shows, business and government meetings, and so on (*ibid.*).

The *BNC* was chosen as the source for present-day material because of its large size but also because it is possible to restrict the range of texts so that only certain types of texts are returned. This function was especially useful as the aim was to find similar source texts as in the diachronic data, so that the results are not skewed due to different types of source texts. The *CLMETEV* comprises literary texts and for that reason Imaginative Prose was chosen as the domain of the

written texts in the *BNC*. Lastly, the *BNC* is a tagged corpus which expedites the investigation and compiling of the data as the number of irrelevant tokens is significantly lower.

It is possible to question how well the *BNC* represents present-day language use as all the texts included are (at the time of writing this) at least 20 years old. Despite this fact, it is nevertheless believed that the *BNC* is a suitable choice as a representative of modern English for this study. Because this thesis does not investigate the newest lexical innovations such as the verb *to google* or the noun *blog*, but the grammar of a verb that has been a part of the English language for a long time, it is unlikely that radical changes have happened in the last 20 years (Berglund Prytz 2008, 45).

3. On the complementation of words

The third chapter deals with the complementation of words. First, the central theories of this thesis are introduced: valency theory, theta theory, and the concepts of ‘control’ and ‘NP movement’.

Then a distinction is made between the two main concepts of *complement* and *adjunct*. Thirdly, a section on complementation patterns introduces the matter at hand.

3.1 Valency theory and complementation

Linguists agree that the VP is the central element of a clause. In some languages, the VP is, in fact, the only element needed to form a grammatical sentence. Finnish is one example where it is possible to say:

(1) Sataa. /It is raining.

In English, the subject is needed, as well, to make the sentence grammatical. In example (1) the VP consists of two parts, but the fact remains that the speakers of the English language intuitively know that the VP governs many aspects of the sentence. This governing is known as valency, and it “is in principle concerned with relationships between the verbal predicate and the other elements making up a predication” (Somers 1984, 508). Herbst et al. (2004, vii) describe this relationship fittingly: “[l]ike atoms, words tend not to occur in isolation but to combine with other words to form larger units: the number and type of other elements with which a word can occur is a very important part of its grammar”. These other elements are called *complements* and *adjuncts*. To explain them briefly, it can be said that *complements* are those elements that the predicate needs for the sentence to be grammatical and are dependent on the valency of a verb, and *adjuncts*, on the other hand, are elements that add something to the meaning of the sentence as a whole but are completely optional to the predicate (Herbst 2004, xxiv). This explanation is not complete, and the distinction between *complements* and *adjuncts* is explored further in section 3.4.

The concept of valency looks at the matter from the perspective of the predicate, but there is also a concept that gives the opposite perspective: licensing. Huddleston & Pullum (2002, 219-220)

state that “[t]he most important property of complements in clause structure is that they require the presence of an appropriate verb that **licences** them.” Verbs are subcategorised into different groups of verbs, depending on whether they are intransitive, monotransitive etc., as not all possible complement types are feasible with one verb (*ibid.*). To give the reader examples of licensing, the following sentences are taken from Huddleston & Pullum (*ibid.*):

- | | |
|---|-------------------------------------|
| (2) 1. She <i>mentioned</i> the letter. | 2. *She <i>alluded</i> the letter. |
| (3) 1. She <i>thought</i> him unreliable. | 2. *She <i>said</i> him unreliable. |

In (2), the verb *mention* is monotransitive and licences direct objects. The verb *allude*, on the other hand, is intransitive and licences only indirect objects. In (3), the verb *think* licences complex-transitive complements, whereas the verb *say* often licences different types of sentential complements.

There remains one thing that should still be mentioned concerning what is considered to be a complement of a verb. Somers (1984, 508) writes that “the *valency* of a given verb is the number of complements it governs”, and Huddleston & Pullum (2002, 219) give examples of mono-, bi-, tri-, and even quadrivalent verbs. This is the traditional valency theory perspective on the complements of a verb where the subject of the sentence is also considered to be one complement of the verb. Thus a monovalent verb has one complement, the subject. However, many linguists who study complementation do not consider the subject to be a complement of the verb. The reason for this is that in English the subject is a necessary part of the sentence, and it has to be always present (Haegeman 1994, 68). Furthermore, it is in some cases only a dummy subject. As the verb does not determine the subject in the same way that it determines what kind of complements are possible, the subject is not regarded as a complement of the verb. Moreover, while subjects are worth studying, the aim of this study is to find how the complements of the verb have changed, and thus the focus will mostly be concentrated on the complements of the verb *boast*.

3.2 Theta theory

Valency theory describes one way of defining the elements that are essential to verbs. Another theory is theta theory, which describes these elements as arguments of the verb which have different *theta roles* in the clause. Haegeman offers us an example verb (1994, 49):

(4) Maigret killed Poirot.
kill: verb; 1 2
 NP NP

In the example the verb *kill* has two arguments: Maigret (NP) and Poirot (NP) and we can intuitively tell that their semantic relationship with the verb *kill* is different in each case (*ibid.*).

“[T]hese relations between verbs and their arguments are referred to in terms of *thematic roles* or *theta roles*” and in the example above, the verb *kill* assigns the theta role of AGENT to the subject argument and the theta role of PATIENT the object argument (*ibid.*). To account for different types of sentences, there are more than just these two theta roles. Haegeman (1994, 49-50) describes some generally distinguished types, although at the same time she notes that linguists have not agreed on the number of theta roles or what their labels are:

AGENT/ACTOR: the one who intentionally initiates the action expressed by the predicate.

PATIENT: the person or thing undergoing the action expressed by the predicate.

THEME: the person or thing moved by the action expressed by the predicate.

EXPERIENCER: the entity that experiences some (psychological) state expressed by the predicate.

BENEFACTIVE/BENEFICIARY: the entity that benefits from the action expressed by the predicate.

GOAL: the entity towards which the activity expressed by the predicate is directed.

SOURCE: the entity from which something is moved as a result of the activity expressed by the predicate.

LOCATION: the place in which the action or state expressed by the predicate is situated.

Theta criterion defines the relationship between the argument and the theta role (Haegeman 1994, 54):

Each argument is assigned one and only one theta role and each theta role is assigned to one and only one argument.

The theta criterion is a good explanation why some sentences are grammatical and why others are not. Haegeman’s examples (1994, 51) illustrate this:

- (5) Maigret killed the burglar.
 (6) *Maigret killed.
 (7) *Maigret killed the burglar the cellar.

Example (5) is grammatical because both argument positions are filled and both arguments have their distinct theta roles. Example (6) is ungrammatical because the object argument is missing and thus the theta role cannot be assigned. Example (7), on the other hand, is ungrammatical because there is an extra NP and, as *kill* only assigns two theta roles, a theta role cannot be assigned to it.

The verb *boast* usually takes two arguments and thus assigns two theta roles. Here are two examples:

- (8) He boasted about his excellent grades.

boast: verb; 1 2
 NP PP

- (9) He boasted that he had won the race.

boast: verb; 1 2
 NP *that*-clause

In both examples, the subject argument is quite clearly assigned the theta role of AGENT, but the theta role of the second argument is not as straightforward. The two possible options are THEME and GOAL but neither is completely satisfactory. THEME is a theta role for something moved by the action of the predicate but in these examples nothing has moved literally or figuratively. GOAL is a theta role for the entity towards which the activity expressed by the predicate is directed but these arguments do not exactly express directionality, either. The verb *boast* highlights Haegeman's statement that theta roles are not clear-cut cases, which is the reason why "instead of specifying the exact type of thematic role for each predicate, we shall often merely list the number of arguments, identifying their roles by numbers rather than by role labels" (Haegeman 1994, 54).

3.3 Control and NP movement

In addition to valency and theta theories, the concepts of control and NP movement are essential to the behaviour of verbs. Verbs do not only differ on the number of the complements they take but how they form grammatical sentences of the elements at their disposal. The basic premise is that

verbs can be divided into two categories: those that are control verbs and those that are NP movement verbs. However, there are also many verbs which are neither control verbs nor NP movement verbs. Example sentences should help to explain the difference between the two structures (examples are taken from Davies and Dubinsky 2004, 3):

(10) Barnett seemed to understand the formula.

(11) Barnett tried to understand the formula.

Example (10) is an NP movement construction where the subject Barnett is only linked to the lower verb *understand*. Its place is before the infinitival marker *to* from which it has been moved to its place in the higher clause. NP movement leaves a trace (t) to mark the original place of the NP and now subject-to-subject raising has taken place.

Example (11) is a subject control construction where the subject of the higher clause is linked to the verbs *try* and *understand*. The link to the lower clause is through *controlling* the subject of the clause. As Haegeman (1994, 68) observes, the subject is an obligatory part of an English clause, so there must be a subject in the lower clause of example (11). Because nothing has been moved, the subject must be there even if we cannot see it (Carnie 2002, 255). This non-overt subject of infinitival clauses is called PRO (Haegeman 1994, 253), and in control structures it is controlled by an NP in the higher clause.

From the previous discussion we can spot two terms, which describe the structures in question: subject-to-subject raising and subject control. At this point, the basic premise becomes slightly more complex as there are actually two types of NP movement structures and two types of control structures: subject-to-subject raising and subject-to-object raising, and subject and object control. Examples illustrate the difference between the two raising constructions (from Carnie 2002, 264-267):

(12) i. Jean_i is likely [_{t_i} to leave]. ii. I want Jean_i [_{t_i} to dance].

In examples (12i) and (12ii) it can be seen how NP movement leaves behind a trace that shows where the moved NP resided originally. Example (12i) illustrates subject-to-subject raising, and

example (12ii) shows subject-to-object raising. In subject-to-object raising, the subject of the lower clause moves to take the place of the object of the higher clause. Here Jean is linked only to the verb *dance*, and it has no connection to the verb of the higher clause.

The following examples show the differences between subject and object control structures (examples from Carnie 2002, 267):

- (13) i. Jean_i is reluctant [PRO_i to leave]. ii. Jean persuaded Robert_i [PRO_i to leave].

Example (13i) shows how the subject of the higher clause controls the co-referential PRO of the lower clause, and example (13ii) reveals the co-referential connection between the object of the higher clause and PRO in the lower clause.

There are several ways how to recognise and differentiate between control and NP movement structures. In section 3.2, theta roles were introduced, which are one way of distinguishing the two structures. Davies and Dubinsky (2004, 4-5) note that “raising and control structures have distinct thematic structures”. The discussion above has already introduced the distinction, at least regarding intransitive verbs. In example (10), Barnett has is linked only to the verb *understand* – is assigned a theta role by the verb – but the verb *seem* does not assign a theta role for Barnett. On the other hand, in example (11) Barnett has been assigned a theta role by both verbs in the sentence. The conclusion is that intransitive raising structures assign only one theta role, and intransitive control structures assign two of them (*ibid.*). “Transitive raising and control verbs exhibit a similar difference, with the difference residing in the postverbal argument” (Davies and Dubinsky 2004, 5). Transitive control verbs assign three theta roles (which are usually): AGENT, PATIENT and THEME, and transitive raising verbs assign only two theta roles AGENT and THEME.

Control and NP movement/raising structures behave differently when the complement clause is passivized. “For raising predicates such as *seem*, a sentence with a passive complement is synonymous with the same sentence with an active complement” (Davies and Dubinsky 2004, 5):

- (14) i. Barnett seemed to have read the book.
ii. The book seemed to have been read by Barnett.

Control verbs do not behave in the same way and often the passivized sentence is not synonymous with the active sentence or it is not grammatical at all (*ibid.*):

- (15) i. Barnett tried to read the book. ii. *The book tried to be read by Barnett.

These example verbs are intransitive but transitive verbs behave in a similar way, and passivizing sentences seems to be good diagnostic tool for identifying control and NP movement structures (*ibid.*).

Above, it was discussed how raising verbs do not assign a theta role to the NP in the subject argument position, and how control verbs do assign a role to that position. This distinction brings about an interesting phenomenon concerning pleonastic subjects. As Davies and Dubinsky (2004, 7) note “since pleonastic elements are semantically empty, they can be assigned no thematic role”. Because control verbs assign a theta role to the subject position, meteorological *it* and existential *there* cannot be the subject in a control structure and only raising verbs produce grammatical sentences (*ibid.*).

The last diagnostic tool to be presented here is the behaviour of idiomatic expressions in sentences with raising and control verbs. Here is an example (from Davies and Dubinsky 2004, 8):

- (16) The cat is out of the bag.

This sentence has two interpretations: if it is literally interpreted, a particular cat is not in a particular container, or if figuratively interpreted, a secret is no longer a secret. As can be seen from the following examples, this idiomatic meaning of *the cat* is only possible with raising verbs (examples from *ibid.*):

- (17) i. The cat seemed to be out of the bag. ii. ?The cat tried to be out of the bag.

Now that we know what control and raising structures are and how to distinguish them, let us look at the verb *boast*.

- (18) He boasted about winning the race.

Applying the presented methods to example (18), it can be deduced that the verb *boast* assigns two theta roles and especially that one of them is assigned to the subject position argument. Hence the conclusion is that *boast* is a control verb. Nonetheless, to make sure that the conclusion is correct, further tests are applied to confirm this conclusion. Passivizing the sentence leads to an ungrammatical sentence:

(19) *The book boasted about being read.

Pleonastic subjects result in some very odd sentences:

(20) *It boasted about raining.

(21) *There boasted about being a gnome in the garden.

Finally, idiomatic expressions, if conceivable at all, do not retain their figurative meaning if embedded in a sentence containing *boast*:

(22) ?The cat boasted about being out of the bag.

These tests show that *boast* is without a doubt a subject control verb.

3.4 The distinction between complement and adjunct

In the previous section, it was noted that *complements* are those elements that are governed by the verb, and that *adjuncts* are completely optional elements and are not dependent on the verb at all. At this point the situation appears to be straightforward, but this is not always the case. There are two kinds of complements: obligatory complements without which the sentence would be ungrammatical, and other, optional complements which are closely linked with the verb but without which the sentence would still remain grammatical (Somers 1984, 508). The problem then is how to differentiate between optional complements and optional adjuncts? Somers (*ibid.*) reminds the reader that “all elements are assigned complement or adjunct status [with respect to some verb]”. By this he means that although prepositional and adverbial phrases are often adjuncts, one cannot

say that a prepositional phrase is an adjunct without first looking at the verb as well. His examples are the following:

- (23) a. He looked for his friend *in London*.
 b. James lives *in London*.

In (23a), the phrase in italics is an adjunct: the meaning of the sentence does not change if one leaves out the phrase *in London* as it only adds a clarification regarding where the action takes place. In (23b), the PP is a complement because the meaning changes. If one only says: ‘James lives’, automatically an image of person in hospital bed or a car accident is evoked. The phrase in (23b), on the other hand, could be said when someone has recently moved and someone inquires after him (Somers 1984, 508).

It is not always easy to decide whether a phrase is a complement or an adjunct. Fortunately, some tests have been developed to help in this decision.

One of the tests is called the *elimination test*. This test is used for finding out if an element is a complement or an adjunct, and is basically what was done to and explained concerning example (23) above. Another name for this test is the *extraction test* (Brinker in Somers 1984, 510). If one wants to find a difference between the two, one may note that they are different regarding the point-of-view they take have on the matter. The elimination test looks at the sentence to see if it remains grammatical, and the extraction test is used to find out if the meaning of the sentence changes if something is extracted out of it. Somers (*ibid.*) criticises these tests for not distinguishing between optional complements and adjuncts, as they only reveal obligatory complements.

Another test is the *backformation test* (Helbig and Schenkel in Somers 1984, 511). The idea in this test is to place the element in question in an embedded sentence, and if this can be done without the sentence being ungrammatical and without changing the basic meaning, the element that has been back-formed is an adjunct (*ibid.*). One of Helbig and Schenkel’s examples in Somers (*ibid.*) is this:

- (24) a. He visited her *in Berlin*.

b. He visited her when he/she was staying *in Berlin*.

Somers (*ibid.*) criticises this test for being complicated, as it is difficult to choose the appropriate form for the backformation, and he also notes that nonlocative adverbials are difficult or even impossible to back-form. It has to be noted that for those adjuncts that the backformation is possible, it is a relatively useful tool and it is easy to see that they are in fact adjuncts. It would have to be kept in mind then that the backformation test should be only used for locative adverbials.

A third test is Brinker's *substitution test* (in Somers 1984, 512). This test operates on the idea that predicates which have similar meanings might also have comparable valency patterns (*ibid.*).

Somers gives the following examples:

- (25) a. He sees a friend in her.
 b. He sees a friend.
 (26) a. He considers her a friend.
 b. *He considers a friend.

In (25b), the PP has been eliminated but this does not yet reveal anything because the meaning changes. In (26), the verb *see* has been substituted with the verb *consider*, and the complements change accordingly. To check if *her* in (26a) is in fact a complement, it is eliminated to form (26b). The sentence in (26b) is ungrammatical as *her* is a complement, and thus it can be inferred that *in her* in sentence (25a) is a complement as well. Another substitution test quoted in Somers (1984, 512) is Andersen's test that plays on the idea that not all verbs which have similar meanings have similar complementation patterns. If substituting a verb with a similar meaning results in an ungrammatical sentence, the element is a complement. Of course, some verbs have similar complementation patterns and often verbs have different meanings depending on their complement patterns. Thus neither of these tests is without their faults.

The last test to be presented here is the *do so* test. Somers (1984, 516) quotes several famous linguists who have noted that *do* is a general proform for verbs, and that the phrase *do so* is a proform for the verb phrase. Lakoff and Ross (1966, II-5) have observed on this that "elements that may occur after *do so* are outside of the verb-phrase (are not constituents of VP), and elements that

cannot occur are inside the verb phrase”. Somers (1984, 517) formulates the *do so* test in the following way: “while a *do so* phrase can be the proform of anything up to the entire predication (less its subject), the MINIMUM element that can be substituted is the predicate PLUS ANY COMPLEMENTS”. Here are Somers’ examples:

- (27) a. Harry went to Reading and Bev went to Reading.
 b. Harry went to Reading and Bev did so too.
 (28) a. * I live *in Manchester* and Jock does so *in Salford*.
 b. * Harold drives *a Volkswagen* and Rod does so *a Lancia*.

From these examples it can be seen that the PP *to Reading* is a complement of the verb *go* because the complement PP cannot occur alongside the proform. This test has its own faults, too. Lakoff and Ross (1966, II-5) have observed that the substitution of the verb phrase by a *do so* phrase is impossible with stative verbs. On the positive side, this test is easier to use than the backformation test, and it is clearer than the substitution test where a second full verb may confuse things even more.

Although none of these tests is conclusive, it is believed that they will assist in deciding which elements are complements and which adjuncts in the corpora data which will be examined later in the study.

3.5 The categories of complements

This section briefly introduces some basic types of complements and their characteristics.

Complements are traditionally divided into two groups: sentential and non-sentential complements.

Sentential complements will be taken to denote the syntactic form of the verb in the complement sentence (infinitive, gerund, participle, finite verb forms) plus the particles (*to, for...to*) if any are present (Dirven 1989, 113). However, instead of using the terms *gerund* and *participle*, this study will adopt the use of the term *-ing* form. Huddleston and Pullum (2002, 1222) have written that “there is no difference of form, function, or interpretation” between what is generally said to be *gerund* and *participle*, and they have chosen to use the term *gerund-participial* to cover all different

cases. This term is long and very awkward, and that is why other options were investigated. Quirk et al. (1985, 96-98) use the term *-ing participle* for all cases of *gerunds* and *participles*, and in this study, this term has been further reduced to *-ing* form.

Some basic types of non-sentential complements are noun phrases, adverbial phrases and prepositional phrases, and these basic types often combine to make longer and more complex non-sentential complements.

3.5.1 Noun phrase as complement

Huddleston and Pullum (2002, 224) write that for the most part noun phrases (NPs) are complements of the verbal predicate, but it is also possible that a NP is an adjunct. NP adjuncts usually describe time or manner. The examples are from Huddleston and Pullum (*ibid.*):

- (29) a. They saw her *this morning/last week*. [time adjunct]
 b. You should hold them *this way*. [manner adjunct]

A simple extraction test suffices here to reveal that these italicized NPs are adjuncts as the meaning does not change. The underlined NPs on the other hand are complements and very typical ones at that: they describe the direct object of the sentence.

3.5.2 Adverbial phrase as complement

“The characteristic function of [adverbial phrases] (AdvPs) is to modify the verb, [and] [i]n general they are adjuncts (Huddleston and Pullum 2002, 224)”. Despite this AdvPs are sometimes complements of a verb, as they do not always function in their most characteristic way. Examples from Huddleston and Pullum (*ibid.*):

- (30) a. She writes *exceptionally clearly*. [adjunct]
 b. They treat us *quite abominably*. [complement]

Here it is good to remember Somers’ (1984, 508) observation that complement or adjunct status is assigned with respect to some verb, and that according to Herbst et al. “they are either obligatory

elements of the valency pattern of the verb...or that the semantic bonds with the verb are so strong that it seems appropriate to consider them as a part of the valency of the verb (2004, xxviii)".

3.5.3 Prepositional phrase as complement

Prepositional phrases may consist of a preposition and NP, or only a preposition. Both of these types can be both complements and adjuncts of a verbal predicate (Huddleston and Pullum 2002, 224). To give the reader an idea of PPs without the NP as complements and adjuncts of a verb, as they are less common than those where the PP is complemented by a NP, here are Huddleston and Pullum's (*ibid.*) examples:

- | | |
|--|--------------|
| (31) a. We slept <i>downstairs</i> . | [adjunct] |
| b. We took the bed <i>downstairs</i> . | [complement] |

If one wants to check that they are indeed properly identified, here the *do so* test is an excellent choice:

- | |
|--|
| (32) a. We slept downstairs and they did so upstairs. |
| b. *We took the bed downstairs and they did so upstairs. |

Sentence (32a) sounds completely natural when the PP follows the *do so* proform, and this means that *upstairs* is an adjunct. In (32b) on the other hand, the PP is a complement because the sentence is not grammatical if the PP follows the *do so* proform.

The problem, however, with these examples of *downstairs* as a preposition is that *downstairs* is not considered a preposition by everyone. In fact, most linguists would say that *downstairs* is an adverb, and proof of this may be found, for example, in dictionaries such as the *Collins COBUILD* and the *MacMillan English Dictionary for Advanced Learners*. In both of these dictionaries, *downstairs* is shown to be an adverb. Nevertheless, for the purposes of this thesis, the examples above are suitable illustrations.

3.5.4 *To*-infinitive as complement

Moving on to sentential complements, it is appropriate to quote Dirven (1989, 113) on the use of the correct sentential complement: “[it] is mainly a question of matching the semantics of each [sentential complement] with the semantics of the governing verb... in the main clause and with the type of verb or other elements in the complement”. This means that sentential complements often have certain prototypical meanings of their own, and in combination with the predicate verb this prototypical meaning is often reinforced.

To-infinitives are one of the most basic types of sentential complements. According to Dirven (1989, 116) the *to*-infinitive “denotes a single occurrence of an event or a state, or a series of single occasions”. Many linguists have stated that *to*-infinitives express some kind of potentiality of events, but Dirven (1989, 121) and Duffley (2000, 234) both note that this is not the case. Their explanations for this differ, however. Dirven (*ibid.*) explains that the potentiality of events results from the meaning of the predicate verb instead of the complement, and he illustrates this with examples of different types of verbs, some of which indeed denote potentiality, and some of which denote that the action of the complement is realised. Here are Dirven’s examples:

- (33) I allowed to boys to smoke, but they refused. (=They did not make use of the permission)
 (34) I obliged them to leave the room. (= implies that they left the room)

Duffley (*ibid.*) on the other hand has noted the *to*-infinitive as being “forward-looking” element, where the matrix verb of the higher sentence is the before-position and the verb of the lower sentence the after-position. The potentiality or realisation of the event once again depends on the matrix verb in question. In his article Smith (2009, 362) first reminds the reader that the roots of the *to*-infinitive lie in the preposition *to*, and later proposes his own theory that “all senses of infinitival *to* are meaningful because they involve the idea that the subordinate process is conceptually distant in some respect from the state or process designated by the matrix predicates and the participant in the matrix process” (Smith 2009, 375). The idea of conceptual distance includes the meaning of the preposition *to* that the source and the goal of the preposition are somehow distant from each other,

and conceptual distance seems to explain nicely many aspects of the use of *to*-infinitive that have to date been unsatisfactorily explained, such as the potentiality/realised aspect and futurity.

3.5.5 *-ing* form as complement

Dirven's (1989, 125) analysis of *-ing* forms begins with the general description that *-ing* forms denote non-individualised phenomena or processes. Duffley (2000, 228) compares *-ing* forms with noun direct objects, and writes that the *-ing* form is indifferent to temporality and it can express something that is future, simultaneous, or before the event expressed by the matrix verb. "Any temporal relation between the events expressed by the *-ing* and the main verb is simply a logical implication based on the latter's lexical meaning" (*ibid.*). Smith (2009, 381) does not agree with this explanation and his own theory states that the *-ing* form is a general marker of conceptual overlap. According to Smith (*ibid.*), *-ing* form is polysemous in meaning and all senses of the *-ing* form evoke a type of overlap, the nature of which depends on the matrix verb. By overlap Smith (2009, 377) means that the matrix verb is semantically compatible with the sense of the *-ing* form.

3.5.6 *That*-clause as complement

Smith (2009, 362), Dirven (1989, 131) and other linguists agree that *that*-clauses denote intellectual processes of various kinds. Dirven (*ibid.*) writes that typically *that* occurs with verbs of cognition such as *know*, verbs of communication such as *say*, and aspectual verbs such as *seem*, and there is some degree of certainty of the information (Dirven 1989, 134).

3.5.7 *Wh*-clause as complement

"*Wh*-[clauses] can occur in finite clause ... or in a construction with a *to*-infinitive", and they are often used with verbs of communication or with verbs of cognition (Dirven 1989, 136). In a sentence containing a *wh*-complement, all other elements are familiar to the participants and the missing variables are indicated by the *wh*-clause (*ibid.*).

4. Issues influencing the complementation of verbs

This chapter considers some factors which may have influence on the complementation of the verb *boast*.

4.1 The Great Complement Shift

“Over the past few centuries, English has experienced a massive restructuring of its system of sentential complementation, which may be referred to as the Great Complement Shift”

(Rohdenburg 2006, 143). The biggest change is the emergence of a new sentential complement, the *-ing* form, and its gradual spread in the complementation of many an English verb, so that it is nowadays often more popular than the other non-finite option, the *to*-infinitive, and the finite sentential complement *that* (*ibid.*). The spread of this new sentential complement and the over-all development of the sentential complementation system has been the focus of many linguists, who have concentrated particularly on investigating the two non-finite sentential complements as they are or have been in competition with each other. What makes *-ing* form special is that it is unique among languages in Europe; no other European language has two non-finite sentential structures, and the rivalry between the two structures is interesting for linguists (Vosberg 2009, 212).

4.2 The Complexity Principle

The Complexity Principle as formulated by Rohdenburg (1996, 151):

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.

The Complexity Principle gives an explanation for some complement choices – certain factors affect the complexity of the sentence, making it harder for the hearer or reader to understand the message, and in these circumstances the use of a more explicit complement will decrease the processing load of the message (Rohdenburg 1999, 101). These complexity factors include the following: discontinuous constructions of various kinds, passive constructions, and the length of the

subjects, objects, and subordinate clauses (Rohdenburg 1996, 149). The Complexity Principle has a considerable influence in the complementation of words, and so it is not a surprise that it also influences linguistic change. Some verbs retain rarely used complements as possible choices because complexity factors delay the on-going change to a less explicit option (Rohdenburg 2006, 148).

4.3 Insertions

Discontinuous constructions, or insertions, are one type of complexity factor, which are “due to material inserted between the superordinate and the dependent clause, or between the matrix verb and the subject of the finite complement” (Rohdenburg 2003b, 210). Here is an example from Rohdenburg (2003b, 211):

(1) 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. (S. Richardson *Clarissa*, 1748)

This eight-word long insertion is more acceptable and clear because the explicit *that*-clause follows it, if *that I saw* was replaced with *seeing* the sentence would be harder to process. The length of the insertion does matter: short insertions, such as the adverb *ever*, are much easier to process than longer insertions but it is possible that short insertions, too, cause difficulties in understanding the message (Rohdenburg 2003b, 210).

4.4 Extractions

Another type of complexity factor is called extraction, which is the relationship between an element moved to the left and the gap that it leaves behind in its original position (Postal 1994, 159):

(2) Who_i did they nominate t_i to be director?

In example (2), the extracted element *who* has left behind a trace *t* in the position it takes in a normal word order. This relationship is also called a filler-gap dependency and they are difficult to

process, which is the reason why extractions are considered to cause cognitively complex environments (Vosberg 2003a, 307).

There is an extraction principle, formulated by Vosberg (2003a, 308), which explains which complements are usually chosen in extraction contexts. This principle can be considered a rewording of the Complexity Principle that works in one type of complexity environment.

(3) *Extraction Principle*

In the case of infinitival or gerundial complement options, the infinitive will tend to be favoured in environments where a complement of the subordinate clause is extracted from its original position and crosses clause boundaries.

Two things arise from the extraction principle which are worth emphasising: the extracted element is always a complement of the subordinate clause and the moved element must cross clause boundaries. However, Rudanko (2006, 43) has noted that sometimes the extracted element is in fact an adjunct, which widens the possible range of extractions.

There are four major categories of extractions (examples from Vosberg 2003a, 307):

- *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]], ... (John Dauncey *The English Love*, 1622)
- *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] ... (Philip Ayres *The Revengeful Mistress*, 1696)
- *Topicalization*: ...even her acquaintance with the Belfield's_i she remembered [not ever **mentioning** t_i], ... (Fanny Burney *Cecilia*, 1782)
- *Interrogation*: Now, how many_i do you remember [**to have heard named** t_i]? (Sabine Baring-Gould *In the Roar of the Sea*, 1892)

Of these four, especially relativization and interrogation are relatively common, so it is not very remarkable that extractions should have an influence on language change.

4.5 Horror aequi

The third extra-semantic factor influencing the complementation of words is the *horror aequi* effect:

The *horror aequi* principle involves the widespread (and presumably universal) tendency to avoid the use of formally (near-) identical and (near-) adjacent (non-coordinate) grammatical elements or structures. (Rohdenburg 2003, 236)

This means that a succession of two non-finite verb phrases almost always involves the *to*-infinitive + *V-ing* pattern or, the other way round, the *V-ing* + *to*-infinitive pattern (Fanego 1996, 59). Above, insertions and extractions were considered as complexity factors which delay the on-going linguistic change, but *horror aequi* can also accelerate it, as in the case of *-ing* forms that follow *to*-infinitive matrix verbs (Vosberg 2003a, 305).

4.6 Concerning the prepositions *of* and *about*

With many verbs that express an act of speaking, the prepositions *of* and *about* are used in the sense of ‘concerning’, ‘on the subject of’ (Brorström 1963, 11). The verb *boast* also falls into this category, and in present-day English, both prepositions can be observed in connection with the verb. The question then arises: how do the speakers of English decide between two prepositions that seem to be in free variation? Brorström (*ibid.*) notes that often *about* is used when “one wishes to go into *details* or to dwell on *externals*”, and *of* is used when “one wishes to state a *fact*”. Despite this, later Brorström (1963, 319) observes that in present-day English *about* is also often used when stating a fact, especially in colloquial styles, and no clear difference between the two prepositions can be drawn based on semantic factors.

In his book, Brorström (1963, 11) draws attention to the importance of rhythmical and stylistic factors in connection with the choice between the two prepositional complements, and these factors shall be taken into account also in this thesis when surveying the appearance and probable spread of the preposition *about*. Although Brorström’s work concerns particularly the verbs *say*, *tell*, *talk*, and *speak*, it is believed that the verb *boast*, which also denotes an act of speaking, behaves in similar ways to the above-mentioned verbs and that Brorström’s conclusions can be used as a basis for finding differences between the uses of the prepositions *of* and *about* in

connection with the verb *boast*. Somers' (1984, 512) statement in his article concurs with this idea: "verbal predicates having a similar MEANING might be expected to have comparable valency patterns" (emphasis in the original).

5. *Boast* in dictionaries and grammars

In this chapter, I will present information concerning the senses and the complementation patterns of *boast* found in some dictionaries and grammars.

5.1 The *OED*

The *Oxford English Dictionary* (hereafter *OED*) gives the widest range of information on the senses and the complementation of the verb *boast* and, thus, is the most important of the works that will be presented in chapter 5.

The *OED* has seven senses for the verb *boast* which are shown in Table 1 below. The first two, with the meaning of ‘to threaten’, are now obsolete, although the most recent example of sense 2 coincides with the first part of the *CLMETEV*. Thus it is possible that, in the older data, some examples of this use may be found. Tentatively, *OED* senses 3, 4, and 5 are combined, which have the meaning “to speak ostentatiously or brag”, and senses 6 and 7 that have the meaning “to have to show”. In all of these five senses, the subject of the sentence is proud of something and wants others to know of it as well, to the point that others may feel annoyed by it. Senses 3, 4, and 5 are here more to differentiate between contrasting uses of the verb rather than to show actual differences in meaning. In the opinion of the author, senses 6 and 7 could be combined to just one sense as they mean practically the same and there are no differences in the complementation patterns.

The complementation patterns of *boast* given in the *OED* are:

- *boast* + *to*-infinitive
- *boast* + NP
- *boast* + *of* + NP
- *boast* + *in* + NP
- *boast* + reflexive
- *boast* + *that*-clause
- *boast* + *poss* + *-ing*

Table 1: The senses and the complementation patterns of *boast* in the *OED*

sense	example	pattern
†1. <i>intr.</i> To utter a threat, to threaten. Obs.	She boasted to marry the Arch-duke Charles. (Melville, <i>Own Life</i> 1610)	<i>boast + to-infinitive</i>
† 2. <i>trans.</i> To threaten; to bully, terrify	Some others near him boasted him for it. (Calderwood, <i>Letters & Journals</i> 1756)	<i>boast + NP</i>
3. <i>intr.</i> To speak vaingloriously, extol oneself; to vaunt, brag; to brag <i>of, about, glory in.</i>	Nor should that Nation boast it so with vs. (Shakespeare, <i>Henry VI, Pt.1</i> 1616) To boast of the honours enjoyed by their remote ancestors. (Brougham, <i>British Constitution</i> 1844) In God we boast all day long. (Bible, 1611)	<i>boast + NP</i> <i>boast + of + NP</i> <i>boast + in + NP</i>
4. <i>refl.</i> in same sense.	The descendants of the victors at Senlac boasted themselves to be Englishmen. (Green, <i>A Short History of the English People</i> 1876)	<i>boast + refl.+ to-infinitive</i>
5. <i>trans.</i> To extol; to speak of with pride or ostentation; to brag of, vaunt. a. with <i>obj. clause</i> , usually with <i>that</i> . b. with <i>simple object</i> .	Voltaire boasted that if he shook his wig, the powder flew over the whole of the tiny republic. (Morley, <i>Rousseau</i> 1873) He boasted his having vanquished the enemy. (tr. Rollin, <i>Ancient History</i> 1738) Who boast'st release from Hell.(Milton, <i>Paradise Regain'd</i> 1671)	<i>boast + that</i> <i>boast + poss +-ing</i> <i>boast + NP</i>
6. To display vaingloriously or proudly. <i>arch.</i>	In vain, ye flowers, you boast your vernal bloom. (Jones, <i>Palace of Fortune</i> 1777)	<i>boast + NP</i>
7. <i>figurative.</i> To possess as a thing to be proud of, to have to show.	He boasts but a pouch of empty cobwebs. (Ellis tr. Catullus, <i>Poems xiii</i> 1871)	<i>boast + NP</i>

In addition to these complements, the *OED* mentions the preposition *about* as a complement of the verb *boast* but it does not give any examples of its use other than contrasting it with the preposition *of*.

Looking at the complementation patterns given for sense 3, the reader may notice that, although the sense is marked to be ‘intransitive’, the *OED* gives an example sentence from Shakespeare where the complementation pattern is, in fact, transitive: *boast* + NP. It is a curious interpretation in such a prestigious dictionary, and it would be interesting to know the reasoning behind the choice, if there is one.

5.2 Collins COBUILD Advanced Learner’s English Dictionary

Collins COBUILD Advanced Learner’s English Dictionary (COBUILD) gives two meanings for the verb *boast*:

1. If someone *boasts*... they talk about it very proudly, in a way that other people may find irritating or offensive.
2. If someone or something can *boast* a particular achievement or possession, they have achieved or possess that thing.

Sense 1 here corresponds to senses 3-5 in the *OED*, and sense 2 corresponds to the *OED* senses 6 and 7. Furthermore, *COBUILD* adds that the use of the verb *boast* carries a sense of disapproval.

The complementation patterns found in *COBUILD* differ greatly from those in the *OED*. As stated in *COBUILD*, *boast* can be followed by:

- *that*-clauses
- *about* + NP
- *of* + *-ing*
- zero complement
- NP
- a quotation

Only *that*-clauses and NP complements were mentioned by the *OED*. However, according to *COBUILD*, NP complement appears with *COBUILD* sense 2 only whereas the *OED* states that NP complements are found with other *OED* senses, too.

5.3 Macmillan English Dictionary for Advanced Learners

Like *COBUILD*, *Macmillan English Dictionary for Advanced Learners (Macmillan)* has two senses for the verb *boast*:

1. to proudly tell other people about what you or someone connected with you has done or can do, or about something you won, especially in order to make them admire you: brag.
2. to have something good, often an attractive feature that other people admire.

As with *COBUILD*, sense 1 in *Macmillan* is similar to senses 3-5 in the *OED*, and sense 2 is similar to senses 6 and 7.

Macmillan presents the following complementation patterns for *boast*:

- *of* + NP
- *about* + NP
- *that*-clause
- NP

There is a rating system for words in *Macmillan* which highlight the 7,500 most common words in English. These so-called “red words” have three, two, or one star(s) next to them depending on their frequency, and three stars mark the 2,500 most common words. The red words have been chosen on the basis of their frequency and their importance to learners of English, as *Macmillan* is a dictionary for advanced learners, and they are derived from the World English Corpus which contains 200,000,000 words of English. In this rating system, the verb *boast* has been given one star, which means that it is fairly common word in the English language.

5.4 *Boast* in grammars

Both the *Cambridge Grammar of the English Language* by Huddleston and Pullum (2002, 294) and *Longman Grammar of Spoken and Written English* by Biber et al. (1999, 664) agree that *that*-clauses are one complement type of the verb *boast*. Moreover, Huddleston and Pullum (2002, 294) note that both the verb *boast* and the noun *boast* take *that*-clauses as complements and lists several other noun/verb combinations that behave like this, although this is not always the case.

Huddleston and Pullum attest that *boast* can be found in a structure where “the verb selects two prepositions: *boast to...about* (2002, 279)”. The prepositional phrase which begins with *to* elaborates who is the recipient of the boast. Biber et al. (1999, 664) also present a structure which has two parts: *boast + to NP + that-clause*, and again, the prepositional phrase tells who is the intended recipient of the boast. There is an interesting observation in Huddleston and Pullum (2002, 959) regarding the prepositional phrase patterns that was just introduced: the first element in these two-part structures is, according to Huddleston and Pullum, an optional internal complement “whose NP indicates the recipient of some act of communication”.

(1) He boasted (to me) that he is rich.

(2) He boasted (to me) about being rich.

It can be seen from these examples that the sentence is perfectly grammatical without the optional PP as the first internal complement. It is perhaps the case that the optional PP is mainly used when knowing the recipient of the boast is somehow relevant to the message. For example, if we look at the sentences (1) and (2), the situation could be that the “me” is someone very poor who is barely earning enough to live, and she is offended more than the average person when the “he” boasts about the houses, the cars, and all the money he has. Or, it could be that the recipient is richer herself than the boaster who is trying to impress her with all his money and does not quite succeed.

Jespersen (1927, 259-260) writes about the meaning of the preposition *of*: “[i]n some cases, where we find a verb both with and without *of*, the preposition has the meaning ‘concerning’”.

Above in section 4.5, Brorström (1963) concurs with this statement. Jespersen (*ibid.*) also writes about the complementation of *boast*, and notes that *boast* “now generally has *of* (or *about*) or a content clause, formerly also a simple object”, and gives an example of *boast + NP* use:

(3) ...loquacious in *boasting* the triumphs of feelings (Brontë V 359)

In example (3) *boast* has the sense “to speak ostentatiously”, but Jespersen (*ibid.*) comments on the construction and says that in the present-day English, the construction always has the meaning of

“to be proud of possessing”. This differs from the analysis given by the *OED*, where the construction has not been marked as obsolete or archaic when the verb has the meaning “to speak ostentatiously”. It will be interesting to see if Jespersen’s older sense appears in the newer data in the third part of the *CLMETEV* and in the *BNC*.

6. Corpus analysis: the Corpus of Late Modern English Texts, extended version

This chapter explores the diachronic data found in the Corpus of Late Modern English Texts, extended edition. The three parts of the corpus shall be examined from the earliest to the latest part, starting from 1710 and ending in 1920. Each sub-section deals with one part of the *CLMETEV*. Because the *CLMETEV* is not a tagged corpus and the separation of verbs from tokens of nouns and adjectives was done by hand, each sub-section begins with illustrations of those tokens that are not tokens of *boast* as a verb. The statistics of each sub-period are shown in tables, which are divided into sentential and non-sentential complements. The treatment of the complementation patterns does not, however, proceed from sentential to non-sentential complements, as is often the case with similar studies, because, as it will be seen, sentential complementation patterns are relatively rare with the verb *boast*. The complementation patterns will be examined in order from the most common pattern in each sub-period to the rarest, and each pattern will be illustrated with example(s) from the corpus.

6.1 *CLMETEV* 1: 1710-1780

There were altogether 119 hits of the word-forms *boast*, *boasts*, *boasted*, and *boasting* in the first part of the corpus. However, as the *CLMETEV* is not a tagged corpus, these 119 hits included 33 cases where the word was actually a noun or an adjective instead of a verb. Here are some examples of the different word-forms as nouns and adjectives:

- (1) Virtue, I grant you, is an empty *boast*; But shall the dignity of vice be lost? (Pope *An Essay on Man*, 1733-4)
- (2) With equal rapture the good rider surveys the proudest *boasts* of the architect, and those fair buildings with which some unknown name hath adorned the rich clo ... (Fielding *Tom Jones*, 1749)
- (3) "Thou hardened young impostor!" said the Prince, as soon as he saw the youth; "what becomes of thy *boasted* veracity now? (Walpole *The Castle of Otranto*, 1764)

- (4) ... I meet with in my enquiries will make this observation bear the air of an apology rather than of *boasting*. (Hume *Treatise of Human Nature*, 1739-49)

After the 33 nouns and adjectives are discarded, there are 86 cases of the verb *boast* left. Table 2

below presents the complementation patterns found in the first part of the *CLMETEV*.

Table 2: The complementation patterns of *boast* in *CLMETEV* 1

Complement	boast	boasts	boasted	boasting	Total	NF
<i>that</i> -clause	3	2	4	-	9 (10.3%)	3
<i>of</i> + <i>-ing</i>	4	1	-	-	5 (5.7%)	1.67
<i>among</i> + NP + <i>wh</i> -clause	-	-	-	1	1 (1.1%)	0.33
<i>poss</i> + <i>-ing</i>	-	1	-	-	1 (1.1%)	0.33
NP	14	2	1	-	17 (19.5%)	5.67
<i>of</i> + NP	35	4	7	1	47 (54%)	15.6
∅	1	-	2	1	4 (4.6%)	1.33
NP + <i>as</i> + NP	-	1	-	-	1 (1.1%)	0.33
<i>among</i> + NP + <i>of</i> + NP	1	-	-	-	1 (1.1%)	0.33
Total	58 (66.6%)	12 (13.7%)	14 (16.1%)	3 (3.4%)	86 (100%)	29

6.1.1 Complementation patterns of *boast* in *CLMETEV* 1

There were 58 word-forms *boast*, 12 of *boasts*, 14 of *boasted*, and only 3 word-forms of *boasting*.

The most common complement in the first part of the corpus was *of* + NP with 47 hits. This is the only complementation pattern to be found with all four word-forms in the first part of the corpus, and the pattern comprises over half of all tokens. The sense here is of “speaking ostentatiously”.

Here are some example sentences:

- (5) The English have only to *boast* of Spenser and Milton in heroic poetry, who neither of them wanted either genius or learning to h ... (Cibber *The Lives of the Poets*, 1753)

- (6) It is evident, that when any one *boasts* of the antiquity of his family, the subjects of his vanity are not merely the extent of time and n ... (Hume *Treatise of Human Nature*, 1739-40)
- (7) The Walachians still preserve many traces of the Latin language and have *boasted*, in every age, of their Roman descent. (Gibbon *Decline and Fall of the Roman Empire*, 1776)
- (8) And that the Chinese, added my uncle Toby, embarrass us, and all accounts of it, still more, by *boasting* of the invention some hundreds of years even before him... (Sterne *Life and Opinions of Tristram Shandy*, 1759-67)

There were 17 cases where the complement of *boast* was an NP, without any prepositions preceding it. With NP complements, attention should be paid to the sense of the verb *boast*. The verb can either have the *OED* sense 7, “to have to show”, as its meaning:

- (9) Princes and magistrates, it was often repeated, might *boast* an earthly claim to a transitory dominion. (Gibbon *Decline and Fall of the Roman Empire*, 1776)
- (10) and sure the first favourite and generalissimo of a prince, who *boasts* an inclination to civilize his barbarous subjects, will not, without any cause, torture them whom ... (Haywood *The Fortunate Foundlings*, 1744)

Or it can mean “to speak ostentatiously” (sense 5):

- (11) Let no man who can think without compassion on such a scene as this, *boast* his zeal for freedom, his regard for bravery, or his gratitude to those who contribute to the weal ... (Johnson *Parliamentary Debates*, 1740-1)
- (12) ... With assertions equally intrepid, and arguments equally contemptible, has the same person, who *boasted* his expedition, endeavoured to defend the establishment of new regiments, in opposition to the pra ... (Johnson *Parliamentary Debates*, 1740-1)

In the opinion of the author, examples (9) and (10) are clear cases of sense 7. The complement NPs have the feature +inanimate, which seems to be the feature common for all the NPs that complement *boast* when the verb means “to have to show”. Example (11) is not as clear as the previous examples. An attempt was made to find an example where the meaning of the verb is “to speak ostentatiously” but it is not clear which meaning the verb has, especially as the NP complement here also has the feature +inanimate, and is very similar to the complements in (9) and

(10). Example (12) is perhaps a clearer example of sense 5. It is thought that this verb has the meaning “to speak ostentatiously”, although, again, the NP complement has the feature +inanimate.

Another difference between examples (9) and (10), and examples (11) and (12) is the presence of the possessive pronoun as part of the NP complement. It is perhaps the case that when a possessive pronoun follows the verb, *boast* has the meaning “to speak ostentatiously” and when there is no possessive pronoun, the meaning of the verb is “to have to show”. It remains to be seen whether this is the case.

To refer back to Jespersen (1927, 259-260), it seems that in the 18th century the pattern *boast* + NP could still mean “to speak ostentatiously”, but the meaning “to have to show” seemed to be already very popular at that time, as only 5 of the 17 *boast* + NP structures had the meaning “to speak ostentatiously”.

There were 9 examples of *that*-clauses in the first part of the corpus. In all 9 cases *that* was explicitly present and not omitted, as it could have been in some cases.

- (13) I have also observed, that it is an additional subject of vanity, when they can *boast*, that these possessions have been transmitted through a descent composed entirely of males (Sterne *Treatise of Human Nature*, 1739-40)
- (14) Julian, the grandson of Constantius, *boasts* that his family was derived from the warlike Maesians. (Gibbon *Decline and Fall of the Roman Empire*, 1776)
- (15) Let it not be *boasted* that nine millions are paid, when a new debt of seven millions appears to be contracted (Johnson *Parliamentary Debates*, 1740-1)

There were 5 sentences where *boast* was complemented by *of* +-*ing* structure. Four of them appear after the verb-form *boast* and one after the form *boasts*, and no tokens were found with the word-form *boasting*, as expected on the basis of the *horror aequi* principle. Here all five sentences:

- (16) And, what's more rare, a poet shall say grace. Fortune not much of humbling me can *boast*; Though double taxed, how little have I lost? (Pope *An Essay on Man*, 1733-4)
- (17) Horatio thanked him for this information, and told him, that tho' he could not *boast* of being able to deliver himself with an affluence becoming the presence of so great a prince (Haywood *The Fortunate Foundlings*, 1744)

- (18) ... ed themselves with joining with the others, in protesting they knew of no one among them who could *boast* of receiving any greater favours from her than his fellows, but that what she did was instigated ... (Haywood *The Fortunate Foundlings*, 1744)
- (19) ... Charles XII. (though he still wanted the more elegant accomplishments of the son of Philip) might *boast* of having rivalled his valor and magnanimity (Gibbon *Decline and Fall of the Roman Empire*, 1776)
- (20) Voltaire *boasts* in his Memoirs, of having killed the Cardinal Tencin from vexation, at a sort of political hoax, ... (Walpole *Letters 1735-1748*, 1735-1748)

Four examples had zero complements in the first part of the corpus. Although it is possible that there is nothing after *boast*, it is more common to express the object of the act of boasting rather than leave it out. It seems that when the object is left out, the act of boasting is not directed at anything specific but in general at all the features of the one who is doing the boasting.

Unfortunately, example (21) is very unclear because of the poetic style of the language but the author's view is that the unmarked word-order would be "she can no[t] boast".

- (21) ... of his life, To frisk and skip, and furnish means Of making sweet Patapanins?
England, alas! can *boast* no she, Fit only for his cicisbee. Must greedy Fate then have him all?- (Walpole *Letters 1735-1748*, 1735-1748)
- (22) if there be injury, there shall be redress; and this I may say without *boasting*, that none have ever taxed the injustice of Sir William Thornhill. (Goldsmith *The Vicar of Wakefield*, 1766)

In two sentences with zero complements, *boast* is a part of a subordinating *as*-clause:

- (23) Caracalla consecrated, in the temple of Serapis, the sword with which, as he *boasted*, he had slain his brother Geta. (Gibbon *Decline and Fall of the Roman Empire*, 1776)
- (24) ... ured the Imperial purple, coined money, published edicts, and raised an army, which, as he vainly *boasted*, he was capable of maintaining from the sole profits of his paper trade. (Gibbon *Decline and Fall of the Roman Empire*, 1776)

There was one token of the structure *poss* +-*ing*:

- (25) The poet in his preface to this play *boasts* his having brought a new sort of Comedy on our stage (Cibber *The Lives of the Poets* 3, 1753)

There is approximately fifteen years between the example of *poss* + *-ing* that was found in the *OED* and the example from *CLMETEV*, so it seems that this pattern was still in use at least in the mid-18th century.

There was one example of the pattern NP + *as* + NP in *CLMETEV* 1.

(26) I hope we shall unite in defeating any attempts that may impair the rights which every Briton *boasts* as his birthright (Johnson *Parliamentary Debates* 1, 1740-1)

Finally, in the first part of the *CLMETEV*, there were two examples of an optional PP complement indicating the addressee of the act of *boasting*, and in both cases it was *among* + NP followed by *of* + NP in (27) and the only *wh*-clause found in the sub-corpus in (28):

(27) ... their conductors, who, upon their return to town, were so base and inhuman as to *boast* among their companions of the exploit they had achieved. (Smollett *The Adventures of Peregrine Pickle*, 1751)

(28) ... the appetite of the invader, and partly to gratify his insolence, and give him an opportunity of *boasting* among his comrades, how successfully he blustered. (Johnson *Parliamentary Debates*, 1740-1)

In contrast to the more common meaning of *boast*, combined with the complement *among* + NP, here *boast* has two shades to its meaning. On the one hand, it is negative, like most uses of *boast*, because the narrator of the story thinks the *boasting* of the ‘conductors’ is ‘base and inhuman’, but on the other hand, the preposition *among* implies that something is done together and that the *boasting* here is an act of camaraderie, and thus the act has positive connotations for the group of ‘conductors’. The overall tone of the sentence is slightly ironic, which is the result of the prosodic clash of the contrasting the negative *boast* and the positive semantic prosody of the preposition *among* (Louw 1993, 167)¹. The irony here is the fact that the strongly negative act of *boasting* can be seen in a positive light at all.

¹ Louw’s 1993 article explores the concept of semantic prosody and how it can be used to create ironic tone in a text.

6.1.2 Extractions and insertions in *CLMETEV* 1

Extraction is a relatively common phenomenon with the verb *boast*, and previous example sentences have already included some examples of extraction. There were altogether 14 extractions in *CLMETEV* 1, or 16% of all tokens. The type of extraction that appears most with *boast* is relativization with 11 cases, and there were 2 cases of topicalization and one of interrogation. None of the fourteen extracted elements were extracted out of sentential complements. Here are examples of all extraction types found in the first part of the *CLMETEV*:

- (29) ... One advantage, I will venture to affirm, we shall have in our academy, which no other nation can *boast*. (Reynolds *Seven Discourses on Art*, 1769-76)
- (30) Thus ended that heroic exploit, which his lordship now *boasted* of with such arrogant misrepresentation. (Smollett *The Adventures of Peregrine Pickle*, 1751)
- (31) Of two fair Richmonds different ages *boast*... (Cibber *The Lives of the Poets*, 1753)
- (32) What indeed has any hero of antiquity to *boast* of in competition with this northern monarch, who conquered and gave away kingdoms for the benefit ... (Haywood *The Fortunate Foundlings*, 1744)

There are also many insertions in sentences with *boast*. There were 8 insertions found in *CLMETEV* 1, which is 9% of all tokens in the first part of the corpus.

- (33) They also *boasted*, and with reason, of their war like enterprises; (Hume *Enquiry concerning the Principles of Morals*, 1751)
- (34) ... --was once no more than a small village belonging to one of the first Counts de Guignes; and as it *boasts* at present of no less than fourteen thousand inhabitants, exclusive of four hundred and twenty di ... (Sterne *Life and Opinions of Tristram Shandy*, 1759-67)

There were two sentences with insertions followed by a sentential complement: one *that*-clause, where *that* is explicit, and one *of* + *-ing* pattern, which is one of the five cases of the pattern found in the first part of the *CLMETEV*. The co-occurrence of an insertion and an *-ing* complement implies that *-ing* complements were already quite widely established as complements of *boast* in mid-18th century English. Here are the sentences:

- (35) ... he *boasted*, with a just pride, that, having received the empire oppressed with foreign and domestic wars, he ... (Gibbon *Decline and Fall of the Roman Empire*, 1776)

(36) Voltaire *boasts* in his Memoirs, of having killed the Cardinal Tencin from vexation... (Walpole *Letters 1735-1748*, 1735-1748)

6.2 CLMETEV 2: 1780-1850

The second part of the *CLMETEV* contained in total 291 tokens of *boast* in its different word-forms.

98 of these 291 tokens were nouns or adjectives. Some examples can be found below:

(1) ... Is this just to these individuals? Is it grateful to the memory of those who are the pride and *boast* of their country? Is it honourable, or becoming to us as a nation... (Southey *Sir Thomas More*, 1829)

(2) ... d compelled them to take refuge beneath a large beech-tree. It was evident, notwithstanding his *boasting*, that the courage of Shoreditch was waning fast, and he at last proposed to his leader that they ... (Ainsworth *Windsor Castle*, 1843)

(3) ... bour? The treatment of servants in most countries, I grant, is very unjust, and in England, that *boasted* land of freedom, it is often extremely tyrannical. (Wollstonecraft *Letters on Sweden*, 1796)

(4) ... and dissimulation, and dishonour; and then he sobbed as if his very heart were cracking. All his *boasted* philosophy vanished; his artificial feelings fled him. (Disraeli *Vivian Grey*, 1826)

When the 98 noun and adjective tokens are left out, there was 193 tokens of the verb *boast* in the second part of the *CLMETEV*. Table 3 below presents the complementation patterns that were found in the second part of the corpus.

Table 3: The complementation patterns of *boast* in *CLMETEV 2*

Complement	boast	boasts	boasted	boasting	Total	NF
<i>that</i> -clause	8	4	8	1	21 (10.9%)	3.62
<i>of</i> + <i>-ing</i>	9	1	1	-	11 (5.7%)	1.89
<i>wh</i> -clause	3	-	-	-	3 (1.6%)	0.52
<i>to</i> + NP + <i>that</i> -clause	-	-	3	-	3 (1.6%)	0.52
reflexive + <i>to</i> -infinitive	-	-	1	-	1 (0.5%)	0.17
NP	37	7	4	6	54 (27.9%)	9.31
<i>of</i> + NP	64	4	18	3	89 (46%)	15
<i>about</i> + NP	-	-	1	-	1 (0.5%)	0.17
∅	7	-	-	-	7 (3.6%)	1.2
NP + <i>over</i> + NP	1	-	-	-	1 (0.5%)	0.17
quote	-	-	1	-	1 (0.5%)	0.17
NP + NP	-	-	1	-	1 (0.5%)	0.17
Total	129 (66.8%)	16 (8.3%)	38 (19.7%)	10 (5.2%)	193 (100%)	33

6.2.1 Complementation patterns of *boast* in *CLMETEV 2*

The number of tokens per word-form was the following: 129 *boast*, 16 *boasts*, 38 *boasted*, and 10 *boasting*. There were three complements that appeared with all four word-forms: *that*-clauses, NP complements, and *of* + NP complements.

As in the first part of the corpus, the most common complement was *of* + NP of which there were 89 tokens in the second part of the *CLMETEV*. Here are examples of the pattern:

(5) ... so et Innumerabili and the "De la causa, principio et uno," of the philosopher of Nola, who could *boast* of a Sir Philip Sidney and Fulke Greville among his patrons... (Coleridge *Biographia Literaria*, 1817)

(6) ... Some of the most atrocious acts are here made a merit of, and the gaoler even *boasts* of them in the public-houses, amongst his pot-companions. (Hunt *Memoirs of Henry Hunt*, 1820-2)

(7) ... Indeed, if we retained it, we should be the greatest hypocrites in the world; for we *boasted* of nothing more than of our own liberty... (Clarkson *The History of the Abolition of the African Slave-trade*, 1839)

(8) ... n's attentions to you? of your acquaintance, in short? Did you ever try to excite his jealousy by *boasting* of a lover so far above you in station? (Gaskell *Mary Barton*, 1848)

The second most common pattern was *boast* + NP with 54 tokens, and this was the second most common pattern in the first part of the corpus as well. Here it is once again prudent to keep in mind the sense of the verb *boast*. To remind the reader of the senses, *OED* sense 5 is 'to speak ostentatiously' and sense 7 'to have to show'. Here are some examples:

(9) ... s most certainly a worthy soul, and equalled by very, very few, in goodness of heart. But can she *boast* more goodness of heart than Clarinda? (Burns *Letters 1780-1796*, 1780-96)

(10) Of England!... which has been so splendid in arms, liberty, legislation, science, and all manner of literature: which has *boasted* its universities, of ancient foundation and proudest fame... (Foster *An Essay on the Evils of Popular Ignorance*, 1821)

(11) He *boasts* his descent from the race of Rameses, and declares that in his family the secrets of remotest antiquity are ... (Bulwer-Lytton *The Last Days of Pompeii*, 1834)

(12) ... convenience of borrowing money, going to the same gaming house, and mutually communicating and *boasting* their mutual vices and intrigues... (Burney *Cecilia 1-2*, 1782)

Example (9) is a typical example of sense 7: one could even rephrase the sentence to "Is it possible that she has more goodness of heart than Clarinda?" It seems to be the case that the presence of a possessive pronoun, as in examples (11) and (12), differentiates between the senses 5 and 7.

Example (10) is not as clear as examples (11) and (12) because the antecedent of *which* is *England* but it is perhaps the case that here *England* does not only refer to the country but also the inhabitants of that country, which makes the sense "to speak ostentatiously" more acceptable. 8 out of the 54 examples found in this sub-corpus had the sense "to speak ostentatiously" with this pattern and all of them had a possessive pronoun in the NP.

In chapter 5 it was stated that the *OED* senses 1 and 2 ‘to threaten’ are now obsolete although it remained possible that some tokens might be found in the older *CLMETEV* data. Two examples were found in the second part of the corpus where it is possible that the sense of the verb is ‘to threaten’ although these examples were written several decades after the most recent example found in the *OED*:

(13) ... being employed in other correspondence; nay, I did more; with the malice of a fiend, I *boasted* of--; nay, do not stop me; I have more to tell." (Disreali *Vivian Grey*, 1826)

(14) ... Centuries hence, we Frenchmen and Englishmen might be *boasting* and killing each other still, carrying out bravely the Devil's code of honour. (Thackeray *Vanity Fair*, 1847-8)

Example (13) is a somewhat difficult case as the complement is discontinued, but investigating the context of the verb may shed light on the matter. Here *boast* follows the phrase ‘with the malice of a fiend’, not exactly the most positive of phrases, and thinking of the context as whole, it seems that the speaker is trying to confess something unpleasant that he has done: he has threatened someone. Example (14) is perhaps a slightly clearer example. Here *boasting* is coordinated with the verb *killing*, and the context is that for centuries Frenchmen and Englishmen did not get along and often fought each other. It would not be surprising to have them *boasting*, that is *threatening*, each other. Particularly the meaning of example (13) is difficult to interpret; however, the possibility of this different meaning is raised here to remind the reader of the history of the verb *boast*.

That-clauses were the third most common complementation pattern with 21 tokens in the second part of the *CLMETEV*, as well. In 2 of the 21 tokens *that* was omitted, and in the rest *that* was explicitly present. These findings agree with those of the first part, where in all nine cases *that* was explicit. Here are examples of the pattern:

(15) ...if she complained she was ill, it was with the certainty that her languor would be admired: if she *boasted* she was well, it was that the spectator might admire her glowing health... (Inchbald *Nature and Art*, 1796)

(16) ... The Pontevedrians *boast* that their land produces two crops every year... (Borrow *Bible in Spain*, 1842)

(17) ... Come forward, Balseiro, you who have been in prison all your life, and are always *boasting* that you can speak the crabbed Gitano... (Borrow *Bible in Spain*, 1842)

There were 11 tokens of the complementation pattern *of + -ing*. It was found after the word-forms *boast*, *boasts*, and *boasted*, and it is not surprising that the pattern did not appear after the word-form *boasting* as that construction would have violated the *horror aequi* principle. Here are examples of the *of + -ing* complement:

(18) ... I know that many devout people *boast* of submitting to the Will of God blindly... (Wollstonecraft *Vindication of the Rights of Woman*, 1792)

(19) ... Margutte is a glutton, a drunkard, a liar, a thief, and a blasphemer. He *boasts* of having every vice, and no virtue except fidelity... (Hunt *Stories from the Italian Poets*, 1846)

(20) ... Finding who Dante was, he *boasted* of having three times expelled the Guelphs. (Hunt *Stories from the Italian Poets*, 1846)

There were 6 tokens of the zero complement. All six were found after the word-form *boast*.

Like in the first part of the corpus, here the *boasting* is not directed at any particular attribute of the *boaster* but his actions or achievements in general. Here are some examples:

(21) ... who's a right to call a man to account that's clear of the world? Not that I mean to *boast*, nor nothing like it, but, as I said before; five times five is fifteen... (Burney *Cecilia 1-2*, 1782)

(22) ... ranked with the vilest of men. "Gentlemen, this is a situation in which a man may be allowed to *boast*. Accursed situation! (Godwin *The Adventures of Caleb Williams*, 1794)

(23) ... one may have done something more than another, yet no one of them in particular has any reason to *boast*. (Clarkson *The History of the Abolition of the African Slave-Trade*, 1839)

There were 3 *wh*-clauses in the second part of the *CLMETEV*. All three tokens were found with the word-form *boast*.

(24) ... What I owe to the noble family of Athole, of the first kind, I shall ever proudly *boast*... (Burns *Letters 1780-1796*, 1780-96)

(25) ... ptain had thus served as a mate, confirmed to me afterwards this assertion, having often heard him *boast* in the cabin, "how he had tricked the law on that occasion." (Clarkson *The History of the Abolition of the African Slave-Trade*, 1839)

(26) ... One of them was the man who had given the fatal wound: he did not live to *boast* of what he had done. (Southey *The Life of Horation Lord Nelson*, 1813)

Example (26) is different from the other two because there is *of* before the *wh*-clause, however, the presence or absence of *of* does not seem to make a difference here.

There were three sentences in this sub-corpus where the optional PP complement *to* + NP was followed by a *that*-clause:

(27) I *boasted* to you that they had no viceroy in Norway, but these Grand Bailiffs, particularly the superior on ... (Wollstonecraft *Letters on Sweden, Norway and Denmark*, 1796)

(28) ... he retired into the chest again; and the next day he set off for Rome with great expedition, and *boasted* to Posthumus that Imogen had given him the bracelet... (Lamb *Tales from Shakespeare*, 1807)

(29) Wedderburn Webster was present when the poet, intensely delighted with his own skill, *boasted* to Joe Manton that he considered himself the best shot in London. (Byron *Letters 1810- 1813*, 1810-3)

There is another optional PP complement pattern in the second part of the *CLMETEV* : NP + *over* + NP:

(30) ... of his extensive parish were a little too much for those vaunted energies which he was wont to *boast* over his younger and less active brethren of the cloth. (Brontë *The Tenant of Wildfell Hall*, 1848)

This complement is similar to the optional *to* + NP complement, which denotes the object of the boasting. *To* + NP expresses perhaps more directly to whom the speaker boasts, and *over* + NP expresses the group of people to whom the boast is meant but who are not necessarily there to hear the boasting. In addition, *over* has a slightly repetitious meaning here so that the created image is of repeated cases of boasting.

Unexpectedly, there was one example of reflexive + *to*-infinitive pattern in the second part of the corpus. An example of a similar sentence was found in the *OED*, and it can be seen in the table in section 5.1.

(31) ... the uncouth monster. It was Polyphemus, the largest and savagest of the Cyclops, who *boasted* himself to be the son of Neptune. (Lamb *Adventures of Ulysses*, 1808)

It seems that here *boast* is an object-control verb, even though *boast* is usually a subject-control verb.

One example was found of the pattern NP + NP.

(32) ... in a formal inscription, as to one's elders,--but through a short prefatory letter, in which I *boasted* myself your intimate... (Byron *Letters 1810-1813*, 1810-3)

There was one example where *boast* was the reporting verb of a quote:

(33) ... assist towards her moral instruction that he did not haste to tell it her; and once when William *boasted* "He knew he was beloved by Agnes"... (Inchbald *Nature and Art*, 1796)

In the second part of the *CLMETEV*, we find for the first time a token of *about* + NP:

(34) ... sat together in the evening after dinner, all their talk was about the departed hero. The father *boasted* about him according to his wont, glorifying himself in recounting his son's feats and gallantry ... (Thackeray *Vanity Fair*, 1847-8)

It is recognised that "studying grammatical change in progress does not mean a futile hunt for the earliest attestation of a new construction" (Mair 2002, 109). Despite this it is significant that the preposition *about* can be found in a literary text of the mid-19th century as this means that it must have been in use much earlier in spoken language.

6.2.2 Extractions and insertions in *CLMETEV* 2

There were in total 29 extractions in the second part of the *CLMETEV*, which is 15% of all tokens.

This is a slightly smaller proportion than in the first part of the corpus. All four extraction types introduced in section 4.4 were found in the second part of the *CLMETEV*, of which relativization was the most common extraction type with 18 cases followed by 5 cases of topicalization, 3 cases of interrogation, and 1 case of comparativization:

(35) ...my lord, while the drops of life warm my heart, gratitude to that dear-loved country in which I *boast* my birth, and gratitude to those her distinguished sons, who have honoured me so much with their p ... (Burns *Letters 1780-1796*, 1780-1796)

(36) ... Rome, Sparta, or Thebes," he would say, "to show me thirty years of such patriotism as Corsica can *boast!*" (Southey *Life of Horatio, Lord Nelson*, 1813)

(37) ... What I owe to the noble family of Athole, of the first kind, I shall ever proudly *boast*... (Burns *Letters 1780-1796*, 1780-96)

(38) Again; men boast of their triumphs over women, what do they *boast* of? Truly the creature of sensibility was surprised by her sensibility into folly--into vice... (Wollstonecraft *Vindication of the Rights of Woman*, 1792)

(39) ... ss a warm heart and inoffensive manners (which last, by the by, was rather more than I could well *boast*) still, more than these passive qualities, there was something to be done. (Burns *Letters 1780-1796*, 1780-1796)

Example (35) shows an extraction from a relative clause; however, there is something unusual about this sentence and the extracted element. Here the extracted element does not cross a sentence boundary, which is one of the conditions of the Extraction Principle. Thus the other condition, which is that the extracted element is a complement of the subordinate sentence, does not necessarily apply here. However, it seems that most extracted elements are complements, which is why the extracted adjunct in example (35) draws attention. This phenomenon has been noted, for example, by Rudanko (2006, 43), but it is a relatively rare phenomenon and all new findings are worthy of attention.

Example (36) is a case of relativization as well. The atypical aspect here is that, instead of the relative pronouns *that* or *which*, *as* has the relative function in this sentence. This is confirmed to be possible, for example, by Knud Schibsbye (1970, 255-256). There are two other cases of *as* having a relative function in the second part of the *CLMETEV*, which is surprising when there were none in the first part.

Example (37) illustrates topicalization, and example (38) shows a case of interrogation. There were no instances of comparativization in the first part of the *CLMETEV* but there was one in the second part. This example is shown in (39). Furthermore, there were no extractions from sentential complements in *CLMETEV 2*, which was also the case in the first part of the corpus.

There were 15 insertions in the second part of the *CLMETEV*, which comprises approximately 7% of all tokens in the sub-corpus. This is slightly less than the percentage in the first part of the *CLMETEV*.

(40) ... ach bay terminated by ice-cliffs, whence great masses would be yearly detached: this island would *boast* only of a little moss, grass, and burnet, and a titlark would be its only land inhabitant. (Darwin *Voyage of the Beagle*, 1839)

The example above shows an insertion of one word. They are very common with the verb *boast*, and in addition to *only*, other regular one-word insertions are *here*, *even*, and *much*. Example (40) is an interesting sentence because it seems that the subject argument may have an influence on the meaning of the verb *boast*. Usually, the pattern *boast* + *of* + NP means ‘to speak ostentatiously’ (*OED* sense 5) but here it looks as if the verb has the meaning ‘to have to show’ (*OED* sense 7), which is mainly expressed with the pattern *boast* + NP. It is the feature -human that seems to force the meaning ‘to have to show’; after all, inanimate things cannot speak or boast.

There were six insertions in sentences with sentential complements, one followed by a *wh*-clause complement, and the other five followed by a *that*-clause complement:

(41) ... ptain had thus served as a mate, confirmed to me afterwards this assertion, having often heard him *boast* in the cabin, "how he had tricked the law on that occasion." (Clarkson *The History of the Abolition of the African Slave-trade*, 1839)

(42) ... rce of recreation, nothing can be more fit to occupy the attention of a divine; and our church may *boast*, in the present as in past times, that the domain of science has been extended by some of its bri ... (Babbage *Reflections on the Decline of Science in England*, 1830)

That was explicit in all five cases and thus behaving as the Complexity Principle predicts.

6.3 CLMETEV 3: 1850-1920

There were altogether 113 tokens of the different word-forms of *boast* in the third sub-corpus of the CLMETEV. Of these, 28 were nouns or adjectives. Here are some examples:

(1) ... the favourite blind uncle had not been present, in spite of Bessie's *boast*, and it was suspected that Alick had not chosen to forward his coming. (Yonge *The Clever woman of the Family*, 1865)

(2) ... bly in the situation of victims to his grace of person, though he did not do so with any unctuous *boasting*. (Meredith *The Adventures of Harry Richmond*, 1870)

(3) ... nd the working population the advantages of the credit system, which is the very foundation of our *boasted* commerce. (Booth *In Darkest England and the Way out*, 1890)

(4) We must certainly have exhibited poor specimens of the *boasted* sway of man over the brute creation could a stranger have witnessed our flight on this occasion. (Baker *The Rifle and the Hound in Ceylon*, 1854)

After disposing of the 28 tokens of nouns and adjectives, there are 85 tokens of the verb *boast* left.

Table 4 below shows the complementation patterns found in the third part of the *CLMETEV*.

Table 4: The complementation patterns of *boast* in *CLMETEV* 3

Complement	boast	boasts	boasted	boasting	Total	NF
<i>that</i> -clause	7	1	2	1	11 (12.9%)	1.80
<i>of</i> + <i>-ing</i>	1	1	-	1	3 (3.5%)	0.49
<i>to</i> -infinitive	1	-	1	-	2 (2.4%)	0.33
<i>to</i> + NP + <i>that</i> -clause	-	-	2	-	2 (2.4%)	0.33
<i>wh</i> -clause	-	1	-	-	1 (1.2%)	0.16
NP	14	4	3	2	23 (27.1%)	3.77
<i>of</i> + NP	27	6	3	-	36 (42.4%)	5.90
<i>about</i> + NP	-	-	1	1	2 (2.4%)	0.33
∅	2	-	-	1	3 (3.5%)	0.49
<i>in</i> + NP	1	-	-	-	1 (1.2%)	0.16
NP + <i>over</i> + NP	1	-	-	-	1 (1.2%)	0.16
Total	54 (63.5%)	13 (15.3%)	12 (14.1%)	6 (7.1%)	85 (100%)	13.9

6.3.1 Complementation patterns of *boast* in *CLMETEV* 3

There were 54 tokens of the word-form *boast*, 13 of *boasts*, 12 of *boasted*, and 6 of *boasting*. Two complements appeared with all four word-forms: *that*-clauses and NP complements. As in the two previous sub-corpora, *of* + NP was the most common complement in the third part of the

CLMETEV, as well, with 36 tokens. These are mostly straightforward examples of the sense “to speak ostentatiously”:

(5) And, indeed, though he didn't actually *boast* of it, yet in his secret soul he did to a great extent believe that the great reform in the School... (Hughes *Tom Brown's School Days*, 1857)

(6) "There is no money;" and yet at the close of the year you proclaimed and *boasted* of a saving of twenty-seven thousand pounds in the treasury! (Baker *Eight Years' Wandering in Ceylon*, 1855)

(7) It now *boasts* of a handsome church, a public reading-room, a large hotel, the barracks, and about twenty private... (Baker *the Rifle and the Hound in Ceylon*, 1854)

In section 6.2.2, an example was found where the pattern *boast* + *of* + NP seems to have the meaning “to have to show” although this pattern usually does not convey this meaning. Example (7) is a similar case, where the subject argument is -human, and thus the usual meaning seems not to be possible.

There were 23 tokens of the NP complement, which make it the second most common complement also in the third part of the *CLMETEV*. One of those 23 tokens had the sense “to speak ostentatiously”, which should not be possible in the British English of 1850-1920 according to Jespersen (1927). The example had a possessive pronoun in the NP complement, which seems to be the deciding factor between the two possible senses of the verb. Here are examples of both senses:

(8) ...and Zubehr in the height of his power, at the head of the slave merchants' confederacy, might *boast* the retinue of a king and exercise authority over wide regions and a powerful army. (Churchill *The River War*, 1899)

(9) And when they can *boast* a parson behind them, they are indecorous up to insolent in their ostentation of it. (Meredith *The Amazing Marriage*, 1895)

(10) Each Khalifa *boasted* his independence. Each marched attended by a numerous retinue. Each asserted his right to beat his... (Churchill *The River War*, 1899)

The third most common complement was *that*-clause with 11 tokens, and it has held this position in all sub-corpora of the *CLMETEV*. In all 11 sentences, *that* is explicit and not a \emptyset .

(11) He was wont to *boast* that he had fought his own way fairly up the School, and had never made up to or been taken up by... (Hughes *Tom Brown's School Days*, 1857)

(12) ... he answered "I heard that the Regius Professor of Everything heard two soldiers talking, and one *boasted* that he had an oyster which was the biggest and tamest in Croäxaxica... (Webster *Daffodil and the Croäxaxicans*, 1884)

(13) Marriage was to alter her fortunes rather than her character, and she was not far wrong in *boasting* that she understood her future husband. (Forster *Howards End*, 1910)

(14) ...uence of the position, M. Thiers does not govern as a Parliamentary Premier governs. He is not, he *boasts* that he is not, the head of a party. (Bagehot *The English Constitution*, 1867)

There were 3 *of* + *-ing* complements in third part of the *CLMETEV*. What was surprising about one of these tokens is that this pattern was found after the word-form *boasting*, and thus it violates the *horror aequi* principle, which is the avoidance of “(near-) adjacent grammatical elements” (Rohdenburg 2003, 236). Here are all three examples of this complement pattern:

(15) But it seemed to me like a sort of triumph that they should be even able to *boast* of having fired our mow-yard. (Blackmore *Lorna Doone*, 1869)

(16) Many a school *boasts* of having the last ideas in education, when it has not even the first idea; for the first idea is... (Chesterton *What's Wrong with the World*, 1912)

(17) But first--I have been *boasting* of knowing something about you--but I should like to ask--do you know anything about me?" (Ward *Marcella I*, 1894)

There were 3 tokens of *boast* + zero complement in *CLMETEV* 3:

(18) Do you think I triumph, that I *boast*? (Ward *Marcella I*, 1894)

(19) I don't say this to *boast*, but just to show you the kind of man I am. (Forster *Howards End*, 1910)

(20) You will do me the favour to understand that I am not *boasting*, not menacing; I attempt, since it is extraordinarily imposed on me, to instruct you. (Meredith *The Adventures of Harry Richmond*, 1870)

In example (20) attention should be paid to the sense of the verb. Here *boasting* is co-ordinated with the verb *menacing*, which means “to threaten” (MacMillan), and it is believed that *boast* carries its earlier sense of “to threaten” here, too. The *OED* table 1 in section 5.1 shows that this meaning of *boast* was last possible in 1756, so to find an example from the year 1870 was very surprising.

Two examples of *about* + NP were found in the third sub-corpus of the *CLMETEV*:

(21) ...England emancipated her negroes sixty years ago, at a cost of #40,000,000, and has never ceased *boasting* about it since. (Booth *In Darkest England and the Way out*, 1890)

(22) For here were we four (the queen, too, one of us!) on tenterhooks, while the fool *boasted* about the sport that he had shown the king. (Hope *Rupert of Hentzau*, 1898)

No comparisons can yet be made between *of* + NP and *about* + NP complements but it is hoped that enough examples of both patterns will be found in the *BNC* for a tentative analysis.

There were two examples of the optional *to* + NP complement followed by a *that*-clause complement. Here are both of them:

(23) ...spectable home, forsaken her husband and family, and sunk so low that the man who then claimed her *boasted* to the Officer that he had bettered her condition by taking her off the streets. (Booth *In Darkest England and the Way out*, 1890)

(24) This would be to shirk the day of reckoning, and he had *boasted* to his companions at the "Punch-Bowl" that they should see him play the game to the end. (Brebner *The Brown Mask*, 1910)

There were two *to*-infinitive complements in the third part of the *CLMETEV*:

(25) Often defeated, but never crushed, the wily Arab might justly *boast* to have run further and fought more than any Emir in the Dervish armies. (Churchill *The River War*, 1899)

(26) We have *boasted* to love each our own country, but have we cared at all for the other countries too? (Carpenter *The Healing of Nations and the Hidden Sources of their Strife*, 1915)

The *OED* does not have any similar examples of *to*-infinitives. According to the *OED*, the sense "to speak ostentatiously" is only possible with the pattern *reflexive* + *to*-infinitive, of which an example was found in the second part of the *CLMETEV*, but no examples of other *to*-infinitive structures were found. Both examples (25) and (26) are subject-control structures. Example (25) is especially interesting because it is a counter-example to Duffley's (2000, 233-234) claim that the *to*-infinitive is always forward-looking. It is apparent from the example above that, in this case, the view is to the past.

Smith's (2009, 375) idea that all *to*-infinitives have *conceptual distance* is recalled here.

According to Smith, there are several ways in which conceptual distance may be realized. If we

analyse example (26), it seems likely that this is Smith's category of "unreality, where the *to*-marked processes are construed as non-overlapping with (conceptually distant from) the matrix processes" (*ibid.*) because they have may have *boasted* that they love their countries but it is implied that this is not necessarily the case with every one of them. Example (25) is not as easy to analyse. If the sentence did not have the adverb *justly*, it would be likely that this is, too, would be in Smith's unreality category. However, the adverb seems to change the situation and none of Smith's categories are a good fit for example (25). There is no category for events that have actually happened, such as in example (25), even though there is a distance between the realised event and the act of *boasting*.

One *wh*-clause was found in the third sub-corpus of the *CLMETEV*:

(27) As this mighty view of lard hides each combatant from the other, gladly each retires and *boasts* how he would have slain his neighbour, but that old sow drove the other away...
(Blackmore *Lorna Doone*, 1869)

One example of the NP + *over* + NP pattern was found also in this sub-corpus of the *CLMETEV*.

(28) ... other peoples underfoot, to malign and traduce them, to single out and magnify their defects, to *boast* ourselves over them. (Carpenter *The Healing of Nations and the Hidden Sources of their Strife*, 1915)

As with the previous example of this pattern, it seems that the preposition *over* is chosen because the NP that follows denotes a group of people, and there is a sense that not everyone, or possibly none, of those people are listening to the *boasting*.

Lastly, an interesting finding was made here because one token of *in* + NP complement was found in the sub-corpus. The *OED* suggested this pattern as a possible complement for the verb *boast* but no examples of this were found in the two previous parts of the *CLMETEV*:

(28) ... reflection that the present had, it might be, really advanced beyond the past, and he was ready to *boast* in the very fact that it was modern. (Pater *Marius the Epicurian*, 1885)

6.3.2 Extractions and insertions in *CLMETEV* 3

There were altogether 17 extractions in the third sub-corpus of the *CLMETEV*, which is 20% of the total number of tokens in this part of the corpus. The number is slightly higher than in the first and second sub-corpora of the *CLMETEV*. Of the 17 extractions found, 12 are relativizations, 3 are topicalizations and one token was found of both interrogation and comparativization. Here is one example of each extraction type:

(26) She and the Mosebachs had gone tobogganing on the only hill that Pomerania *boasted*. (Forster *Howards End*, 1910)

(27) 'Why, surely it's something!' 'Something for non-commissioned officers to *boast* of; not for statesmen. (Meredith *The Adventures of Harry Richmond*, 1870)

(28) "Did you ever hear a more ingenious intimation of the number one has to *boast*?" "Only in character," calmly returned Alick. (Yonge *The Clever Woman of the Family*, 1865)

(29) . . . n her place; clearly she was going through to Strelsau, having, with more providence than I could *boast*, secured apartments there. (Hope *The Prisoner of Zenda*, 1894)

No elements were extracted from sentential complements in *CLMETEV* 3, either.

There were 4 insertions in the third part of the *CLMETEV*, which is approximately 5% of the total number of tokens. Here are two examples of insertions found in the third sub-corpus:

(30) ... those which appeal to the senses, which claim to be embodiments of the greatest human ideas, which *boast* in some cases of far more than human origin. (Bagehot *The English Constitution*, 1867)

(31) He was very unhappy; but he saw the deck-steward lashing chairs together, and, since he had *boasted* before the man that he was never seasick, his pride made him go aft to the second-saloon deck at ... (Kipling *Captains Courageous*, 1897)

Two of the four insertions were in sentences that had *that*-clause complements, and in those two cases *that* was explicitly present.

6.4 Summary of the findings in the *CLMETEV*

The central finding of the extended version of the Corpus of Late Modern English Texts is that, in the period from 1710 to 1920, the three main complements of the verb *boast* have not only remained the same throughout the two centuries but retained the same positions in relation to each

other, so that the most common complement has always been *of* + NP, followed by the NP complement, and in the third position *that*-clause complement. In percentages, the *of* + NP complement has lost its favour to some degree: in the first part of the *CLMETEV*, *of* + NP made up around 55% of all tokens but in the third part it comprises only slightly over 40% of all tokens. In contrast, NP complement has risen from 20% to almost 30%, and the use of *that*-clause complement has grown from 10% to around 16%.

Furthermore, it is apparent from the tables above that all other complements were very marginal in the period in question. The only other complement that had any real popularity was *of* + *-ing* but the popularity of the complement seemed not to be stable.

The *boast* + NP pattern is significant also because it shows differences in meaning. Both senses “to speak ostentatiously” and “to have to show” are possible with this pattern in all three parts of the *CLMETEV*, even though Jespersen (1927) states that the former meaning should be obsolete in his present-day British English, which coincides roughly with the (end of) the third sub-corpus of the *CLMETEV*. The significant difference between these two senses seems to be the presence of a possessive pronoun as a part of the NP complement.

In addition to *boast* + NP having two senses, some evidence was found that *boast* + *of* + NP has the meaning “to have to show” when the subject argument of the sentence is -human. It is hoped that the data found in the *BNC* will shed some light on the matter.

The second sub-corpus of the *CLMETEV* introduced *as* with a relative function in extraction sentences, which was not found in the first or the third part of the corpus. It will be interesting to see if any tokens of this will be found in the *BNC*.

The second part of the *CLMETEV* delivered another surprising find: an extraction sentence where the extracted element was an adjunct.

The third interesting find of the second sub-corpus of the *CLMETEV* was the first appearance of the preposition *about*. Two more examples of *about* + NP were found in the third part of the corpus, and more examples of the preposition are expected to be found in the *BNC*.

The *poss* + *-ing* structure found in the first part of the *CLMETEV* is the only example of this pattern that could be found in the entire *CLMETEV*. Thus it could perhaps be said that this pattern is now obsolete. A reason for this might be that the *poss* + *-ing* structure is not necessary because *-ing* by itself already carries the same meaning. Usually when someone boasts of something, they are boasting of their own accomplishments, so an extra possessive pronoun is an unnecessary addition because the goal of speakers of a language is efficiency.

One token was found of the NP + *as* + NP pattern in *CLMETEV* 1. Even though it was said in the previous paragraph that the *poss* + *-ing* pattern is now probably obsolete, the same should not necessarily be said about the NP + *as* + NP pattern. Although the latest examples of both patterns are from mid-18th century, the NP + *as* + NP pattern differs from the *poss* + *-ing* pattern in that it has a more restricted use, and is therefore more likely a rare pattern than an obsolete one.

The three *to*-infinitives found in the *CLMETEV* were an unexpected surprise. There was one token of the reflexive + *to*-infinitive, which was shown to be possible by the *OED*. In addition, two other *to*-infinitives were found with the sense “to speak ostentatiously”, of which the *OED* did not offer any examples. Moreover, one of the two is a counter-example to Duffley’s (2000, 233-234) claim that the *to*-infinitive is always forward-looking, and that same example showed that Smith’s (2009, 375) theory of conceptual distance seems to be lacking a category for realised events.

7. Corpus analysis: the *BNC*

The data for the analysis of the complementation patterns of the present-day British English come from the British National Corpus. The texts in the corpus are assigned to distinct groups depending on the type of the text, so that the groups represent different domains, such as natural and pure sciences, leisure, world affairs etc. The data for this study comes from the imaginative prose domain, which most closely resembles the texts of the Corpus of Late Modern English Texts.

The data was accessed through the University of Tampere BNCweb interface, which offers plethora of options for the researcher to use in finding the desired tokens. After selecting the imaginative prose domain, a lemma search was made for the verb *boast*, which resulted in 154 tokens. Since the *BNC* is a tagged corpus it was expected that the results contain only tokens of the verb *boast*; however, as is often the case with tagged corpora, some non-verbal tokens did appear. There were two nouns, one adjective, and one token sentence which occurred twice in the results. For those interested, here are the three non-verbal tokens:

(1) H9N 994 Colonel Goreng said with an earnestness that took away all *boast*, ‘I kill two thousand more.’

(2) F9R 2150 As the high points of last night's blustering and *boasting* passed through her mind one by one, she groaned aloud.

(3) HGE 323 But he was a man who liked challenges and this wilful — child — for despite her *boasted* nearly twenty-one years, to Neil Cochrane she seemed little more — appeared to offer one.

The code containing letters and numbers before each sentence is the filename of the text and the number code is the designation of the sentence in that text. When the non-verbal tokens and the one repeated token are left out, there are altogether 150 tokens of the verbal lemma *boast* in the imaginative prose domain of the *BNC*.

As in chapter 6, the statistics of the complementation patterns are shown in a table, which proceeds from sentential complements to non-sentential complements even though complement patterns will be examined from the most common to the rarest.

7.1 Complementation patterns of *boast* in the Imaginative prose domain of the *BNC*

Table 5: The complementation patterns of *boast* in the *BNC*

Complement	boast	boasts	boasted	boasting	Total	NF
<i>that</i> -clause	9	1	5	7	22 (14.7%)	1.33
<i>to</i> + NP + <i>that</i> -clause	2	-	4	-	6 (4%)	0.36
<i>of</i> + <i>-ing</i>	-	-	3	-	3 (2%)	0.19
<i>about</i> + <i>-ing</i>	-	-	1	1	2 (1.33%)	0.13
<i>wh</i> -clause	-	-	1	-	1 (0.67%)	0.06
NP	9	6	17	1	32 (21.3%)	1.93
<i>of</i> + NP	15	1	14	-	30 (20%)	1.82
<i>about</i> + NP	8	-	5	6	19 (12.7%)	1.15
∅	4	1	3	5	13 (8.67%)	0.81
quote	3	-	13	3	19 (12.7%)	1.19
<i>to</i> + NP + <i>of</i> + NP	-	-	1	-	1 (0.67%)	0.06
<i>to</i> + NP + <i>about</i> + NP	1	-	-	2	3 (2%)	0.19
Total	50 (33.3%)	9 (6%)	66 (44%)	25 (16.7%)	150 (100%)	9.38

The Imaginative prose domain of the *BNC* had 50 word-forms of *boast*, 9 of *boasts*, 66 of *boasted*, and 25 of *boasting*. Three complements appeared with all four word-forms of *boast*: NP complement, *that*-clause, and zero complement. Table 5 above contains more detailed information about the complementation patterns of the verb.

The most frequent complementation pattern in the *BNC* was the NP complement with 32 tokens, although it is separated from the second most frequent pattern only by two tokens. As will be recalled from chapter 6 dealing with the *CLMETEV*, it is important that the meaning of *boast* should be investigated when the verb is complemented by an NP. The investigation here reveals that, of the 32 tokens found, only one token has the older sense “to speak ostentatiously” and the

remaining tokens have the sense “to have to show”, which is what was expected. The following examples show the one exceptional case, and some others to be used as a comparison:

(4) JY3 49 If her results were good in August, she might even be able to *boast* a BA Hons in textile design.

(5) FP6 1507 Clare works for an estate agent so far up-market it's mostly estates they deal in, not humble houses, no matter how extensive; if it doesn't *boast* a couple of salmon rivers, a few square miles of trees and a brace of hills, lochs or lakes, then they just aren't interested.

(6) EVC 98 She was particular about her appearance, *boasting* more clothes and jewellery than any other female in the tribe.

(7) H8A 3587 Alice, more sporty, *boasted* navy blue knickerbockers and striped jersey, without stockings, and serviceable yellow jaconet bathing cap.

Example (4) is the exceptional case in which the sense of the verb is “to speak ostentatiously”; however, it has to be noted that example (4) could also have the meaning “to have to show”. The examination of the *CLMETEV* data seemed to suggest that if a possessive pronoun is part of the NP complement, then the sense of the verb is “to speak ostentatiously”; but, as can be noticed from example (4), the NP complement does not include a possessive pronoun. The only difference between example (4) and many other sentences with *boast* + NP construction is that the subject argument is +human. This can be observed in example (5), where the subject argument *it* refers to *estates*, which is -human. In spite of this comparison, one cannot say that if the subject argument of the sentence is +human, then the verb takes on the meaning “to speak ostentatiously” due to the fact there are cases, such as examples (6) and (7), which have a + human subject argument but nevertheless the verbs mean “to have to show”. Thus it remains unclear how to differentiate between these two senses of the complementation pattern, if it is even possible.

The second most common complementation pattern in the *BNC* was *of* + NP with 30 tokens. As said above, the difference between this and the most frequent complement is only two tokens. *Of* + NP is a very straightforward complement; it has only one sense, “to speak ostentatiously”. Here are examples of the complementation pattern in the *BNC*:

(8) CD2 769 Emily would be suitable; and the fact of her aristocratic blood weighed with Paul; one could always *boast* of it discreetly to colleagues, in the event.

(9) CDN 122 Through the summer, as the skyscrapers grew on Tollemarche Avenue, they *boasted* of the glories of their country cottages and the important people from Edmonton or Calgary who had spent a weekend with them at these summer homes.

(10) FB0 1817 In fact, perversely, Esther Breuer disliked the only Jane Austen novel she had ever read (which was, perversely, *Sense and Sensibility*) and frequently *boasts* of her inability to tackle the others.

The third most frequent pattern in the *BNC* is the *that*-clause complement with 22 tokens, making it almost as popular as the two previous complements. In two of the 22 *that*-clause complements, *that* was expressed as \emptyset . Here are examples of both \emptyset and explicit *that*:

(11) BMN 279 The King had been so glum on his arrival and then, suddenly, almost out of character even for him, his mood had changed to one of enjoyment, drinking deeply, *boasting* that he would be with the Queen before the night was out, then off riding into that terrible storm to his death on the top of Kinghorn Cliff.

(12) FAP 1172 They *boasted* that it was the worst they'd ever known, and could expect a million profit with confidence.

(13) FRF 332 You see, there are people in the City who would pay a vast sum of money to be able to *boast* they had real rabbit at one of their dinners.

(14) CDY 16 She was waved on by a sharp-eyed young officer, who *boasted* he could smell a smuggler from fifty yards away.

There were 19 tokens of the pattern *about* + NP. Here are some examples:

(15) CS4 1486 He's Martinez' right-hand man over here and, although he's usually pretty close about his clients' deals, he's sometimes conceited enough to *boast* about them.

(16) CDA 678 Vologsky shunned the ribald laughter of his fellows as they *boasted* about their sexual conquests.

(17) BIX 434 He could imagine Durkin *boasting* about it to everyone.

Now that more than one or two examples of *about* + NP have been found in one corpus, it is hopefully possible to compare it to the *of* + NP pattern to see what kinds of NPs may be found following the two prepositions, and in what other ways these two patterns differ.

On the basis of Sverker Brorström's (1963) book, it was first expected that more tokens of *about* + NP (and *about* + *-ing*) would be found in the *BNC*, so that there would be roughly an equal

number or more of *about* + NP than *of* + NP. The reason for this is that, already in the English of 1930- 1960, which Brorström considered to be his present-day English, *about* seems to have been more prevalent with the verbs in question (*tell, talk, speak, and say*). As this expectation was not full-filled, one is left wondering how other estimates will hold in the data.

Of Brorström's (1963, 312-316) eight central findings about factors which have favoured the use of *about* in connection with these verbs of communication, only one factor is supported by enough data in the *BNC* to make any comparisons or judgements. Brorström found out that when the preposition is followed by the short monosyllabic *it*, the preposition is in almost all cases *about* in (his) present-day British English. His explanation (1963; 11, 32) for this are rhythmical reasons by which he means that the two short monosyllabic words (*of* and *it*) are not stressed, and two such words in a sequence sound unnatural. This seems to be true also when the verb *boast* is followed by a similar pattern. In the *BNC*, six of the *about* + NP constructions had the monosyllabic *it* as the NP, compared to only one such case with the preposition *of*. Here are three examples of the pattern:

(18) CD2 769 Emily would be suitable; and the fact of her aristocratic blood weighed with Paul; one could always *boast* of it discreetly to colleagues, in the event.

(19) FS8 3188 He can't display it, not really; he can't *boast* about it.

(20) HPR 153 Did he have to *boast* about it too?

Six is not a very significant number but, in this case, if one sets aside the statistics, and it may be said that in present-day British English, *about* is the expected preposition when the preposition is followed by the monosyllabic *it*.

Brorström (1963, 317) also noted some cases where *of* is predominant in late Modern English, and one these cases seems to apply to *boast* in present-day English as well. He observed that when the preposition precedes the verb, *of* occurs instead of *about*. Brorström did not use terms such as extraction, but this is what he means by prepositions preceding the verb, although this is only one type of extraction that is possible. In all the four cases in the *BNC* where extraction has changed the

sentence structure and the preposition has moved to a position before the verb, the preposition is always *of*. Here are two examples:

(21) CAV 526 No car of my own of which I could *boast*.

(22) AMU 2528 Though he sensed that he was getting close — his goal, the gringo brain behind the coup, of whom Miguelito had *boasted*.

Here the rhythmical reasons are opposite of the one introduced above. Two stressed words in a sequence would disrupt the natural rhythm in which a stressed syllable is followed by an unstressed one, which is why the unstressed *of* is preferred (Brorström 1963, 30).

One of Brorström's (1963, 315) findings was that when a preposition is used at the end of a phrase, usually the preposition is nowadays *about*. However, there were not enough tokens in the *BNC* that support for this could be found. There were four such sentences, and two of them had the preposition *of* and the other two had *about*. Here are examples of both of them:

(23) B1X 2176 Aye, and I have all me hair and most of me teeth and that's more than many men ten years younger can *boast of!*'

(24) AC4 2878 The passion that I have foolishly *boasted* so much about.

Next, there were 19 sentences where *boast* was the reporting verb of a quote. They comprise over 10% of all tokens in the corpus, which is a huge rise from the few examples found in the *CLMETEV*. In thirteen sentences, the verb *boast* was used in the past tense form of *boasted*, which is not surprising as most books are written in the past tense, and, in fact, of the remaining six sentences, in four of those the verb *boast* is part of a construction which is in past tense. Here are examples of *boast* as the reporting verb of a quote:

(25) AEB 1281 'Oh, I've been inside the big house hundreds of times,' *boasted* Jackie.

(26) C8E 1156 Ted used to *boast*, 'I've got ten men under me,' and now he had none.

(27) HRC 2673 And a thousand men stayed, they were *boasting*, to level the church and the hall and the monastery and then leave to do the same to Scone and to Perth.

(28) FSF 55 M♦ller in high spirits, *boasting*, 'I've got a client for you Irina.

Another complement which has had a rise in its popularity is the zero complement. The *CLMETEV* contained only a few tokens of \emptyset , but 13 tokens were found in the *BNC*:

(29) CH4 168 She also knew that he liked to *boast* and she would egg him on shamelessly.

(30) H9L 945 Florian *boasted*, bored when ignored, glancing indifferently at Maria's outfit before growing exuberant.

(31) A73 1358 Always bragging and *boasting*, he got on my wick.

(32) JY1 685 He might discuss some business matters with my father, for whom he has a tremendous respect, but apart from the fact that he doesn't live at Parkwood any more he never *boasts*.

These examples show that when *boast* is followed by a zero complement, there is a often sense of repeated acts of *boasting*, which does not seem to be about one extraordinary thing but about many or all features of the one who is doing the *boasting*.

There were 6 examples of the *to* + NP + *that*-clause complement, which seems to be more popular in present-day English. Here are two examples:

(33) A6J 41 This was the street along which she had run, a skinny and excited ten-year-old, to *boast* to her father that she was the only girl who had made it to the next round of the chess competition.

(34) AMU 1765 One of their men *boasted* to me that they intend killing the ministers.

There were 3 *of* + *-ing* complements in the imaginative prose domain of the *BNC*. All three appeared after the word-form *boasted*, and thus no violations of the *horror aequi* principle occurred.

Here are they:

(35) AE0 1830 I can tell you Surkov petted with Mrs Thatcher, or at least *boasted* of having done so; I would not feel able to confess to it myself.

(36) FB9 81 Her friend, Rosie Fortinbras, always getting lost between the Pinacoteca and the Duomo in Siena, *boasted* of having kissed her way round all the waiters in the restaurant in the Piazza del Campo, saving for the last, like a favourite soft creamy centre, little Vittorio with the face of a page-boy in the corner of an Adoration of the Magi.

(37) G06 2056 No Englishman would have *boasted* mendaciously of killing a cat.

In contrast to the previous complementation pattern, 2 tokens of *about* + *-ing* were found in the *BNC*. This is the first time such a pattern is found as a complement of the verb *boast*. Moreover,

one of the two tokens occurs after the word-form *boasting*, which is a violation of the *horror aequi* principle. Here are the two examples:

(38) AC3 132 She regularly *boasted* about not having a sense of humour.

(39) HH5 679 Here was I writing to Benjamin, *boasting* about being a merchant prince, and it had all been contrived.

One *wh*-clause was found in the *BNC* data:

(40) AC3 513 Some of his male colleagues *boasted* about how they'd felt with various women, raising an arm to show what they'd been like.

As with previous *wh*-clauses found in the *CLMETEV*, any prepositions preceding the *wh*-clause have been ignored in this analysis because there are too few of them for any kind of analysis, and they do not seem to have any influence on the surrounding sentence.

Finally, one example was found of *to* + NP + *of* + NP and three of *to* + NP + *about* + NP.

(41) CD2 808 In that state, Paul talked more than he should; and *boasted* to Edwin of his engagement to a lady whose grandfather was the Earl of Holden in Warwickshire.

(42) BP8 682 ... and the girls they are protecting in the police-stations, the Committee officers *boasting* to Kate about the elegant jerk-offs in the massage parlours...

When these are added to the six optional PP complements indicating the addressee which were found with *that*-clauses, there are altogether 10 examples where the optional PP complement makes an appearance. This is significantly more than in any of the sub-corpora of the *CLMETEV*.

7.2 Extractions and insertions in the Imaginative prose domain of the *BNC*

There were only 7 extractions in the imaginative prose domain of the *BNC*, which comprises less than 5% of all tokens in this corpus. This is a significant drop from the third part of the *CLMETEV*, where extractions comprised around 20% of all tokens. Five of the seven extractions were relativizations, and there was one token of topicalization and one of comparativization. No elements were extracted from sentential complements of *boast*. Above, examples (21) and (22) are relativizations, and additional examples may be found below:

(43) G1A 2037 You remember Gustave's Madame Schlesinger, the woman who first cicatrised his adolescent heart, the woman with whom everything was doomed and hopeless, the woman of whom he used to *boast* furtively, the woman for whose sake he had bricked up his heart (and you accuse our sex of vain romance?).

(44) AR3 365 I refer to things such as good accent and command of language, general knowledge on wide-ranging topics such as falconing or newt-mating — attributes none of which my father could have *boasted*.

(45) HJH 2622 Her mother so much wanted her to be doing something prestigious, Caro thought bitterly, something she could *boast* about to her woolshop cronies, after all that dreadful 'grubbing about in the park'.

(46) B1X 2176 Aye, and I have all me hair and most of me teeth and that's more than many men ten years younger can *boast* of!

Example (45) is a case of topicalization and example (46) is comparativization. In example (45), it can be noticed that it is possible for the *to* + NP complement to also occur after the preposition + NP complement pattern. Another such example is example (17).

There were altogether 12 insertions in the *BNC*, which makes up 8% of all tokens in the corpus. In all sentences where the insertion came before a *that*-clause complement, *that* was explicit and not a \emptyset , which indicates that even a short insertion is considered to be a complexity factor. Here are examples of insertions found in the *BNC*:

(47) A73 361 It was one thing to *boast* afterwards of pre-breakfast hiking, quite another to be actually seen leading this freak of nature, this abortion, about the public streets.

(48) B3J 1441 Yanto recalled him *boasting* in the pub that 'be prepared' had been his motto ever since leaving the boy scouts.

(49) G06 2056 No Englishman would have *boasted* mendaciously of killing a cat.

Example (49) shows a sentence where material has been inserted between the verb *boast* and an *of* + *-ing* complement. This is an interesting finding as only one other example of this has been found in the entire data of the thesis, and this was in the first part of the *CLMETEV*.

8. Comparison of the *BNC* and the *CLMETEV*

Now that all data has been analysed, what is left is the comparison of the older data from the Corpus of Late Modern English Texts, extended version, and the present-day data from the British National Corpus.

The summary of the findings in the *CLMETEV* tell us that the three main complements in the *CLMETEV* were consistently *of* + NP, NP, and *that*-clause complement. Their proportion to each other changed somewhat over time, so that the popularity of *of* + NP dropped from 55% to little over 40% of all tokens in the third sub-corpus, but no huge changes occurred in the period from 1710 to 1920. The *BNC*, however, shows that, in the approximately 70-year period between the last years of the *CLMETEV* and the period when the data for the *BNC* was collected, some major changes had happened in the main complementation patterns of the verb *boast*. The three principal complements now comprise almost an equal percentage of the total number of tokens, a little over or under 20%, when the patterns with the optional PP complements indicating the addressee are added to those without the optional complements. It is outside the scope of this thesis to find reasons for these changes, but it is the author's speculation that semantics might be behind the more frequent use of *boast* + NP pattern; the 70-year period between the two corpora have brought about the rise of the consumer culture where owning something or "keeping up with the Joneses" is seen as something to be desired. *Boast* + NP in the sense "to have to show" tells a lot more about the person in question than only using *have*, for example.

In every sub-corpus of the *CLMETEV*, all other complements apart from the main three had only a few tokens, but, in the *BNC*, *about* + NP, zero complement, and quote had roughly 10% of all tokens each. This study cannot offer explanations for why zero complements and *boast* used as a reporting verb of quote have suddenly become more popular, but the rise of *about* + NP complement is explained by the similar trend with other verbs which denote an act of communication, although in the case of the verb *boast*, *about* has not spread as widely as in the case of the other verbs, and it seems that the change is still in progress.

The *boast* + NP complement pattern is different from other complement patterns of the verb *boast* because it has two possible senses. *OED* sense 5 “to speak ostentatiously” was the rarer option already in the three sub-corpora of the *CLMETEV*, and the one token of this found in the *BNC* data could be read both as “to speak ostentatiously” and “to have to show”. That any possible examples of this could be found in the *BNC* was a surprise because, according to Jespersen (1927), this older sense should have been obsolete at the time of the third sub-corpus of the *CLMETEV*. *OED* sense 7 “to have to show” has been the more common meaning of this pattern as early as at the beginning of 18th century. It is possible that these two senses are separated by the use of a possessive pronoun as a part of the NP complement, but not all NP complements have possessive pronouns when the verb *boast* has the meaning “to speak ostentatiously”.

Changes in meaning may be happening also with the complementation pattern *boast* + *of* + NP, as some examples were found in the *CLMETEV* in which the meaning of the verb was “to have to show”. Examples of this were few, and no similar examples could be found in the *BNC* data, but based on those few examples, it may be the case that semantic features of the subject argument may influence the meaning of the verb. In those cases where *boast* + *of* + NP has this other meaning, the subject argument was always -human.

A few *about* + NP complements were found in the *CLMETEV* but it was not until the *BNC* that enough tokens of this complement pattern were discovered that a comparison with the older *of* + NP pattern could be attempted. To one’s disappointment, the data in the *BNC* yielded only little useful tokens that corresponded to Brorström’s (1963) factors which favour the use of the preposition *about*. One conclusion would be then that, in many cases, it is possible that the uses of prepositions *of* and *about* following the verb *boast* are the same, and only the preference of the speaker or writer determines which preposition is chosen. However, the data revealed two situations in which one or the other preposition is preferred: in structures *boast* + prep. + *it*, the preposition *about* is preferred because two monosyllabic, unstressed, words in a sequence are difficult to

pronounce, and in structures where the preposition comes before the verb (such as extractions), the preposition *of* is more frequent as two stressed words in a sequence feel unnatural to pronounce.

Another difference between the two corpora was that in the *CLMETEV* the frequency of extractions seemed to be on the rise, and in the third part of the *CLMETEV*, extractions comprised around 20% of all tokens. Nevertheless, in the *BNC* the number of extractions dropped dramatically to 5%. An interesting finding concerning extractions was made in the *CLMETEV*, where in one token the extracted element was an adjunct instead of a complement as was expected. No extracted adjuncts were found in the *BNC*.

The optional PP complement *to* + NP, which indicates the recipient of the act of *boasting*, was very rare in the *CLMETEV*. There were only a few tokens in the entire corpus. The *BNC* data revealed that it is much more common to indicate the intended recipient of the act of communication in present-day English as there were ten tokens of the complement in the *BNC*.

Finally, there were three sentences with *to*-infinitives in the *CLMETEV*. One pattern was reflexive + *to*-infinitive which the *OED* showed to be a possible complementation pattern. Additionally, there were two tokens of *to*-infinitives without the reflexive, which should not have been possible. One of these two showed that Smith's (2009) theory of conceptual distance may be lacking a category for realised events, and that Duffley's (2000) claim that all *to*-infinitives are forward-looking is not true, which is worth noting from the point of view of the interpretation of *to*-infinitives.

9. Conclusion

The purpose of this thesis was to examine how the complementation patterns of the verb *boast* have changed in the Late Modern English period, and which complement patterns are used now in present-day British English. Other, secondary goals were the investigation into the use of prepositions *of* and *about*, and the changing meaning of the complement pattern *boast* + NP. The thesis was able to answer some of these questions satisfactorily and others less so, and the most important results have been examined in detail in the previous chapter.

If we look at chapter 5 and compare the complementation patterns found in the dictionaries and grammars to the patterns found in the *CLMETEV* and the *BNC*, it can be noticed that the data from the two corpora did not reveal many new complements. In fact, there were only four complements which were not mentioned in any of the sources: NP + *as* + NP complement, NP + NP, and the optional complements *among* + NP and NP + *over* + NP, which indicate the recipient of the *boast*. All complementation patterns suggested by the dictionaries and grammars were found in the data.

Comparing the findings of the thesis to the complementation patterns introduced in the *Collins COBUILD Advanced Learner's English Dictionary* and the *Macmillan English Dictionary for Advanced Learners*, it can be said that both these dictionaries list the most common complements of the verb *boast*. Especially *Macmillan* seems to give only the most frequent complements, so that the learner of English is not confused by a long list of complements. In addition to those mentioned by the *Macmillan*, *COBUILD* notes other possible complements, of which the most important is *of* + *-ing* because this shows the possibility of a non-finite complement.

While analysing the data from the corpora, it became quickly apparent to the author that more tokens would have yielded more accurate and possibly more interesting results. The fact that both *CLMETEV* 1 and *CLMETEV* 3 contained less than hundred tokens of the verb *boast* was very disappointing. It is also likely that if the *BNC* had more tokens, more differences could have been found between the uses of prepositions *of* and *about*.

Although this thesis answered some questions, there are many possible options for further study. The question of the uses of prepositions *of* and *about* in connection with the verb *boast* is one that has yet been answered and other, large British English corpora may contain some answer to this question.

Another question that rose from analysis of the data is that, if *OED* sense 7 “to have to show” was more common with the pattern *boast* + NP as early as at the beginning of the 18th century, then when did this change from the sense “to speak ostentatiously” begin? Investigation into Early Modern English corpora may reveal the answer.

It would also be possible to compare *boast* to other similar verbs such as *brag* to see how the complementation patterns are different from or similar to those of *boast*, as verbs with similar meanings often have similar complementation patterns (Somers 1984, 512).

Finally, this thesis has only examined the complement patterns of the verb *boast* in historical and present-day written British English. Similar investigations into spoken British English and into other varieties of English around the world would paint a more complete picture of the complementation patterns of the verb *boast*.

Works cited

- Ball, C. N. 1994. "Automated Text Analysis: Cautionary Tales". In *Literary and Linguistic Computing* 9, 295-302.
- Berglund Prytz, Ylva. 2008. "Introducing the British National Corpus". In *Corpus Linguistics with BNCweb – a Practical Guide*, ed. Thomas Kohonen and Joybrato Mukherjee, 27-46. Frankfurt am Main: Peter Lang.
- Biber, D. 2010. "Corpus-based and corpus-driven analyses of language variation and use". In *The Oxford Handbook of Linguistic Analysis*, ed. Bernd Heine and Heiko Narrog, 159-. Oxford: Oxford University Press.
- Biber, D. et al. 1998. *Corpus Linguistics: Investigating Language Structure and Use*. Cambridge: Cambridge University Press.
- Biber, D. et al. 1999. *Longman Grammar of Spoken and Written English*. Harlow: Longman.
- Brorström, Sverker. 1963. *The Increasing Frequency of the Preposition about during the Modern English Period*. Uppsala: Almqvist & Wiksells Boktryckeri Ab.
- Carnie, Andrew. 2002. *Syntax: a generative introduction*. Oxford: Blackwell Publishing Ltd.
- Collins COBUILD Advanced Learner's English Dictionary*, ed. John Sinclair. 2003. Glasgow: HarperCollins Publishers.
- Davies, William D. and Stanley Dubinsky. 2004. *The grammar of raising and control: a course in syntactic argumentation*. Oxford: Blackwell Publishing Ltd.
- Dirven, René. 1989. "A Cognitive Perspective on Complementation". In *Sentential Complementation and the Lexicon*, ed. Dany Jaspers, Wim Klooster, Yvan Putseys, and Pieter Seuren, 113-139. Dordrecht : Foris Publications.
- Duffley, Patrick J. 2000. "Gerund versus Infinitive as Complement of Transitive Verbs in English". In *Journal of English Linguistics* 28, 221-248.
- Fanego, Teresa. 1996. "The Development of Gerunds as Objects of Subject-control Verbs in English (1400-1760)". In *Diachronica* 13, 29-62.
- Fries, Peter H. 2010. "Charles C. Fries, linguistics and corpus linguistics." In *ICAME Journal* 34, 89-119.
- Haegeman, Liliane. 1994. *Government & Binding Theory: second edition*. Oxford: Blackwell Publishers Ltd.
- Herbst, Thomas et al. 2004. *A Valency Dictionary of English*. Berlin: Mouton de Gruyter.
- Hoffmann, Sebastian. 2008. "Corpus linguistics: some basic principles". In *Corpus Linguistics with BNCweb – a Practical Guide*, ed. Thomas Kohonen and Joybrato Mukherjee, 13-26. Frankfurt am Main: Peter Lang.

- Huddleston, R. and G. Pullum. 2002. *The Cambridge Grammar of the English Language*. Cambridge: Cambridge University Press.
- Hunston, Susan. 2002. *Corpora in Applied Linguistics*. Cambridge: Cambridge University Press.
- Jespersen, Otto. 1927. *A Modern English Grammar, Part III Syntax*. Second Volume. London: George Allen & Unwin Ltd.
- Lakoff, G. and J.R. Ross. 1966. "Criterion for Verb Phrase Constituency". In *National Science Foundation* 17, II-1–II-11.
- Lindquist, Hans. 2009. *Corpus Linguistics and the Description of English*. Edinburgh: Edinburgh University Press Ltd.
- Louw, Bill. 1993. "Irony in the Text or Insincerity in the Writer? The Diagnostic Potential of Semantic Prosodies" In *Text and Technology: In Honour of John Sinclair*, ed. Mona Baker, Gill Francis and Elena Tognini-Bonelli, 157-175. Philadelphia: John Benjamins Publishing Company.
- Macmillan English Dictionary for Advanced Learners*, ed. Michael Rundell. 2002. Oxford: Macmillan Education.
- Mair, Christian. 2002. "Three changing patterns of verb complementation in Late Modern English: a real-time study based on matching text corpora." In *English Language and Linguistics* 6.1: 105-31.
- NatCorp. 2009. The British National Corpus.
<<http://www.natcorp.ox.ac.uk/corpus/index.xml?ID=intro>> [Accessed 20 September 2012]
- Oxford English Dictionary*. 1989. 2nd e. OED online. Oxford: Oxford University Press.
<<http://www.oed.com/>> [Accessed 2 February 2011]
- Postal, Paul M. 1994. "Contrasting extraction types". In *Journal of Linguistics* 30, 159-186.
- Quirk et al. 1985. *A Comprehensive Grammar of the English Language*. Harlow: Pearson Education Limited.
- Rohdenburg, Günter. 1996. "Cognitive complexity and increased grammatical explicitness in English". In *Cognitive Linguistics* 7, 149-182.
- Rohdenburg, Günter. 1999. "Clausal Complementation and Cognitive Complexity in English". In *Proceedings of the Conference of the German Association of University Teachers of English*, ed. Fritz-Wilhelm Neumann and Sabine Schülting, 101-110. Trier: WVT Wissenschaftlicher Verlag Trier.
- Rohdenburg, Günter. 2003. "Cognitive complexity and *horror aequi* as factors determining the use of interrogative clause linkers in English". In *Determinants of Grammatical Variation in English*, 305-328. Berlin: Mouton de Gruyter.

- Rohdenburg, Günter. 2006. *Syntax, Style and Grammatical Norms: English from 1500-2000*, ed. Christiane Dalton-Puffer, Dieter Kastovsky, Nikolaus Ritt & Herbert Schendl, 143-166. Bern: Peter Lang AG.
- Rudanko, Juhani. 2006. "Watching English grammar change: a case study on complement selection in British and American English". In *English Language and Linguistics* 10, 31-48
- Svartvik, Jan. 1992. "Corpus linguistics comes of age". In *Directions in Corpus Linguistics: Proceedings of Nobel Symposium 82 Stockholm, 4-8 August 1991*, ed. Jan Svartvik, 7-13. Berlin: Mouton de Gruyter.
- Schibsbye, Knud. 1970. *A Modern English Grammar: with an Appendix on Semantically Related Prepositions*. London: Oxford University Press.
- Smet, Hendrik de. 2005. "A Corpus of Late Modern English Texts". *ICAME Journal* 29, 69-82.
- Smith, Michael B. 2009. "The semantics of complementation in English: A cognitive semantic account of two English complement constructions". In *Language Sciences* 31, 360-388.
- Somers, Harold L. 1984. "On the validity of the complement-adjunct distinction in valency grammar". In *Linguistics* 22, 507-530.
- Vosberg, Uwe. 2003a. "The role of extractions and *horror aequi* in the evolution of *-ing* complements in Modern English". In *Determinants of Grammatical Variation in English*, ed. Günter Rohdenburg and Britta Mondorf, 305-325. Berlin: Mouton de Gruyter.
- Vosberg, Uwe. 2003b. "Cognitive Complexity and the Establishment of *-ing* Constructions with Restrospective Verbs in Modern English". In *Insights into Late Modern English*, ed. Marina Dossena and Charles Jones, 197-220. Bern: Peter Lang.
- Vosberg, Uwe. 2009. *One Language, Two Grammars? Differences between British and American English*, ed. Günter Rohdenburg and Julia Schlüter, 212-227. Cambridge: Cambridge University Press.

Corpora used

BNC Consortium. *The British National Corpus*. [BNC]

Smet, Hendrik. *The Corpus of Late Modern English Texts*. [CLMETEV]