

**The Complementation of the Verb *Aim* from the 18<sup>th</sup>  
Century to the Present Day**

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Tässä korpuspohjaisessa pro gradu -tutkielmassa keskitytään *aim* verbin komplementtien historialliseen kehitykseen kolmen viime vuosisadan aikana. Tutkielma on rajattu ainoastaan Britannian englantiin. Historiallinen aineisto saatiin CLMETEV-korpuksesta (Corpus of Late Modern English Texts Extended Version), ja nykyenglannin aineisto kerättiin BNC-korpuksesta (The British National Corpus). BNC korpuksesta valittiin kolme eri tekstityyppiä: fiktiivinen (imaginative), uskonnollinen (belief and thought) ja journalistinen (world affairs) tekstityyppi.

Englannin verbit voivat valita useita erilaisia komplementteja, mikä voi olla haasteellista englantia vieraana kielenä puhuvalle. *Aim* verbi voi esiintyä esimerkiksi infinitiivin: *hotel chain aiming to crash the racing scene*; prepositio-gerundi yhdistelmän: *policies aimed at changing borders* tai *at*-prepositio: *I expect you aimed at the walls* kanssa. Vaikeutta lisää vielä se, että erilaiset komplementit eroavat usein toisistaan merkityksellisesti.

*Aim* verbin komplementtien semanttisia merkityksiä tutkitaan *Oxford English Dictionaryn* (OED) ja kahden muun sanakirjan avulla. Verbin syntaktisia puolia ja komplementteja puolestaan valotetaan ensin keskeisten kielioppien ja muun aikaisemman kirjallisuuden avulla. Korpusaineiston esimerkkilauseiden semanttiset merkitykset ja syntaktiset rakenteet analysoidaan huolellisesti, jonka jälkeen tuloksia verrataan aikaisempaan kirjallisuuteen. Erityistä huomiota kiinnitetään *aim* verbin *to*-infinitiivi ja *-ing* komplementteihin.

Tutkielman laajempaan viitekehykseenä toimii englannin kielen verbien komplementaatiota käsittelevä Rohdenburgin Great Complement Shift – teoria, jonka mukaan gerundikomplementit ovat yleistyneet ajan saatossa. Tutkielman muita teoreettisia ideoita ovat muun muassa: valenssiteoria, control, Vosbergin ekstrasemanttiset tekijät ja semanttiset roolit. Tutkielmassa pyritään selvittämään, onko *aim* verbi seurannut useiden muiden englannin verbien tavoin Great Complement Shiftiä 1700-luvulta nykypäivään tultaessa.

Tutkielmasta käy ilmi, että *aim* verbin *to*-infinitiivikomplementit ovat lisääntyneet ajan saatossa huomattavasti. Infinitiivi onkin nykyenglannissa *aim* verbin kanssa useimmin esiintyvä komplementti. *Aim* ei ole siis seurannut useiden muiden verbien tavoin Great Complement Shiftiä. *At* + gerundi – komplementtia käytetään nykyään lähinnä passiivilauseissa ja elottomien (-animate) subjektien kanssa. Historiallisen korpuksen yleisin komplementti *at* + substantiivi on nykyään vasta neljänneksi suosituin.

Asiasanat: *aim*, komplementaatio, korpus, korpuslingvistiikka, verbi

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# 1 Introduction

Consider the following sentences (1-4) from the British National Corpus:

- (1) ADY 840 The Lifetime Award to Tremayne was the work of a taken-over revitalised hotel chain *aiming to crash the racing scene* with sponsorship in a big way.
- (2) FSE 1871 It was depressing to discover that the warmth of Alexei's concern was a sham, and that it had been *aimed at making him susceptible to ideas* which would lead to the industrialisation of Tarvaras.
- (3) BP0 2422 I expect you *aimed at the walls*.
- (4) C98 761 Lifting her foot, she *aimed a kick at George*, catching him under the ribs with her boot.

These four preceding sentences of authentic written British English offer a tiny glimpse into the complicated and evolving complementation of the verb *aim*. The aim of this thesis is to do a diachronic corpus based study on the development of the complementation patterns of the verb *aim* from the 18<sup>th</sup> century to the present day. Mair (2002, 111) points out that the complementation of English verbs is one of the most fertile areas for studying on-going changes in the English grammar. It is also of interest to discover whether a certain complement is used with a certain sense; i.e. both the syntactic and semantic qualities of the verb *aim* will be examined.

This study focuses only on the post-head complements of the verb *aim*, which means that post-verbal adjuncts will be discarded from the results. Tokens where *aim* is a noun or an adjective are also beyond the scope of this paper. *Aim* selects both sentential (examples 1-2) and non-sentential complements (example 3-4). Example (1) has a *to*-infinitive complement and example (2) has a gerundial *at* + *V-ing* complement. Example (3) has an *at* + NP complement and example (4) has a NP + *at* + NP complement. As can be seen from the example sentences, *aim* governs a myriad of different post-head complements that will be examined in more detail later on this study.

The authentic primary data for this study was gathered from two different sources. The historical data comes from the extended version of The Corpus of Late Modern English Texts, henceforth known as the CLMETEV, which includes texts from 1750 to 1920. According to De Smet (2005, 69) this is one of the least studied eras in the English language. The Present Day English data comes from The British National Corpus, henceforth known as the BNC. What makes this thesis unique is that the complementation of the verb *aim* has never been studied using these corpora before.

The different senses of the verb *aim* will be introduced with the help of the online version of the *Oxford English Dictionary* and two other major dictionaries. Major English grammars and other previous literature, such as academic articles and books, are used to shed light on the complement selection of *aim*. After which, the general theory of complementation and theoretical assumptions about the verb *aim* will be compared to the authentic data.

Special attention is paid to the sentential complements of *aim* because according to Rohdenburg (2006, 143) the English language is undergoing a Great Complement Shift where gerundial complements are gaining ground at the expense of the infinitival complements. The expansion of the gerundial complements includes both prepositional gerunds and directly linked gerunds, which is of importance since *aim* only licenses gerunds that are linked with the preposition *at*. It is intriguing to see whether the development of the sentential complements of *aim* moves in the direction of the Great Complement Shift as well.

I am also an aspiring ESL teacher, which makes the study of complementation interesting to me on personal level. It can be very difficult for non-native speakers to choose correct complements with English verbs because complements are lexically governed. One can usually only trust his or her linguistic instinct, memory or a good dictionary when it comes to the complements of a certain verb. Consequently, this thesis can benefit language

teaching and learning by clarifying some issues of complementation to the reader, at least, on the part of the verb *aim*.

Chapters 2-5 form the theoretical background of this thesis. Chapter two will introduce the two corpora used in this thesis, and explain the benefits and pitfalls of using corpora. Chapter three will focus on complementation and introducing valency theory. Chapter four explores the semantics of the verb *aim* with the help of the Oxford *English Dictionary* (*OED*) and other dictionaries. Chapter five will be dedicated to the study of the previous literature that has discussion on *aim*. Chapter six discusses other theoretical factors, such as control and *horror aequi*, that may influence the selection of complements in a given sentence. Chapters 7-10 will be the actual analysis of part of the corpus data where the merit of the theory part is tested against the authentic British English examples of *aim*. Chapters eleven and twelve will summarize the results.

## 2 On Corpora

This chapter will introduce the concept of corpus linguistics and the two corpora that were used for retrieving the data for this thesis. There will also be a short sub-section on calculating normalized frequencies. McEnery & Wilson (2001, 32) define the word *corpus* in modern linguistics as a: “a finite-sized body of machine-readable text, sampled in order to be maximally representative of the language variety under consideration.” Bauer, on the other hand, (2004, 98) considers a corpus simply as: “a public body of language data which can serve as a basis for linguistic analysis and description.”

### ***2.1 From traditional linguistics to corpus linguistics***

McEnery & Wilson (2001, 1) define corpus linguistics as “the study of language based on examples of ‘real life’ language use”. Corpus linguistics is rather a linguistic method than an “aspect of language” such as syntax or semantics (McEnery & Wilson 2001, 2).

Next, I will give a short historical introduction of the two different main methodological approaches to linguistics. The field of linguists has sometimes been divided into two broad methodological camps. On one side are the empiricists who rely on external data or observation of language. On the other side are the rationalists, also called traditional linguists, who use “artificial behavioral data and conscious introspective judgments” (McEnery & Wilson 2001, 5).

Noam Chomsky, who coined the two terms competence and performance, was one of the big proponents of traditional linguistics. With competence he meant the tacit knowledge of language that each human possesses in their mind and with performance the actual instances of language in use (McEnery & Wilson 2001, 6). Chomsky argued that we should focus on creating a model of competence rather than performance. According to Chomsky performance may contain false starts or hesitations that might interfere with the study of

competence, which is why he did not consider corpora as good sources of data (Kennedy 1998, 23; Leech 1968, 89). Leech (ibid, 94), on the other hand, quite poignantly states that:

Thus the linguist who studies competence through the observation of performance is following a general pattern of linguistic inquiry, and is no more roundabout in his methods than is (say) a meteorologist who confirms hypotheses about the weather by observing the readings of recording instruments.

Chomsky's criticism was directed towards a group of early corpus linguists who thought that language is finite and that it could be described solely by relying on empirical methods. However, it is also true that relying on introspection alone can lead to erroneous conclusions. The general opinion nowadays seems to be that a combination of both empirical data and rational introspection provides the linguist with the best results (McEnery & Wilson 2001, 7-12; Kennedy 1998, 271; Leech 1968, 93). Because of the advances in technology, this aforementioned marriage of data collection and intuition is now possible.

## ***2.2 The Benefits of corpora for linguistic research and ESL teaching***

By comparing historical and present day corpora, linguists can study the evolution of a language (McEnery & Wilson 2001, 124; Bauer 2004, 105; Mair 2002, 106). Mair (ibid, 108) believes that using data from corpora is the best way to study on-going grammatical change, which might be very difficult to notice otherwise. Even slight changes in the grammar can be made visible by analyzing frequencies of linguistic phenomena, which cannot be done only through introspection (Wilson 2001, 15; Bauer 2004, 103). One might easily be under the impression that grammatical changes take vast amounts of time, but it has been proven by recent studies made with diachronic corpora that a period of thirty years is enough for the study of short-term linguistic change (Kytö, Rudanko & Smitterberg 2000, 92; Leech 2003, 223).



One other apparent benefit of electronic corpora is that they can be searched quickly and accurately with the help of modern computers (Kennedy 1998, 5). Consequently, the complementation behavior of verbs can be studied in more detail than ever before (Hunston 2002, 167). Corpora also provide linguists with context that allows the researcher to observe the linguistic phenomenon under study in its natural environment (McEnery & Wilson 2001, 17-18). Because of the context, corpora offer a convenient way of studying a particular dialect or an earlier period of language use (McEnery & Wilson 2001, 103; Kennedy 1998, 4).

Hunston (2002, 168) also points out that corpora allow the study of variation between different registers. For example, verb + that-clause combinations seem to be favored in spoken registers whereas the adjective + *to*-infinitive pattern is more common in academic writing (Hunston *ibid*). According to Kennedy (1998, 272) the analysis of different corpora can even reveal new linguistic phenomena that linguists have not thought of previously. Corpus data can also be accessed easily by other researchers if we are using a public corpus (McEnery & Wilson 2001, 14; Bauer 2004, 102). Bauer (*ibid*) points out that it is a good sign of science that examples can be replicated because it adds to the verifiability of the results obtained by corpus data analysis.

The knowledge gained by examining corpora can also be used in practical applications such as teaching (Kennedy 1998, 1). Hunston (2002, 169) stresses the importance of pattern grammar in language pedagogy. By this she means “an approach to the grammar of English which prioritises the behaviour of individual lexical items” (*ibid*). By patterns, like *aim* + *to*-infinitive, Hunston basically means the head plus its complements. According to Hunston (2002, 173) even advanced students of English can improve their grammatical accuracy by being able to recognize and use different patterns. Hunston (2002, 173) believes that a lack of control over patterns can lead to unidiomatic use of language. Hunston (2002, 174) also points out that fluency of speech can be improved significantly by stringing together different

patterns. Teachers should try to raise the pattern-consciousness of their students so that they would be able to understand the importance of patterns in the English language (Hunston 2002, 176). Hunston (2002, 176-177) even provides a few corpora-based example exercises in her article that can be used to raise the students' consciousness of patterns.

Corpora have become useful for teaching material producers as well because they can reveal the frequencies of different grammatical patterns. In fact, McEnery & Wilson (2002, 120) point out that some traditional text/grammar books of English might have taught students patterns that are relatively infrequent in real life language use. Fortunately, some producers of teaching material have started to use empirical corpus based data to justify their claims (McEnery & Wilson *ibid*).

### ***2.3 The pitfalls of using corpora***

McEnery & Wilson (2001, 75) point out that one of the reasons why Chomsky has criticized the use of empirical data is that it might yield 'skewed' results. By this he means that certain rare linguistic phenomena might appear to me more frequent than they actually are. This might happen, for instance, if an author favors a certain grammatical peculiarity and many of his/her texts have been included in the corpus. The problem of 'skewed' results can be corrected at least to some extent by paying close attention to the structure of the corpus while compiling it. For example, different demographic and sociolinguistic factors should be taken into account. The compilers of a corpus must make sure that their corpus represents the variety it focuses in as well as possible (McEnery & Wilson 2001, 79).

Another pitfall is that linguists can never be totally sure of how well their corpus analysis results actually represent the whole variety they are studying (Bauer 2004, 103). The previous argument can be extended to diachronic corpus study as well. Linguists cannot be absolutely sure whether a certain increase in the frequency of a given grammatical pattern is a result of diachronic development or whether it just represents a stylistic variation caused by a

difference in the text-selection. However, if similar results are obtained from the study of many different well representative corpora, the results can obviously be trusted more (Bauer (2004, 103). The size of a corpus can also prove to be a problem for linguistic analysis. Bauer (2004, 104) says that it is quite hard to be sure of how big a corpus must be in order to obtain credible results. However, it is clear that the rarer the linguistic pattern under study the bigger the corpus must be.

Retrieval of results from a corpus, also called the recall problem, can also prove to be an issue (Ball 1994, 295). Some grammatical phenomena are difficult to study because examples cannot be retrieved from a corpus. Bauer (2004, 107) provides an example of this with the zero relative. Zero relative tokens cannot be retrieved unless the corpus is tagged, and even tagged corpora can have mistaken tags in them. Ball (1994, 296) points out that linguists can never be absolutely sure that their search string has given them all the relevant tokens from the corpus unless the whole corpus is analyzed by hand. This is especially true with large corpora, and if the linguistic phenomenon is complex. A search that brings about many relevant tokens, but not many irrelevant ones, is said to have good precision.

## ***2.4 The corpora used in this study***

The empirical data of this thesis comes from two main sources: the diachronic data was gathered from all of the three parts of the CLMETEV and Present Day English was studied with the help of the BNC. The next two subsections (2.4.1 and 2.4.2) will introduce these two corpora in more detail.

### **2.4.1 The Corpus of Late Modern English Texts (extended)**

The texts of the CLMETEV have been compiled using *Project Gutenberg* and the *Oxford Text Archive*, which both represent electronic collections of text freely accessible on the Internet (De Smet 2005, 70). De Smet (ibid) points out that the CLMETEV is not necessarily

a traditional corpus in the sense that anyone can add or subtract texts from it using these two previously mentioned sources. The CLEMETEV has been divided into three subdivisions, each covering a period of seventy years. The first part includes texts from 1710-1780, the second part from 1780-1850, and the third part from 1850-1920 (ibid).

The corpus was compiled following carefully chosen principles. First, De Smet chose only British, native speakers of English for his corpus because he wanted to facilitate comparison with other corpora, most of which represent the British variety (ibid, 71). Second, "...the texts included within one sub-period of the CLMET are written by authors born within a correspondingly restricted time-span" (De Smet 2005, 70); i.e. the authors of each part of the corpus were born during a seventy-year-span that begins thirty years before the beginning of each of the parts of the corpus. These methods were chosen to increase the homogeneity of each sub-period. This should also make the possible historical language trends of each era more prominent. In addition, no authors' work appears in two subsequent parts of the corpus.

Third, the amount of text that each author provided for the corpus was limited to 200,000 words. This was done to avoid 'skewing' of the data (see section 2.3), which might have resulted from some individual author's idiosyncrasies (De Smet 2005, 71). Fourth, De Smet has tried to collect texts from different text genres, and from authors with different social backgrounds. This was done, of course, within the limitation of the *Project Gutenberg* and the *Oxford Text Archive* that tend to favor formal, 'high' register texts. However, whenever there was a choice between a stylistically 'lower' or 'higher' text, the less formal text was chosen. Women authors' texts were also included in the corpus.

Despite these measures, the corpus is still somewhat biased towards higher class male authors since most writers during the Late Modern English period were from this kind of a background (De Smet 2005, 71-72). De Smet points out (2005, 79) that texts from well

educated authors are not necessarily the best for studying language change “because these are exactly the type of texts where one expects language change to be kept at a tight leash.”

The sizes of the different parts of the corpus are presented in the table (1) below (<http://perswww.kuleuven.be/~u0044428/>).

Sub-period	Number of authors	Number of texts	Number of words
1710-1780	23	32	3,037,607
1780-1850	46	64	5,723,988
1850-1920	51	80	6,251,564
TOTAL	120	176	14,970,622

**Table 1: The CLMETEV # of authors, texts, words in each part**

#### 2.4.2 The British National Corpus

The BNC was gathered in a collaborated effort by major academic, commercial publishing and publicly founded institutions. Half of the cost of this corpus project was funded by the British government. The compilers of the corpus had a high goal of putting together a corpus that is representative of present day British English as a whole. Consequently, the BNC consists of a wide range of different text types and transcribed spoken British English. Easy access to the corpus was also considered to be one of the main priorities (Kennedy 1998, 50).

The BNC consists of 4,124 texts, ninety percent of which come from written sources and ten percent from spoken sources. The total word count of the corpus reaches the number of about 100 million (Kennedy 1998, 50-51). Seventy-five percent of the written English part of the corpus consists of informative texts. The different written genres of the *informative* texts are the following: *natural and pure science, applied science, social and community, world affairs, commerce and finance, arts, belief and thought, and leisure* (Kennedy 1998, *ibid*). Twenty-five percent of the texts in the corpus are from an *imaginative* field of writing.

It is interesting to note that the make-up of the corpus is also supposed to represent different ‘levels’ of British English: thirty percent represents “a more literary or technical ‘high’ style”, forty-five percent ‘middle’ style, and twenty-five percent ‘low’ or informal style (Kennedy 1998, 51). In sum, this multilayered sampling was taken up to increase the representativeness of the corpus, in order to reflect the whole of the English language better (ibid, 52-53). According Kennedy (1998, 53) the large size of the BNC accounts for the fact that many errors are bound to be found among the data. The probable mistakes include transcription errors, spelling errors in the original texts, and errors that have resulted from optical scanning.

The biggest differences between the CLMETEV and the BNC are their respective sizes, as well as the fact that a part of the BNC data comes from spoken sources. Given that the focus of this thesis is on written British English, I chose to discard spoken samples from my data. The CLMETEV data comes from imaginative prose and religious texts. Thus, to make comparison easier, I took a random sample of 300 out of 397 tokens from the *imaginative* text type and a random sample of 200 out of 214 tokens from the *belief and thought* text type in the BNC. I believe that by choosing these two text types, which resemble the CLMETEV data as closely as possible, I can make the comparison of the two corpora easier. In addition to these two previously mentioned text types, I gathered an additional random sample of 200 out of 1542 tokens from the *world affairs* text type in the BNC. This was done to increase the total number of tokens for the Present Day English analysis part of this thesis, and also to see whether the use of *aim* differs in stylistically different writing. The projected total number of words for the BNC sample was (*Imaginative* 12,465,800 + *Belief and Thought* 2,838,815 + *World Affairs* 2,236,644) 17,541,259 words.

## ***2.5 Calculating normalized frequencies***

I decided to use normalized frequencies in the presentation of the results because these two corpora differ greatly in size. By calculating normalized frequencies for the different complements in the BNC and the CLMETEV data, it is possible to study the historical changes that have taken place in the complementation of the verb *aim*.

Normalized frequencies are calculated by dividing the raw number of tokens with the number of words in the whole corpus, after which this ratio is multiplied by a constant (Biber et al. 2000, 263; McEnery & Wilson 2001, 83). The constant selected for this thesis is 1,000,000 words. The size of the sample has been taken into account when calculating the normalized frequencies for the BNC part of the data.

### 3 Complementation

This chapter will focus on making a crucial distinction between adjuncts and complements. It is of vital importance to be able to make this distinction because adjuncts are beyond the scope of this study. We will also take a brief look at Valency theory. Finally, the concept of semantic roles is also introduced and applied to a sentence with the verb *aim*.

#### 3.1 Complement or adjunct?

It is very important to distinguish complements and adjuncts from each other because this thesis focuses only on the complementation of the verb *aim*. It can be quite difficult to make a distinction between complements and adjuncts at times because the surface structure of complements and adjuncts can be very similar. This is especially true in the case of catenative verbs, such as *aim*, and their non-finite clause complements.

The biggest difference between complements and adjuncts, according to Huddleston (1984, 177), is that adjuncts can always be omitted from a sentence; whereas complements cannot be left out, at least without changing the meaning of the matrix verb. Complements are tightly connected to the matrix verb of the sentence, which is considered to be the head. The meaning of the matrix verb is completed by complements (Somers 1984, 508; Rudanko 1989, 10). Adjuncts, on the other hand, complete the meaning of the whole central predication of a sentence. Thus, adjuncts have a constant meaning regardless of the verbs they occur with (Dowty 1991, 577). The matrix verb of the sentence selects its post-verbal complements, but different kinds of adjuncts can be used more freely (Huddleston 1984, 178). There are grammatical restrictions that limit the number of complements down to three per sentence, but no such restrictions apply to the number of adjuncts in a given sentence (Huddleston 1984, 179).



Next we will take a look at the typical categories of complements. The most prototypical phrasal classes that occur as non-sentential complements are the NP and the AdjP (the following examples are from Huddleston 1984, unless noted otherwise).

- (1) Ed loves *Kim*.           S-P-O  
 (2) Ed is *fond of Kim*.       S-P-PC

Huddleston makes a difference between the type of complements occurring here (the first one is an object and the second one a predicative complement), but for our purposes it is enough to know that they are both complements. A NP and an AdjP can combine to form a sentence with two complements:

- (3) Ed made *Liz angry*.     S-P-O-PC

A sentence with two NP complements is also possible:

- (4) Ed gave *Liz the key*.    S-P-O-O

Complements may also take the form of a PP (Huddleston 1984, 200). Huddleston uses the term ‘prepositional verbs’ for the verbs that select PPs as their complements.

- (5) Ed relied *on the minister*.   S-P-PP

Other cases of PP complementation, where the preposition does not depend on the matrix verb, are very similar to adjuncts of comparable type. Here are examples of complements of place, goal and time respectively (Huddleston 1984, 205):

- (6) The cat is *in the lounge*.  
 (7) John went *into the kitchen*.  
 (8) The meeting is *at 5 o'clock*.

According to Herbst et al. (2004, xxviii) complements can also be AdvPs, even though this phrasal class is usually associated with adjuncts. The form of the AdvP complements is not governed by the matrix verb. Another similar complement is the *wh*-clause. Examples (9) and (10) are from Herbst et al. (2004).

- (9) I put paper and kindling *there*.  
 (10) I put paper and kindling *where they belong*.

Sentential complements form another major group of post-head complementation. A matrix verb may license subordinate clauses as its complements (Huddleston 1984, 207). Here are a few examples where the subordinate clause complement contains a finite verb:

- (11) She assumed *that he was right*.  
 (12) She asked *who I was*.

Catenative verbs, such as *aim*, may select non-finite clauses as their complements (Huddleston 1984, 210). Prototypically, non-finite refers to the verb being non-tensed.

Typical complements of this kind are the *to*-infinitives and the *-ing* forms:

- (13) Ed hoped *to repair it*.  
 (14) Ed remembered *repairing it*.

There can also be cases where the non-finite VP is preceded by a NP:

- (15) Ed intended *Liz to repair it*.  
 (16) Ed remembered *Liz repairing it*.

Let us now turn our attention to adjuncts. Huddleston (1984, 223) has an extensive list of different kinds of adjuncts. Adjuncts can either be AdvPs, PPs or finite or non-finite subordinate clauses, and in some rare cases NPs and AdjPs.

- |   |                |
|---|----------------|
| (17) a. He drives <i>very carefully</i> .                             | Manner         |
| b. I opened it <i>with the master key</i> .                           | Instrument     |
| c. Liz came <i>with John</i> .  | Comitative     |
| d. She died <i>in 1942</i> .  | Time           |
| e. They rested <i>for a few minutes</i> .                             | Duration       |
| f. She <i>often</i> faints.   | Frequency      |
| g. He was reading <i>in the bath</i> .                                | Place/Locative |
| h. He worked late <i>to impress the boss</i> .                        | Purpose        |
| i. They stayed in <i>because it was raining</i> .                     | Reason         |
| j. I enjoyed it <i>very much</i> .                                    | Degree         |
| k. <i>From a philosophical point of view</i> ,<br>it is quite unsound | Viewpoint      |
| l. <i>Perhaps</i> he likes her.                                       | Modal          |
| m. She resigned, <i>however</i> .                                     | Connective     |

(Huddleston 1984, 223)

The line between a complement and an adjunct is probably the vaguest in the case of an adjunct of purpose that is realized by a *to*-infinitive. According to Huddleston (1984, 223)

a way to make a distinction between a *to*-infinitive complement and an adjunct of purpose is to insert *in order to* into the sentence under analysis. *He worked late in order to impress the boss* is correct, whereas *\*He wanted desperately in order to impress the boss* is not. Rudanko (1989, 9) also adds *so as to* as an element which can be inserted in similar fashion.

Another adjunct that can easily be confused with the *to*-infinitival complement is called an ‘infinitive of result’. Rudanko (1989, 9) has an example of this kind of structure: *He awoke suddenly to find the car had stopped outside the hotel*. This kind of a sentence does not contain a *to*-infinitive complement. Instead, the actions that take place in sentences like these happen in rapid succession. In fact, in the example sentence above, the action of awakening and finding out can almost be considered to be coordinate. Thus, the preceding example could be paraphrased as: *He awoke suddenly and found...* Or *only* can be inserted into the sentence: *He awoke suddenly only to find the car...*

There is also an adjunct formed with the preposition *at* that one has to be able to distinguish from the *at* + *V-ing* complement, especially as *aim* selects a very similar *at* + *V-ing* complement. The following example is taken from Rudanko (1996, 95):

(18) He promised *at parting* to call the Council the following day.

Here the *at* “denotes a mixed relation of time and cause “(Poutsma 1929, 951 in Rudanko 1996). Example (18) could be paraphrased as *He promised on parting to call the Council the following day*. It follows that *at* can be substituted by *on* in adjuncts like these, particularly if the adjunct emphasizes a relation of time (Rudanko 1996, 95). It is also possible to prepose adjuncts like these, as in *At parting he promised to call the Council the following day*.

Somers (1984) offers various tests on how to differ complements from adjuncts, even though these tests do have their own complications. The first test he mentions is the elimination test (1984, 509). By deleting elements of an active declarative sentence, it is possible to see which components are mandatory for the sentence to remain grammatical:

- (19) a. *He put the book under the table.*  
 b. \* He put the book.  
 c. \* He put under the table.  
 d. \* He put. (Somers 1984, 509)

Another test which closely resembles the elimination test is called the extraction method, but instead of focusing solely on the grammaticality of the sentence it also takes into account the changes in meaning, which result from extracting elements from the sentence (Somers 1984, 510). Thus, *his field* cannot be extracted from (20a), even if (20b) is perfectly grammatical, without changing the meaning of the predicate.

- (20) a. The farmer ploughs his field.  
 b. The farmer ploughs. (Somers 1984, 510)

The best way, according to Somers (1984, 516-518) to distinguish between complements and adjuncts is the *do so* test. “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 (again other than the subject)” (Somers 1984, 517). From this we can infer that if an element cannot occur alongside the proform, it is a complement. As a result, the italicized components in the following Somers’ examples are complements:

- (21) a. \*I live *in Manchester* and Jock does so *in Salford*.  
 b. \*Harold drives *a Volkswagen* and Rod does so *a Lancia*.  
 c. \*The News lasts *for fifteen minutes* and the Weather Report does so *for five*.

Somers (1984, 520) points out, though, that the *do so* test is not applicable to predicative adjective complements because *do so* is a proform for the VP plus its complements. The different syntactic patterns of complementation of the verb *aim* will be under scrutiny in the data analysis part of the thesis.

### **3.2 Valency theory**

The fundamental idea of valency theory is that matrix verbs occupy a central role in sentences, and they also determine how many elements are needed to form a grammatical sentence. The obligatory elements are called complements (Herbst et al. 2004, xxiv). The valency of a verb denotes the total number of its complements (Herbst et al. 2004, xxiv, Somers 1984, 508); i.e. the complements of given verb are called valents. According to valency theory subjects are also considered complements, but this thesis focuses mostly on the immediate post-head complements of the verb *aim*.

There are also components that connect less tightly to the matrix verb. In valency theory, these elements are called adjuncts (Herbst et al. 2004, xxiv; Somers 1984, 508). Adjuncts are not a part of the valency of a verb because their occurrence in a sentence cannot be predicted on the basis of the matrix verb. Instead, adjuncts can “occur relatively freely” across a wide variety of different sentences (Herbst et al. 2004 xxiv).

### **3.3 Semantic roles**

The NPs of sentences are thought to have “semantically relevant syntactic relationships” that can be described with the concept of semantic roles (Fillmore 1968, 5). Semantic roles provide a helpful way of deepening our understanding of the verb *aim* as well.

In subject control sentences (see 6.2 below), the matrix verb assigns semantic roles (also known as case roles or thematic roles) to the higher subject NP (henceforth NP<sub>1</sub>) and to the lower understood subject NP (henceforth NP<sub>2</sub>) (Rudanko 1989, 50; Dubinsky 2004, 4-5). Rudanko states (ibid) that the relevant semantic roles for subject control sentences are: the Agent, the Experiencer, the Benefactive and the Object. We will adopt the views presented on semantic roles in Rudanko (1989) in this thesis.

The Agent can be defined as “the case of the typically animate perceived instigator of the action identified by the verb” (Fillmore 1968, 24). Rudanko (1989, 53-54) attaches the notion of intentionality to the Agent, thus all inanimate NPs are excluded from the category of the Agent, as well as some +Human NPs. Consider examples ((1-2) from Rudanko 1989):

- (1) John opened the door.
- (2) John died yesterday.

In example (1) *John* intentionally opens the door, thus NP *John* is an Agent, but in (2) the NP *John* is an Object.

The Experiencer specifies “the undergoer of a psychological event of sensation, emotion, or cognition and also that of communication” (Rudanko 1989, 54). In a sentence where the matrix verb assigns the Experiencer role to the subject NP, the Object specifies the content of the experience. The Benefactive can be defined as “the one in the state of possession, or the one who undergoes gain or loss in the transfer of property.” Rudanko (1989, *ibid*) points out that the Object of a sentence with a Benefactive NP “specifies the thing possessed or the thing transferred”.

Rudanko (1989, 56) suggests that verbs like *aim* contain an “element of intention or decision” which makes NP<sub>1</sub> agentive. On the other hand, NP<sub>1</sub> can be analyzed as an Experiencer that experiences the cognition of intending to do something. Thus, subjects of verbs like *aim* can have two roles simultaneously, the Experiencer and the Agent role. This is known as the concept of coreferential roles (Rudanko 1989, 61).

Let us now look at an example sentence (3) from the BNC to see what kinds of semantic roles the verb *aim* assigns to the two NPs.

- (3) C85 763 These ignorant savages have strange beliefs – one being that we *aimed* [PRO] to eat them.

In the above example, *aim* seems to allocate the Experiencer/Agent role to the subject of the matrix clause *we*, and the Agent role to PRO, which is the subject argument of the verb *eat*.

NP<sub>2</sub> PRO seems have many Agent entailments such as volition, sentience and causation. NP<sub>1</sub> *we* could be thought of as experiencing the cognition of *aiming* to eat the savages, thus it seems to have the Agent and Experiencer roles concurrently.

## 4 *Aim* in the *Oxford English Dictionary* and Other Dictionaries

The *OED* lists eight different senses for the verb *aim*. The first four of these senses are irrelevant for this paper because they are listed as obsolete, and none of these were found in the data. The other two dictionaries consulted, *Cambridge Advanced Learner's Dictionary* and *Longman Dictionary of the English Language* (LDEL), give two main senses for *aim*: 'to point something at a mark or an object' or 'to intend to do something'. The *LDEL* also has the 'to direct one's course' sense (see table below).

The different senses in the *OED* are rather elaborate and complex; thus, I have suggested a simplification for the different senses. The simplified senses of the verb *aim* could be: 'to direct one's course', 'to intend to do/achieve something', 'to take aim' and 'to point something at something'. According to the *OED*, the different senses of *aim* select different complements. Only the *at* + NP complement occurs with two senses, the *OED* sense 5 and 6.a. The *OED* senses are listed in the following table along with the possible complements and simplifications of each sense:



Senses	Quote	Complements	Simplified senses
5. To calculate one's course with a view to arriving (at a point); to direct one's course, to make it one's object to attain. Hence <i>fig.</i> To have it as an object, to endeavour earnestly. b. <i>intr.</i> Also with infinitive: to intend; to attempt (formerly chiefly <i>dial.</i> and <i>U.S.</i> , now <i>colloq.</i> )	1649 SELDEN That ease and rest that the King <i>aimed</i> to enjoy. 1758 S.HAYWARD Perfection is what the Christian is <i>aiming</i> at. 1872 JENKINSON <i>Aim</i> for the steeple. 1879 FROUDE In politics they <i>aimed</i> at being on the successful side.	( <i>to obs.</i> ) <i>at</i> + NP <i>for</i> + NP <i>to</i> -infinitive <i>at</i> + V- <i>ing</i>	'to direct one's course'  'to intend to do/achieve something'
6.a. <i>intr.</i> To calculate or estimate the direction of anything about to be launched (at an object); to deliver a blow, or discharge a missile (at anything) with design or endeavour to strike. Hence <i>fig.</i> To try to hit, gain, or bring into one's power; to have designs upon, to seek to obtain.	1718 POPE <i>Aim</i> at his breast, and may that aim succeed.	<i>at</i> + NP	'to take aim'
7 <i>trans.</i> To direct (a missile, or blow); especially, to direct it with the eye before its discharge; to point or level a gun, etc. Hence <i>fig.</i> To direct any act or proceeding against.	1721 M. ANGELO Mrs. Bull <i>aimed</i> a knife at John. 1962 <i>Car Suppl.</i> Offside headlamp [was] <i>aimed</i> high.	NP + ( <i>at</i> ) + (NP) NP + AdvP	'to point something at something'
8 <i>absol.</i> In both preceding senses: To take aim; to form designs.	1651 HOBBS They look about with two eyes, yet they never <i>ayme</i> but with one.	∅	'to take aim'  'to point something at something'

**Table 2: Senses, complements and simplified senses of *aim* in the OED**

## 5 *Aim* in the Previous Literature

Various grammars also provide discussion on the complements of *aim*. Herbst et al. (2004, 27) list the following complements in the sense of ‘pointing something’: *at* + NP, (NP) + AdvP, NP + *at* + NP and  $\emptyset$ ; and in the sense of ‘aiming to do or achieve something’: *to*-infinitive, *at* + NP, *at* + V-*ing* and *for* + NP. Declerk (1991, 469) mentions *aim* in a section where he describes verbs that take a *to*-infinitive complement, but he also adds the possibility of *aim* taking a gerundial *at* + V-*ing* complement without a difference in meaning. Quirk et al (1985, 697) point out that the preposition *at* in the *aim* + *at* construction expresses the “intended goal or target” of the action expressed by the verb.

Biber et al. (1999) give the following complementation patterns for *aim*: *to*-infinitive, *at* + V-*ing* and (NP) + *at* + NP. Poutsma (1904, 693) states, in his grammar written at beginning of 20<sup>th</sup> century that the *to*-infinitive and the *at* + V-*ing* construction can be used in the same sense. Poutsma (ibid) also makes an interesting point about the frequencies of the aforementioned patterns: “The gerund-construction is the usual one, and the infinitive-construction may have crept in through the analogy of *to aim* with a numerous class of verbs and adjectives with *for*, after which the verbal almost regularly takes the form of the infinitive.” It will be interesting to see whether Poutsma’s observation holds true in the empirical part of this study.

Some authors (Rudanko 1989, 78; Dirven 1989, 121-122) include *aim* in a list of verbs that can select a *for* + NP + *to*-infinitive complement. As in example (1) from Rudanko (1989):

(1) Jack *aimed* for Sue to leave the party first.

As a general rule, verbs that take *for* + NP complements also accept *for* + NP + *to*-infinitive complements (ibid). We will see whether this hypothesis holds true with *aim* in the data

analysis part of the thesis. I will perform a separate search for this particular pattern in the BNC.

Rudanko (1996, 94) also makes noteworthy points about the syntactic status of the lower gerundial sentences ( $S_2$ ) selected by *aim*. The  $S_2$  in an *at* + *V-ing* complement sentence is a nominal clause. Consider the following illustrations (1-1'). (Example 1 taken from Rudanko (1996, 97)):

- (1) The solitary learner should *aim* at mastering all four approaches.  
 (1') [[The solitary learner]<sub>NP1</sub> should [*aim*]<sub>Verb</sub> [[at]<sub>Prep</sub> [[[PRO]<sub>NP2</sub> mastering all four approaches]<sub>S2</sub>]<sub>NP</sub>]<sub>PP</sub>]<sub>S1</sub>]

There are many ways to test the nominal status of the lower sentence. It is possible to form a question with *what* that can be answered with the subordinate clause. Q. *What should the solitary learner aim at?* A. *Mastering all four approaches.*  $S_2$  can also be replaced by a pronoun (*it/that*), as in *The solitary learner should aim at mastering all four approaches, but the group learner should not aim at it.* There is also the possibility of Right dislocation of  $S_2$ , as in *The solitary learner should aim at it, mastering all four approaches.* One can also form pseudocleft sentences, as in *What the solitary learner should aim at is mastering all four approaches.*

Verbs like *aim*, which select nominal *at* + gerundial complement clauses, can usually also govern *at* + NP complements (Rudanko 1996, 94). Example from the CLMETEV:

- (2) ...but I cautioned B. to reserve his fir till the bull should be close into me, and then to *aim at the head.* (Baker 1854, *The Rifle and the Hound in Ceylon*, line 1428)

However, it is not the case that all verbs selecting *at* + *V-ing* complements also allow non-sentential NP complements after the preposition *at*.

In addition, Rudanko (1996, 97) makes an interesting statement about the frequency of the *aim* + *at* + *V-ing* pattern. In the LOB and Brown corpora, *aim* “is by far the most common verb selecting the pattern”. *Aim* with the *at* + *V-ing* complement expresses a matter of the

mind instead of something concrete. With this particular complement, *aim* also expresses a tendency of having to be in control of the events that take place in  $S_2$  (Rudanko 1996, 108).

Thus examples like (2 (a-b) from Rudanko (ibid)) might sound a bit peculiar:

- (3) a. John ?*aimed* at being told to wait in line.  
 b. John ?*aimed* at having to wait in line.

Additionally, the subject of the lower clause has to be PRO. Object control sentences are not likely to occur when *aim* selects the *at* + V-*ing* complement: *John ?aimed at Sue repairing the puncture* (Rudanko 1996, 108).

Other work also offers some discussion on the frequency of *aim* with different complements. In his recently published book, Egan (2008, 421) has studied the whole BNC in order to find out which matrix verbs in English occur most commonly with *to*-infinitive complements in subject control constructions. *Aim* is the twenty-third most common subject control verb selecting infinitival complements in the whole BNC. This is a significant finding because, in the BNC, there were altogether 7180 tokens of the verb *aim*. The total number of tokens was thinned down to random sample of 1000 tokens, which contained 407 tokens of *aim* with the *to*-infinitive complement. The projected total of infinitive complements occurring with *aim* for the whole BNC was 2922 tokens. This projected number of tokens predicts that *aim* is found with infinitives more frequently than common verbs such as *plan*, *use* and *prefer*.

## 6 Factors Bearing on Complementation

This chapter will identify various general factors that may influence the selection of complements in a given sentence.

### 6.1 Semantics of the non-finite complements

We will now consider the semantics of the non-finite complements of *aim*. According to Bolinger's generalization (1968, 127) "a difference in syntactic form always spells a difference in meaning." Even though this statement might be a bit exaggerated in some instances, I assume that there is usually a difference in meaning between the syntactically different complements of *aim*. Allerton (1988, 11) also states that the two non-finite verb forms of English (infinitives and gerunds) resemble each other closely, but are still semantically different.

There are many verbs which select either only the *to*-infinitive or the gerund complement. In the case of *aim*, there is a choice between the *to*-infinitive complement and the prepositional gerund complement. According to Huddleston (1984, 212) catenative verbs with similar or related meaning, i.e. verbs that license non-finite clauses such as *to*-infinitives or *ing*-clauses as their complements, usually select similar complements. Although there is a tendency of this sort, one cannot predict the correct post-verbal complement solely on the basis of the semantic properties of the main verb.

Let us now consider the semantic properties of the two non-finite complements of *aim*. Rudanko (1996, 113) proposes that there might be a subtle difference in meaning between the *at + V-ing* pattern and the *to*-infinitive with *aim*. Following examples are from Rudanko (ibid):

- (1.) a. John *aimed* at clearing a path through the thicket.
- b. John *aimed* to clear a path through the thicket.

Example (1b.) might put more stress on the intention of clearing the thicket. According to Rudanko (1b.) might indicate a “more definite or specific or therefore perhaps higher” commitment on John’s part than in (1a.); while (1a.) puts more emphasis on the goal of John’s intention. Even so, this difference is very subtle and should not be over emphasized. Allerton (1998, 22) even points out that there seems to be a tendency in formal English to blur the distinction between the infinitive and the gerundial complement with verbs of intention, and thus they are in many cases both used with similar meaning.

## 6.2 Control

When *aim* is appears with the *to*-infinitive complement, it is a subject control verb (Rudanko 1989). Subject control also applies to cases where *aim* governs prepositional gerund complements (Rudanko 1996). The linguistic phenomenon of control has to do with issues of reference (Davies & Dubinsky 2004, 3). Consider sentences (1-2) from the BNC:

- (1) C85 763 These ignorant savages have strange beliefs – one being that  
[[we]<sub>NP1</sub> [*aimed*]<sub>Verb1</sub> [[PRO]<sub>NP2</sub> [[to eat]<sub>Verb2</sub> them]<sub>VP2</sub>]<sub>S2</sub>]<sub>S1</sub>.
- (2) A4X 159 [[The bill]<sub>NP1</sub> [is *aimed* ]<sub>Verb1</sub> [at]<sub>Prep</sub> [[PRO]<sub>NP2</sub> [preserving]<sub>Verb2</sub>  
social and political freedoms]<sub>VP</sub>]<sub>S2</sub>]<sub>S1</sub> and is welcomed by most people.

In example (1), both the matrix verb *aim* and the lower verb *eat* are semantically linked to the subject *we*; and in example (2) the NP *the bill* is semantically linked to both the verb *aim* and *preserve*. The higher NP is said to “control” the reference of the subject of the lower clause, consequently it can be called the “controller” (Rudanko 1989, 8; Rudanko 1996, 3). In other words, “the NP that serves as PRO’s antecedent is called its controller” (Carnie 2002, 17). Therefore, in example (1) *we* is the controller of PRO in S<sub>2</sub>, and, similarly, in example (2) *the bill* controls the reference of PRO in S<sub>2</sub>. This aforementioned phenomenon is called “subject control”.

It is generally considered to be the case that in subject control sentences the embedded clause has an understood subject that is co-referential with the subject of the matrix clause.

This understood subject is usually described, in transformative literature, with an empty, phonetically non-realized pronoun PRO (Rudanko 1989, 3; Rudanko 1996, 2; Carnie 2002, 1; Fanego 1996, 29). One of the reasons why PRO is needed is that according to the theta criterion “there must be one-to-one mapping between the number of theta roles and the number of arguments in a sentence” (Carnie 2002, 7). There has to be an understood subject in  $S_2$  to satisfy the theta criterion.

There are also sentences where the referent of PRO is not clear or it lacks specific reference. Example (3) is from Carnie (2002).

(3) [PRO<sub>arb</sub>] to find a new mate, go to a dating service.

This kind of PRO can be entitled as arbitrary PRO (Rudanko 1996, 33). PRO<sub>arb</sub>'s rough meaning is “someone”, and in these cases PRO<sub>arb</sub> gets its reference from outside the sentence (Carnie 2002, 17).

Matrix predicates selecting sentential complements can be divided into two groups: control and NP movement predicates. One way of testing the syntactic property of a verb is to use a pleonastic subject (empty subject without reference) in the higher sentence (Davies & Dubinsky 2004, 7). We can use the pronoun *it*, for example, which is used as a dummy subject in weather expressions. Consider sentences (4) and (5) from Davies & Dubinsky (ibid):

(4) It *seemed* to be raining. (NP Movement)

(5) \*It *tried* to be raining. (Control)

As can be seen from the previous examples, control verbs like *try* do not function well with pleonastic subjects. This is caused by the fact that control predicates assign a semantic role to the controller of PRO, whereas NP movement verbs like *seem* do not. Since a pleonastic subject cannot be assigned a semantic role, control verbs do not work in constructions like (5). One could substitute *try* with *aim* in example (5), but the end result would be just as ungrammatical, which proves that *aim* is a control predicate.

Another way of distinguishing control and NP movement is the idiom chunk test. In the idiom *the cat is out of the bag*, the NP *cat* has an idiomatic meaning and it refers to a *secret* (Davies & Dubinsky 2004, 8).

- (6) The cat *seemed* to be out of the bag.  
 (7)?The cat *tried* to be out of the bag.

There are two ways of interpreting sentence (6): the literal interpretation would be that a feline creature seems to have made it out of a bag successfully; whereas the figurative interpretation would imply that a secret is now out in the open. On the other hand, one can only interpret example (7) in a literal way, which would mean that an actual cat tried to escape from the confines of a bag.

### ***6.3 Insertions and the complexity principle***

According to the complexity principle, cognitively complex environments or structurally discontinuous constructions (e.g. insertions of words between the matrix verb and the lower verb) favor grammatical explicitness if there is a choice between less or more explicit grammatical structures (Rohdenburg 2003, 235; Rohdenburg 2006, 147).

For instance, one can assume that the *to*-infinitive complement is more likely to appear in these kinds of contexts than the gerundial complement (Vosberg 2003b, 321; Rudanko 2007, 474). Finite complements are even more likely to occur, but these are not relevant for this thesis because *aim* does not select finite complements. From a language evolutionary perspective, this principle also predicts that more explicit new structures are likely to emerge in cognitively complex environments; likewise, more explicit obsolescent patterns thrive in similar kinds of linguistic contexts.



## 6.4 Extractions and the extraction principle

According to Transformational Grammar, phrase structure rules generate canonical sentences. However, there are also sentences where the normal order of constituents has been altered by a transformational process, which can also be called an extraction (Huang 1997, 123; Vosberg 2003b, 201).

One of these transformation processes is called *wh*-movement. *Wh*-movement has also been called question movement (Soames & Perlmutter 1979, 251) and it occurs in direct questions and indirect questions (examples from Huang 1997):

- (1) What is John buying [t]?
- (2) I want to know what John is buying [t].

In the previous examples the [t] represents the original deep-structure position of the *wh*-constituent. After *wh*-movement took place, the *wh*-constituent was extracted to its current location. The [t] is called a trace. *Wh*-movement can also happen across sentence boundaries as in (3) (Huang 1997, 126):

- (3) What do you think that Mary believes that you have done [t]?

Another common type of extraction is called topicalization, where a NP complement of a sentence is moved to the beginning of the sentence, as in (4) or (5) (Huang 1997, 129). This movement process leaves a “gap” in the sentence that is indicated by [t] in the example sentences (Soames & Perlmutter 1979, 229). It depends on the situation whether the topicalized element is followed by a comma or not.

- (4) John’s articles, I will never read [t].
- (5) John I am sure [t] will be angry when he finds out about it.

A third type of movement process is called relativization, and it occurs in relative clauses, which are used “to provide additional information about the noun they modify” (Huang 1997, 130).

- (6) The man who you saw [t] yesterday is my brother.

In relativization sentences, the relative pronoun moves from its original deep-structure position. This process is similar to *wh*-movement because many relative pronouns are *wh*-words. However, relativization does not result in direct or indirect questions. Relativization can also occur across sentence boundaries (7):

(7) The man who I believe Mary thought she had seen has disappeared [t].

Relativization is the most common of the extraction processes. There are also many other movement rules which alter the canonical order of constituents such as: pseudo clefting, comparativization, clefting etc. Examples (8-10) are from Postal (1994, 159).

(8) What<sub>t</sub> Ellen wants [t<sub>1</sub>] is a Mercedes-Benz. (Pseudo clefting)

(9) Stella tickled more chimps than (what<sub>t</sub>) I said that Dwight tickled [t<sub>1</sub>].  
(Comparativization)

(10) It was Frank who<sub>t</sub> they hired [t<sub>1</sub>]. (Clefting)

According to the Extraction Principle explicit grammatical patterns are likely to appear in sentences where a constituent of the lower clause has been extracted across sentence boundaries (Vosberg 2003a, 307; Rohdenburg 2006, 153-154; Vosberg 2003b, 202). These kinds of environments are considered to be cognitively more complex; thus, they are more likely to have an explicit pattern such as the *to*-infinitive in them. Despite the extraction principle, the general tendency of grammatical development in the English language seems to favor the expansion of *-ing* forms at the expense of *to*-infinitives. I will keep the Extraction Principle in mind, when I analyze the corpus data later on in the thesis, in order to see whether this extra-semantic constraint affects the complementation of *aim* as well.

## **6.5 Horror aequi**

Rohdenburg (2003, 236) defines the *horror aequi* principle as follows: “the widespread (and presumably universal) tendency to avoid the repetition of identical and adjacent grammatical elements or structures.” This means, for example, that a main verb in a marked infinitive form is less likely to be followed by a *to*-infinitive complement than some other grammatical

pattern (example 11). Two adjacent *-ing* patterns are even less like to appear. The following example has been invented.

(11) He decided *to aim to finish* in the top three.

This grammatical tendency is so strong that it might provide a favorable linguistic context for new or obsolescent grammatical structures. We will see later on in the thesis if there are any *horror aequi* violations in the data.

## **6.6 Semantic properties of the subject NPs**

The semantic properties of the subject NPs appear to have an impact on the complement selection of *aim*. It seems to be the case most of the time, when *aim* selects a *to*-infinitive complement that the subject of the matrix clause has to be +animate. Rudanko (1989, 22) has included *aim* with a *to*-infinitive complement in a group of verbs which “require their triggers to be +animate.” Similarly, Rudanko (1996, 103) claims that subjects of the verbs selecting the *at + V-ing* complement are usually +animate.

## 7 The CLMETEV Corpus: Part One (1710-1780)

This chapter will begin the analysis of the authentic historical corpus data. First, I will analyze the different senses in which *aim* was used in the first part of the CLMETEV. After that, I will examine and count the number of the different complements. The ideas and principles presented in the theory part of the thesis will be compared to the actual data.

The CLMETEV does not allow lemma searches, which would make it possible to search the corpus for all the different inflected forms of the verb at once. Instead, the corpus has to be searched using a basic text editor, which unfortunately also retrieves tokens where *aim* is a noun. The search for the base form and the inflected forms of *aim* yielded a total of 123 tokens out of which 39 were nouns. The nouns were discarded from this study, which left 83 relevant tokens. Here is an example of *aim* as a noun:

- (1) Those, that imparted, court a nobler *aim*, Exalt their kind, and take some virtue's name. (Pope 1733-4, An Essay on Man, line 711)

One token (example 2) proved to be really hard to analyze because it appears to have a misscan in it:

- (2) ...our ignorance, the imperfection of our nature, our virtue, and our condition in this world, with respect to *aim* infinitely good and just Being [sic], our Creator and Governor, and you will see what religious affections of...(Butler 1726, Human Nature and Other Sermons, line 3713)

Sentence (2) does not represent a token of the verb *aim*. In order to make any sense of the sentence, one has to assume that the indefinite article *an* has been misinterpreted by the computer as *aim* when it was scanned. Thus, this token was discarded.

## 7.1 The senses found in the data

Most of the tokens (74 in total) in the data represent the *OED* sense 5.

'to intend to do/achieve something'	5. To make it one's object to attain. Hence <i>fig.</i> To have it as an object, to endeavour earnestly. b. <i>intr.</i> Also with infinitive: to intend; to attempt (formerly chiefly <i>dial.</i> and <i>U.S.</i> , now <i>colloq.</i> )
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Here are some examples of *aim* used in this sense:

- (3) This long laborious comparison should be the first study of the painter who *aims at the greatest style*. (Reynolds 1769-76, Seven Discourses on art, line 3520) *at* + NP
- (4) However, though there is not any necessity that men should *aim at being important and weighty* in every sentence they speak... (Butler 1726, Human Nature and Other Sermons, line 1241) *at* + V-*ing*
- (5) ...the sound of love from any other mouth is harsh and disagreeable; the more he *aimed to vindicate himself* in this point the more guilty he became... (Haywood 1744, The Fortunate Foundlings, line 2767) *to*-infinitive

The data confirm the proposition made in the grammars and dictionaries (see section 5 above) that the *to*-infinitive and the gerundial *at* +V-*ing* complements can be used in the same sense. The data also clearly shows that when *aim* is used in this sense, it most commonly selects the *at* + NP complement. This figurative meaning of *aim* seems to have been the most common sense for *aim* already in the earlier parts of the 18<sup>th</sup> century. However, there were no examples of *aim* used in the 'direct one's course' sense in the first part of the CLMETEV.

The second most common meaning for *aim* in the data, although much less frequent than the *OED* sense 5 (7 tokens), was the 'to point something at something' sense.

'to point something at something'	7 <i>trans.</i> To direct (a missile, or blow); especially, to direct it with the eye before its discharge; to point or level a gun, etc. Hence <i>fig.</i> To direct any act or proceeding against.
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A few examples of this sense from the data:

- (6) Its proper power to hurt, each creature feels; Bulls *aim* their horns, asses lift their heels... (Pope 1733-4, An Essay on Man, line 4786) NP
- (7) This expedient, however, did not produce the desired effect; for he *aimed* the ball at the lead with such discomposure, that it struck the wrong side. (Smollett 1751, The Adventures of Peregrine Pickle, line 2268) NP+ *at* + NP
- (8) This piece is aimed against sedition, and was occasioned by the striking of a medal, on account of the indictment against the... (Cibber 1753, The Lives of the Poets 3, line 2126)

*Aim* selected the bare NP (example 6), NP + *at* + NP (example 7) and NP + *against* + NP (example 8) complements when it was used in the *OED* sense 7.

The third sense that was encountered in the data was the ‘to take aim’ sense.

‘to take aim’	6.a. <i>intr.</i> To calculate or estimate the direction of anything about to be launched (at an object); to deliver a blow, or discharge a missile (at anything) with design or endeavour to strike. Hence <i>fig.</i> To try to hit, gain, or bring into one’s power; to have designs upon, to seek to obtain.
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Here are two tokens where *aim* is used in this sense:

- (9) This being the case, *aim* at the heart. Intrinsic merit alone will not do... (Chesterfield 1746-71, Letters to His Son on the Art..., line 2139)
- (10) However, those who *aim* carefully at the mark itself, will unquestionably come nearer it, than those who from despair... (Chesterfield 1746-71, line 17617)

This meaning of *aim* was the least frequent (3 tokens) of the three senses that were present.

The *at* + NP complement was found in all of the tokens where *aim* had this sense.

## 7.2 The complementation patterns found in the data

This section will focus on all the different syntactic complementation patterns that were attested in the first part of the CLEMETEV. The following table gives an overview of the various complements of *aim* that were found. Raw and normalized frequencies of each complement are also presented in table (3) below:

Complement	Raw frequency	Normalized frequency per million words
<i>at</i> + NP	65	21.4
<i>at</i> + V- <i>ing</i>	6	1.9
NP + <i>at</i> + NP	5	1.6
<i>to</i> -infinitive <sup>1</sup>	4	1.3
NP	1	0.3
NP + <i>against</i> + NP	1	0.3
<i>to</i> + NP	1	0.3
Total	83	27.1

**Table 3: CLEMETEV 1710-1780 complements, raw and normalized frequencies**

As can be seen from the table above, many of the complements that were introduced in the *OED* were also present in the data. Clearly the most frequent complement pattern with sixty-five tokens was the non-sentential *at* + NP (examples 11-12). Complements will be underlined in the following examples.

- (11) ...for there is no uniformity in the design of Spenser; he *aims* at the accomplishment of no one action; he raises up a hero for every one of his adventures. (Cibber 1753, *The Lives of the Poets* 1, line 3384)

<sup>1</sup> There was one token where the pseudo-cleft movement process had taken place, but this token was included in the *to*-infinitive complement category.

- (12) ...I shall always have so much command over myself as not to become ridiculous by aiming at impossibilities. (Haywood 1744, *The Fortunate Foundlings*, line 3288)

*Aim* also selected the two sentential complements mentioned in the *OED*. However, it should be noted that the sentential complements occurred much less frequently than the *at* + NP complement. There were altogether six *at* + *V-ing* complements in the first part of the CLMETEV:

- (13) I would have you do so; for at your age you ought not to aim at changing the tone of the company, but conform to it. (Chesterfield 1746-71, *Letters to His Son*, line 13370)
- (14) ...to what necessities of man demand; but when those great personages I have just mentioned condescend to aim at confining such low offices to themselves—as when, by hoarding or destroying, they seem desirous to... (Fielding 1749, *Tom Jones*, line 5196)

The CLMETEV data, thus, corroborates Poutsma's (1904, 693) findings about the gerundial *at* + *V-ing* complement being the usual sentential complement for the verb *aim*, at least at the beginning of the 18<sup>th</sup> century. *To*-infinitives were less frequent in the data, but four tokens were found:

- (15) ...truly devoted to one object, the sound of love from any other mouth is harsh and disagreeable; the more he aimed to vindicate himself in this point the more guilty he became, and all he said served only to increase her... (Haywood 1744, *The fortunate Foundlings*, line 2767)
- (16) ...I shall always holloa in your ears, as Hotspur holloaed MORTIMER to Henry IV, like him too, I have aimed to have a starling taught to say, SPEAK DISTINCTLY AND GRACEFULLY, and send him you, to replace your loss...(Chesterfield 1746-71, *Letters to His Son*, line 3213)

A closer look at the semantic properties of the subjects of the sentential *at* + *V-ing* and *to*-infinitive complements provides further insight into the patterns. First, looking at the prepositional gerund complement, one cannot but notice that in all six tokens the lower subjects are +animate. This observation corroborates what was presented in section 6.6. In addition, all of the higher clauses of the gerundial complement sentences were in the active voice:



(17) However, though there is not any necessity that men should *aim at being important and weighty* in every sentence that they speak; yet...(Butler 1726, *Human Nature and Other Sermons*, line 1241)

(18) And though you should be told that you are genteel, still *aim at being genteeler*. (Chesterfield 1746-71, *Letters to His Son*, line 13370)

All of the lower subjects of the *to*-infinitive tokens were also +animate and the higher clauses were in the active voice (see examples (15-16)). It appears as if in the early 18<sup>th</sup> century, the *at* + *V-ing* complement was marginally more frequent than the *to*-infinitive complement. The sentential complements seem to have been commonly used with +animate subjects and in sentences where the higher clauses are active.

Next, we will look at some of the rarer patterns of complementation found in the first part of the CLMETEV. In five tokens, *aim* selected the NP + *at* + NP complement, which was also introduced in the *OED*. Here are two tokens of this pattern:

(19) ...the tranquility in his nerves. This expedient, however, did not produce the desired effect; for he *aimed the ball at the lead* with such discomposure, that it struck on the wrong side, and came off at an angle...(Smollett 1751, *The Adventures of Peregrine Pickle*, line 2268)

(20) No. The utmost I can do for him, is to consider him as a respectable Hottentot. – [This ‘mot was *aimed at Dr. Johnson* in retaliation for his famous letter.] (Chesterfield 1746-71, *Letters to His Son on the Art*, line 14354)

Example (20) is a passive transformation of the active sentence, but it was counted as a NP + *at* + NP complement. In one sentence, *aim* was complemented only by a bare NP complement:

(21) ...Plagued by her love, or libeled by her hate. Its proper power to hurt, each creature feels; Bulls *aim their horns*, and asses lift their heels; ‘Tis a bear’s talent not to kick, but hug; And no man wonders...(Pope 1733-4, *An Essay on Man*, line 3732)

Surprisingly, there was also one NP + *against* + NP complement in the data. This particular pattern is interesting because it was not mentioned in the previous literature:

(22) Absalom and Achitopel was published, the Medal, a Satire, was likewise given to the public. This piece is *aimed against* sedition, and was

occasioned by the striking of a medal, on account of the indictment against the...(Cibber 1753, *On Lives of the Poets* 3, line 2126)

The previous example is a stative passive. In the active voice, the complement would be NP + *against* + NP because someone would have to be *aiming a piece against* something.

There were altogether eighteen tokens where a constituent of the lower clause had been extracted. Extractions seemed to be fairly common in the earlier years of the 18<sup>th</sup> century, especially from *at* + NP complements. In sum, extraction occurred in about twenty-two percent of the relevant tokens. In seventeen tokens, extraction took place in sentences with an *at* + NP complement. The most typical transformational process that affected the canonical order of constituents was relativization (12 tokens):

(23) The character which most young men first *aim at* [t], is that of a man of pleasure; but they generally take it upon trust; and instead of consulting their... (Chesterfield 1746-71, *Letters to His Son*, line 363)  
RELATIVIZATION

(24) ...are laid in solid science. And practice, though essential to perfection, can never attain that to which it *aims* [t], unless it works under the direction of principle. (Reynolds 1769-76, *Seven Discourses on Art*, line 3520)  
RELATIVIZATION

Example (24) is a rather curious token because it has a very rare *to* + NP complement. This complement was marked as obsolete in the *OED*, but it still seems to have been in use during the latter parts of the 18<sup>th</sup> century.

I also encountered other less frequent cases of extraction. There were four tokens with *wh*-movement. All of the *wh*-movement extractions occurred in sentences with *at* + NP complements:

(25) ...particularly a very curious Person in such matter, who tells me, that provided this method answers what we *aim at* [t], he supposes they will be the most agreeable, either to be boiled with Cream, or stew'd in Gravey, after... (Bradley 1732, *The Country Housewife and Lady's Director*, line 2833)

A single token of comparativization (26) out of an *at* + NP complement was found:

- (26) ...she was preparing for you all the blessings in her power to give, and even more than your ambition *aimed at* [t].

There was also a single token (27) with pseudo-cleft movement:

- (27) If he speaks, the doors are locked. A body of loquacious placemen go out to tell the world, that all (what) he *aims at* [t], is to get into office. If he has not the talent of elocution, which is the case of many as wise...(Burke 1770, Thoughts on the Present Discontents, line 1938)

Differing views are provided in the literature about the nature of pseudo-clefts. The view adopted here comes from Biber et al. (1999, 958-960). Pseudo-cleft sentences correspond to simple sentences. The simple sentence version of (27) could be *He aims (at)<sup>2</sup> to get into office*. Thus, token (27) was regarded as a special instance of the *to*-infinitive complement. This token seems to be in accordance with the Extraction Principle (see 6.4 above).

Now we can turn our attention to insertion, which is another interesting phenomenon affecting the choice of complements. Insertion (see 6.3 above) is the term that is used to describe instances where an adjunct has been placed in between the matrix verb and the complement. There were altogether eight examples of insertion in the first part of the CLMETEV. In seven of the tokens, insertion occurred in sentences with the *at* + NP complement:

- (28) ... since it is plain that not only what is called a life of pleasure, but also vicious pursuits in general, *aim at* somewhat besides and beyond the moderate satisfactions. (Butler 1726, Human Nature and Other Sermons, line 1909)
- (29) *Aim at least at the perfection of everything* that is worth doing at all; and you will come nearer...(Chesterfield 1746-71, Letters to His Son on the Art..., line 8569)

I managed to find a single insertion token with the sentential *to*-infinitive:

- (30) ...knew himself so perfectly innocent, destroyed at once all the considerations his timidity had inspired, and *aiming only to be cleared in her opinion*;--if there be faith in man, cried he, I know nothing of what I am accused...(Haywood 1744, The Fortunate Foundlings, line 2277)

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<sup>2</sup> See Ross 2004, 352 on Preposition Deletion.

In theory, sentential complement sentences which have structural discontinuity should favor grammatically explicit constructions; i.e. in this case, the *to*-infinitive over the gerundial *at + V-ing* complement (see 6.3 above). In (30) this is indeed the case, and the Complexity Principle seems to stand its ground so far. However, this solitary example of insertion between the matrix verb and its sentential complement does not allow me to draw any firm conclusions yet.

## 8 The CLMETEV Corpus: Part Two (1780-1850)

This chapter will focus on the different senses and complementation patterns that were found in the second part of the CLMETEV. The results from the second part of the CLMETEV will be compared with the results obtained from the analysis of the first part the corpus. Similarly to chapter seven, a thorough quantitative and qualitative analysis will be undertaken.

The second part of the CLMETEV was searched in order to find all the verbal tokens of *aim*. The search strings were the base form and the inflected forms of *aim*. After manually inspecting the data, I was left with 119 relevant tokens out of a total of 219. There were altogether 100 irrelevant tokens, out of which 96 were nouns (example 1) and 4 were adjectives (example 2).

- (1) Thus, with a rational *aim* and method in life, you may easily guess...(Burns 1780-96, Letters 1780-1796, line 8400)
- (2) ...what specialties of treason, stratagem, *aimed* or aimless endeavour towards mischief... (Carlyle 1837, The French Revolution, line 3528)

These kinds of tokens are beyond the scope of this paper.

### 8.1 The senses found in the data

Similarly to the first part of the CLMETEV, by far the most common semantic meaning for *aim* was the *OED* sense 5. *Aim* had the meaning of ‘intend to do/achieve something’ in ninety-one tokens.

‘to intend to do/achieve something’	5. To make it one’s object to attain. Hence <i>fig.</i> To have it as an object, to endeavour earnestly. b. <i>intr.</i> Also with infinitive: to intend; to attempt (formerly chiefly <i>dial.</i> and <i>U.S.</i> , now <i>colloq.</i> )
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As expected, both of the sentential complements of *aim* occurred in this sense:

- (1) He may avoid gross vices, because honesty is the best policy; but he will never *aim at attaining great vices*. (Wollstonecraft 1792, *Vindication of the Rights of Woman*, line 3307) *at + V-ing*
- (2) ...all their motions were made known to him; and as they wore twice, he inferred that they were *aiming to keep the port of Cadiz open*, and would retreat there as soon as they saw the British fleet; (Southey 1813, *Life of Horatio Lord Nelson*, line 8165) *to-infinitive*

Likewise to the first part of the CLMETEV, the *at + NP* complement was the most frequent complement in the *OED* sense 5:

- (3) ...as that name shall be extended to acts *aiming at the bare relief of pain*, or shall be restricted to such as *aim at the excitement of positive pleasure*. (De Quincy 1822, *Confessions of an English Opium Eater*, line 83) *at + NP*

There was also a sentence with the *OED* sense 5 where *aim* selected an AdvP complement:

- (4)... and no to call evil good, and good, evil; I should wish you to think more deeply, to look farther, and *aim higher than you do*.' (Brontë 1848, *The Tenant of Wildfell Hall*, line 11863) AdvP

In example (4), someone is giving advice to someone that he/she should try to set his/her goals higher than they are currently are. Therefore, it is obvious that we are not talking about literal pointing or aiming here. Similarly to the semantic behavior of *aim* in the first part of the CLEMETEV, I could not find any tokens where *aim* had the 'direct one's course' sense.

The second most frequent meaning for *aim* in the second part of the CLMETEV was the *OED* sense 7 (16 tokens).

'to point something at something'	7 <i>trans.</i> To direct (a missile, or blow); especially, to direct it with the eye before its discharge; to point or level a gun, etc. Hence <i>fig.</i> To direct any act or proceeding against.
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Here are a few examples where *aim* had the 'to point something at something' meaning:

- (4) ...when his brother came against him inadvertently, he had *aimed a blow at him* with his foot, which, if it had taken effect, would have killed him. (Hogg 1824, *Private Memoirs and Confessions of a Justified Sinner*, line 1048) NP + *at* + NP

- (5) Not so harmless was Lydon's retaliation: he quickly sprung to this feet, and aimed his cestus full on the broad breast of his antagonist. (Bulwer-Lytton 1834, *The Last Days of Pompeii*, line 13409) NP + *on* + NP

Example (4) has a NP + *at* + NP complement that *aim* selected most of the time when it was used in this sense. Example (5) is interesting because it has a very rare NP + *on* + NP complement in it. Even though the pattern is syntactically somewhat hard to find, it takes on a similar meaning as the NP + *at* + NP complement.

The third most common meaning for *aim* in the second part of the CLMETEV was the *OED* sense 6.a. (12 tokens).

'to take aim'	6.a. <i>intr.</i> To calculate or estimate the direction of anything about to be launched (at an object); to deliver a blow, or discharge a missile (at anything) with design or endeavour to strike. Hence <i>fig.</i> To try to hit, gain, or bring into one's power; to have designs upon, to seek to obtain.
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All of the tokens with this meaning, except one (example 7), had the non-sentential *at* + NP complement:

- (6) If a man is put to *aim at a mark* with a bow and arrow, he must hit it or miss it, that's certain. (Hazlitt 1821-2, *Table Talk*, line 3689)
- (7) We shall see where they are trying for an entrance, and where to *aim* with our muskets. (Marryatt 1841, *Masterman Ready*, line 10015) AdvP

It is clear that were talking about 'taking aim' in a literal sense in example (6). Even *the bow and arrow* are mentioned that are to be used in the process of *aiming*. The extracted AdvP complement in example (7) describes where the agent of the sentence should 'take *aim*'. Therefore, example (7) has the *OED* sense 6.a.

## 8.2 The complementation patterns found in the data

This section will present a syntactic analysis of the data obtained from the second part of the CLMETEV. The results of the second part of the CLMETEV will be compared the findings from the first part. It is interesting to observe how the frequencies of the different complements have developed. The following table (4) will provide a summary of the different complementation patterns, as well as the raw and normalized frequencies of the different complements.

Complement	Raw frequency	Normalized frequency per million words
<i>at</i> + NP	63	11.0
<i>to</i> -infinitive	22	3.8
<i>at</i> + V- <i>ing</i>	16	2.8
NP + <i>at</i> + NP	16	2.8
AdvP	4	0.7
NP	1	0.2
NP + <i>on</i> + NP	1	0.2
Total	119	21.5

**Table 4: CLEMETEV 1780-1850 complements, raw and normalized frequencies**

The table above shows that seventy years have brought about some changes in the frequencies of the different complements. The total frequency of the verb *aim* seems to have decreased from 27.1 to 21.5, which means there is a 5.6 decrease in the use of *aim* in the second part of the CLMETEV. Similarly to the previous part of the CLMETEV, the non-sentential *at* + NP complement remains as the most frequent complement.



- (8) “That hope,” answered the general, “might enkindle you to *aim at the throne*; but often times these ministers of darkness tell us truths in little things...(Lamb 1807, Tales from Shakespeare, line 4964)
- (9) ...in his own merit, which no superiority could depress; and with a presumption which encouraged him to *aim at all things*, he blended good humour than no mortification could lessen. (Burney 1782, Cecilia 1-2, line 373)

As in the first part of the CLMETEV, there were sixty-eight *at* + NP tokens in the data.

However, the normalized frequency of the *at* + NP complement has come down from 21.4 to 11.0.

The normalized frequencies also seem to point to the gradual increase in the frequency of the sentential complements. What immediately stands out from the data is that the *at* + V-*ing* complement (example 10) is no longer the most common sentential complement of *aim* (16 tokens); instead, the *to*-infinitive (example 11) has become more frequent with twenty-two tokens.

- (10) ...and as the presence of their troops in the island effected this, they *aimed at doing the people no farther mischief*. Would that the conduct of England...(Southey 1813, Life of Horatio Lord Nelson, line 3092)
- (11) ...but in the feverish sense of his own upstart self-importance. By *aiming to fix*, he is become the slave of opinion. He is a tool, a part of a machine that never stands still...(Hazlitt 1821-2, Table Talk, line 4246)

This is an interesting finding in that according to the general theory of the Great Complement Shift (see Introduction above) the gerundial complements have become more frequent at the expense of the infinitival complements during the evolution of the English language. *Aim* seems to be heading in the opposite direction in the development of its sentential complements. For some other verbs evolving in the same direction as *aim*, see Denison (1998, 267). We will also have to look at some more recent data to see whether *aim* is indeed evolving towards another type of complementation system. Nonetheless, the data clearly shows that both of the sentential complements of *aim* have become more common. The

frequency of the *at* + *V-ing* complement has risen from 1.9 to 2.8, and the frequency of the *to*-infinitive has increased from 1.7 to 3.8.

As was done with the sentential complements of *aim* in the previous part of the CLMETEV, I examined the semantic properties of the lower subjects in the subject control tokens. In the first part of the CLMETEV, all of the subjects of the sentential complements were +animate. In the second part, eighteen of the twenty-two *to*-infinitive sentences had +animate subjects. Yet, surprisingly four tokens had -animate subjects:

- (12) A poem is not necessarily obscure, because it does not *aim* [PRO] to be popular. (Coleridge 1817, *Biographia Literaria*, line 9389)
- (13) A system, which *aims to deduce* the memory with all the other functions of intelligence, must of course place its first position... (Coleridge 1817, *Biographia Literaria*, line 4710)

This finding is somewhat surprising since Rudanko (see 6.6 above) has listed *aim* in a list of verbs that require its subjects to be +animate when it is used with the *to*-infinitive complement. However, it must be noted that three of these tokens come from the same author Coleridge and they have all been taken from the same book. This might reflect Coleridge's tendency to use *aim* with the *to*-infinitive complement and -animate subjects. Despite this slight 'skewing' effect, it can be noted that *aim* was used with both -animate and +animate subjects during 1780-1850. All of the infinitival complements occurred in sentences where the higher clauses were in the active voice.

Fifteen of the sixteen lower subjects in the *at* + *V-ing* sentences were +animate as was to be expected according to Rudanko (see 6.6 above):

- (14) Animated by this important object, I shall disdain to cull my phrases or polish my style—I *aim at being useful*, and sincerity will render me unaffected... (Wollstonecraft 1792, *Vindication of the Rights of Woman*, line 938)
- (15) Johnson trusts to his own strong understanding in a matter of which he has the full command, and does not *aim at setting it off* by futile decorations, he is always respectable... (Cary 1846, *Lives of the English Poets*, line 1854)

The higher clauses of the gerundial complement sentences were all in the active voice.

However, in one sentence the higher and the lower subject were –animate:

- (16) The mind can scarcely contemplate a plan of utility more vast or splendid than one which *aimed at preserving the fountain of right* uncontaminated for twenty millions of people. (Cary 1846, Lives of the English Poets, line 8849)

To summarize, the *at + V-ing* complement was normally found in sentences where the higher clause was in the active voice and with +animate subjects, and only rarely did it occur with -animate subjects in the second part of the CLMETEV.

The fourth most frequent complement was the transitive NP + *at* + NP complement. Compared to the previous part, the normalized frequency of this complement has increased from 1.6 to 2.8. In total, I managed to find sixteen tokens with this complement:

- (17) ...made Sir F. Burdett a puppet to carry on his hostility against those ministers who had persecuted him, and *aimed a deadly blow at his life*. Mr. Tooke was a man of profound talent, a persevering friend of liberty,... (Hunt H 1820-2, Memoirs of Henry Hunt, line 5804)

Some of the sentences were in the passive voice, but they were counted as instances of the NP + *at* + NP complement:

- (18) George, being irritated beyond measure, as may well be conceived, especially at *the deadly stroke aimed at him*, struck the assailant with his racket, rather slightly, but so that his mouth and nose gushed out... (Hogg 1824, Private Memoirs and Confessions of a Justified Sinner, line 1048)

The AdvP complement, introduced in Herbst et al. (2004) and in the *OED* (see chapters 4 and 5 above), occurred for the first time in this part of the data. There were four altogether AdvP complements:

- (19) ... I should wish you to think more deeply, to look farther, and *aim higher* than you do.' (Brontë 1848, The Tenant of Wildfell Hall, line 11863)
- (20) In their blind wrath, they took it for a flag of defiance, and *aimed thitherward the more*. (Carlyle 1837, The French Revolution, line 3528)

It is somewhat controversial to call AdvPs complements because most of the time they occur as adjuncts. I believe it is justified to consider the AdvPs that I encountered in the data as complements because they could not be removed from the sentences without changing the meaning of the matrix verb.

The least frequent patterns that were attested were the bare NP and the NP + *on* + NP complements:

- (21) Great caution, however, is necessary in *aiming* these blows, for the boar is very adroit in transfixing the weapon on his snout or his tusks... (Disraeli 1826, Vivian Grey, line 6494)
- (22) ...the blow passed his head. Not so harmless was Lydon's retaliation: he quickly sprung to his feet, and *aimed* his cestus full on the broad breast of his antagonist. (Bulwer-Lytton 1834, The Last Days of Pompeii, line 13409)

Both of these complements occurred only once, and, thus, can safely be called fairly marginal. The transitive prepositional complement with *on* is interesting because it was not mentioned at all in the previous literature.

Now, we can turn our attention to extractions to see if they had any effect on the complement selection in the second part of the CLMETEV. The canonical order of constituents had been altered by extraction in about twenty-three percent of the sentences (27 tokens). This figure is rather similar with the one obtained from the first part of the CLMETEV. As was the case in the first part of the corpus, extraction is most likely to occur out of *at* + NP complements:

- (23) ...therefore the best condition of that is his true felicity and glory, and the object chiefly to be *aimed at* [t] in all that is done by him, and for him, on earth. (Foster 1821, An Essay on the Evils of Popular Ignorance, line 8001) RELATIVIZATION

Relativization was again the most common type of extraction process with twenty-one instances.

The AdvP complement had been extracted twice by the *wh*-movement process:

- (24) And behold whatsoever he doth, it shall not prosper!" I rarely hit where I *aim* [t], and if I want anything, I am almost sure never to find it where I seek it. (Burns 1780-96, Letters 1870-1796, line 1849) WH-MOVEMENT
- (25) We shall then see where they are trying for an entrance, and where to *aim* [t] with our muskets." (Marryat 1841, Masterman Ready, line 10127) WH-MOVEMENT

There were also three other tokens where the order of the constituents had been affected by *wh*-movement. All of these sentences contained the *at* + NP complement.

Nonetheless, the most interesting case of extraction in the second part of the CLMETEV data was a token where relativization had taken place in a sentence with the sentential *at* + V-ing complement:

- (26) The critic takes good care not to baulk the reader's fancy by anticipating the effect which the author has *aimed at producing* [t]. (Hazlitt 1821-2, Table Talk, Line 9887)

This token is a counterexample to Rohdenburg's Extraction Principle (see section 6.4 above). According to the principle, the infinitival complement is more likely to appear in these kinds of extraction contexts, but here a NP of the lower clause has been extracted from a clause with a gerundial complement. There was also an extraction token with the *to*-infinitive complement, which is in accordance with the Extraction Principle:

- (27) ...Upon us thy sovereign influence dispense; And list to the praises our gratitude *aims To* [sic] *offer up* [t] worthily, mighty Saint James. (Borrow 1842, Bible in Spain, line 10742) RELATIVIZATION

It could be stated cautiously that in 1780-1850 extractions did not solely occur after infinitival complement clauses but sometimes after gerundial complements as well. The least frequent extraction process was comparativization out of an *at* + NP complement (1 token):

- (28) ...be no other than the property of exciting a more continuous and equal attention than the language of prose *aims at* [t], whether colloquial or written. (Coleridge 1817, Biographia Literaria, line 5919)

Adjuncts had been inserted between the matrix verb and its complement in thirteen tokens. Ten of the insertions had the *at* + NP complement:

- (29) It does not *aim*, of course, at any shadow of his pathos or moral sublimity, but seems to us to be as singularly faithful copy... (Smith J & Smith H 1812, Rejected Adresses)

In example (29) the inserted adjunct is a parenthetical expression *of course*. Usually, the inserted element is some sort of an adjunct similar to the one in (29). Insertion occurred once in a NP + *at* + NP complement sentence:

- (30) I followed speedily, I hardly knew why; but when the man saw me draw near, he *aimed* a gun, which he carried, at my body and fired. (Shelly 1818, Frankenstein, line 4398)

In (30), the inserted element is a relative clause, which modifies the first NP of the complement.

The most rewarding occasions of insertion took place in sentences with the sentential *to*-infinitive complement:

- (31) ...from the more imperfect development of his faculties, and from the lower state of their cultivation, *aims* almost solely to convey insulated facts, either those of his scanty experience or his traditional belief;... (Coleridge 1817, Biographia Literaria, line 6656)
- (32) I, however, *aim* not so much to prescribe a law for other, as to set forth the law of my own mind. (Gillan 1838, The Life of Samuel Taylor Coleridge, line 8480)

Examples (31) and (32) were the only sentential complement sentences with insertions. These two tokens seem to corroborate Rohdenburg's complexity principle (see 6.3 above), which states that infinitival complements are favored in cognitively complex environments.

## 9 The CLMETEV Corpus: Part Three (1850-1920)

This chapter will focus on the analysis of the authentic British English sentences obtained from the third part of the CLMETEV. This chapter will follow the same method that was undertaken in the analysis of the two previous parts of the CLMETEV, which means that both the semantic and syntactic properties of *aim* will be taken into consideration.

The search of the third part of the CLMETEV was performed in a similar manner as before. The base form and the inflected forms of *aim* were included in the search, but, since the corpus is not tagged, many nouns (120) and adjectives (2) were also present in the search results. After the manual analysis of all the tokens, the nouns and adjectives were discarded from the data, and I was left with 134 relevant tokens. Here are a few discarded tokens:

- (1) I fully expected it to miss fire; no sights were visible, and I had to guess the *aim* with the advancing elephant within five yards of me. Hopelessly I pulled the slippery trigger. (Baker 1854, *The Rifle and the Hound in Ceylon*, line 4196)
- (2) But definitely *aimed* mimicry like this is always rare; original men who like their own thoughts do not willingly clothe them... (Bagehot 1869, *Physics and Politics*, line 791)

In example (1) *aim* is a noun because it is preceded by an article, and *aimed* is an adjective in example (2) because it modifies the noun *mimicry*. *Aimed* in example (2) also answers a question like: What kind of mimicry is always rare? This is proof of its adjectival status.

### 9.1 The senses found in the data

By far the most common meaning for the verb *aim* in the third part of CLMETEV was the *OED* sense 5.

'to intend to do/achieve something'	5. To make it one's object to attain. Hence <i>fig.</i> To have it as an object, to endeavour earnestly. b. <i>intr.</i> Also with infinitive: to intend; to attempt (formerly chiefly <i>dial.</i> and <i>U.S.</i> , now <i>colloq.</i> )
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*Aim* had this meaning in ninety-four tokens of the data. It has become clear by now that *aim* is primarily used in this non-literal sense in writing. Here is a selection of the different complements that took *OED* sense 5 in the third part of the CLMETEV:

- (3) ...when by waiting so short a time she would have been enabled to *aim at a prosperous tradesman*, who kept his gig and had everything handsome about him. (Gissing 1891, *New Grub Street*, line 4609) *at + NP*
- (4) I thought neither of winning her, nor of *aiming to win her*, but of a foothold on the heights she gazed at reverently. (Meredith 1870, *The Adventures of Harry Richmond*) *to*-infinitive
- (5) This is the secret of the whole matter. The modern schoolmaster does not *aim at learning from his pupils*, he hardly can, but the old masters did. (Butler 1912, *Notebooks*, line 5259) *at + V-ing*

Example (3) is the usual case with the non-sentential *at + NP* complement. Similarly to the two previous parts of CLEMTEV, the *at + NP* complement was the most commonly encounter pattern with this sense. Examples (4-5) exhibit the sentential complements of *aim*, which were again only found with the *OED* sense 5.

Example (6) has a novel complement that was not present in the two earlier parts of the CLMETEV:

- (6) What, then, is the standard *towards* which we may venture to *aim* [t] with some prospect of realization in our time? (Booth 1890, *In Darkest England and the Way Out*, line 766) *towards + NP*
- (7) ...who is going to do better by and by, it is that of one who is essentially insincere and who will never *aim higher than immediate success*. (Butler 1912, *Notebooks*, line 5787) *AdvP*

The *towards + NP* complement functions in the *OED* sense 5 in example (6). The meaning of example (6) has to be the *OED* sense 5 because the agent of the sentence *we* is trying to achieve some sort of a standard. The agent is not literally ‘taking aim’ at a standard. Example (7) is a bit uncommon in this sense as well because the *AdvP* complement was not introduced in the *OED*, or in the previous literature, under sense 5. However, there was also a similar *AdvP* token in the second part of the CLEMTEV.



The first few tokens of the *OED* sub-sense 5 ‘to direct one’s course’ were found in the third part of the CLMETEV.

‘to direct one’s course’	5. To calculate one’s course with a view to arriving (at a point); to direct one’s course.
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Here are the two tokens from the data where *aim* is used in this sense:

- (8) ...before she found herself face to face with the Red Queen, and full in sight of the hill she had been so long *aiming at* [t]. ‘Where do you come from?’ said the Red Queen. (Carroll 1871, *Through the Looking Glass*, line 574) *at* + NP
- (9) She seized her dressing-gown, which was spread over the bed, and put it on, *aiming for the door*. Her feet were bare. (Bennet 1908, *The Old Wives’ Tale*, line 12983) *for* + NP

Both of these complements were introduced in the *OED* with this sense.

The second most common meaning for *aim* in the third part of the CLMETEV was the *OED* sense 6.a. This differs from the previous two parts of the CLMETEV where the *OED* sense 7 was more common than the *OED* sense 6.a. I managed to find twenty-four tokens with this meaning.

‘to take aim’	6.a. <i>intr.</i> To calculate or estimate the direction of anything about to be launched (at an object); to deliver a blow, or discharge a missile (at anything) with design or endeavour to strike. Hence <i>fig.</i> To try to hit, gain, or bring into one’s power; to have designs upon, to seek to obtain.
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Twenty-one times the complement was the non-sentential *at* + NP as in example (10):

- (10) ...from the buffalo, but I cautioned B. to reserve his rifle till the bull should be close into me, and then to *aim at the head*. (Baker 1854, *The Rifle and the Hound in Ceylon*, line 1428)

Here in example (10), the context is hunting, which is a very natural context for the ‘taking aim’ sense. The AdvP complement was found twice with the *OED* sense 6.a.:

- (11) They were so high above us that I was obliged to *aim about four inches down the trunk*, so that the ball should reach the brain in an upward direction. (Baker 1854, *The Rifle and the Hound in Ceylon*, line 6003)

Herbst et al (2004) (see chapter 5 above) suggested that the AdvP complement is used this sense and the data seem confirm their idea. There was also one token with the *for* + NP complement, which clearly had the meaning of to ‘take aim’:

- (12) It is a good plan, when serving from the right-hand court, to *aim for the spot* where the centre line bisects the service-line. (Chambers 1910, Lawn Tennis for Ladies, line 591)

Example (12) is offering advice on the game of tennis. The agent, who is doing the serving, should strive to hit a specific spot on the tennis court.

The third most common sense in this part of the corpus was the *OED* sense 7 with twelve tokens.

‘to point something at something’	7 <i>trans.</i> To direct (a missile, or blow); especially, to direct it with the eye before its discharge; to point or level a gun, etc. Hence <i>fig.</i> To direct any act or proceeding against.
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The most common complement occurring with this sense was the NP + *at* + NP (8 tokens):

- (13) To Strelsau I must go to tell the queen that she was widowed, and to *aim the stroke at young Rupert’s heart*. (Hope 1898, Rupert of Hentzau, line 4378)

There were also a couple of tokens where the object of the ‘pointing’ had been left out, and just the first NP was left to complement *aim*:

- (14) ...and when one considers the attempt to *aim bombs* from a moving balloon high in air the case becomes yet more absurd. (Bacon 1902, The Dominion of the Air, line 8857)
- (15) ...and the useless demonstration of effort with which the clowns *aimed their shafts* and drew their bow, sometimes to find the arrow on the grass at their feet...(Yonge 1870, Caged Lion, line 698)

Unlike the previous two parts of the CLMETEV, the third part had two tokens with the *OED* sense 8.

‘to take aim’	8 <i>absol.</i> In both preceding senses: To take aim; to form designs.
‘to point something at something’	

Here is an example of the pattern where *aim* has a zero complement:

- (16) ...you could handle a sword on occasion.’ ‘Father trained me,’ said Carthina. ‘I can fire a pistol, [*aiming*]. ‘With good aim, too...(Meredith 1895, *The Amazing Marriage*, line 794)

## 9.2 The complementation patterns found in the data

This section will be devoted to the syntactic analysis of the third part of the CLMETEV. I will examine all of the different syntactic patterns that were used in British English writing during the later years of the Late Modern English period. The data obtained from this part of the corpus will be analyzed in a similar manner as the data from the two previous parts of the CLMETEV, after which the results will be compared to the second part of the CLMETEV.

The following table provides a summary of the results:

Complement	Raw frequency	Normalized frequency per million words
<i>at</i> + NP	92	14.7
<i>at</i> + V- <i>ing</i>	13	2.1
NP + <i>at</i> + NP	8	1.3
<i>to</i> -infinitive	6	1.0
AdvP	5	0.8
NP	4	0.6
<i>for</i> + NP	3	0.5
∅	2	0.3
<i>towards</i> + NP	1	0.2
Total	134	21.5

**Table 5: CLEMETEV 1850-1920 complements, raw and normalized frequencies**

As can be seen from the table, the overall frequency of the verb *aim* has remained the same. The most common complement was once again the non-sentential *at* + NP complement:

- (17) They were both clean shots: Palliser had *aimed at his head*, and had cut off one ear and laid the skin open at the back of the neck. (Baker 1855, *Eight Years' Wandering in Ceylon*, line 9134)

*Aim* selected this complement ninety-two times. The normalized frequency of the *at* + NP complement has increased from 11.0 to 14.7.

It was surprising to find out that the second most common complement in the third part of the CLMETEV was the gerundial *at* + V-*ing*:

- (18) ...such as "The Complete Lawn-Tennis Player," by A. Wallis Myers, that I shall not *aim at covering old ground*. (Chambers 1910, *Lawn Tennis for Ladies*, line 433)

Yet, there were only 13 tokens of this kind. The frequency of this complement has decreased from 2.8 to 2.0. Even though there was a drop in the frequency of the gerundial complement, it still occurred more often than the infinitival complement.

Taking a closer look at the semantic properties of the subject NPs of the subject control *at* + V-*ing* complement reveals more about its behavior in the third part of the CLMETEV. In seven tokens, the subject of the lower clause, PRO, was +animate (example 19). This was usually the case in the two previous parts of the CLMETEV as well:

- (19) Do I seem to you a shallow optimist?' No. A vigorous rational optimist – such as I myself *aim* [PRO] at being [t]. (Gissing 1891, *The Odd woman*, line 6956)

However, some changes seem to have been taking place with the gerundial complement during the latter years of the 19<sup>th</sup> century and the earlier part of the 20<sup>th</sup> century because I encountered five tokens where PRO was –animate:

- (20) This able reasoner and aeronaut pointed out that the contrivance to be tested *aimed* [PRO] at obviating two principal drawbacks which the

parachute had up to that time presented...(Bacon 1902, *The Dominion of the Air*, line 5141)

- (21) The dinner, which she herself had cooked, and which she assisted in serving, *aimed* [PRO] at being no more than a simple; decorous meal, but the guest unfeignedly enjoyed it...(Gissing 1893, *The Odd Woman*, line 6655)

In the second part of the CLMETEV, there was only a single token with a –animate lower subject (see example (16) in chapter 8 above). It is interesting to see whether this trend will keep developing further in the Present Day English part of the data. It seems like the prepositional gerundial complement of *aim* is no longer used predominantly with +animate subjects. In the second part of the CLMETEV, there was almost an even distribution of –animate and +animate subjects with the gerundial complement. Even though according to the previous literature (see section 6.6 above) +animate subjects are expected to appear in sentences like these.

The semantic properties of the subjects were impossible to analyze in one token of the data (example 22) because the context was insufficient for forming a surefire answer.

- (22) ...of their character or conduct, and charges itself with supplying at once their temporal needs; and then *aims at placing them* in a permanent position of comparative comfort... (Booth 1890, *In Darkest England and the Way Out*, line 9978)

All of the higher clauses in the *at* + *V-ing* complement sentences were in the active voice.

The transitive NP + *at* + NP complement (example 23) emerged as the new third place owner in the frequency race of the complements. The search yielded eight tokens of this type.

- (23) Certain Professors, friends of mine, at your University, will see you through it. *Aim your head at a star* – your head! – and even if you miss it you don't fall. (Meredith 1870, *The Adventures of Harry Richmond*, line 287)

The normalized frequency of NP + *at* + NP has decreased from 2.8 to 1.3, which indicates the fact that this particular complement was used more rarely in the third part of the CLMETEV than in the second.

The most significant decrease in frequency in the third part of the CLMETEV occurred with the *to*-infinitive complement (example 24). It was only the fourth choice in the complements selected by *aim* with six tokens. The normalized frequency has plummeted from 3.8 to 1.0.

- (24) A writer who *aims to be widely read* to-day [sic] must perpetually halt, must perpetually hesitate at the words that arise in his mind...(Wells 1902-3, *Mankind in the Making*, line 3181)

This dramatic decrease in the frequency of the infinitival complement is somewhat surprising considering the fact that the *to*-infinitive was the second most common complement in the second part of the CLMETEV. There seems to be some sort of fluctuation in the development of the sentential complements of *aim*. These results suggest that *aim* is conforming Rohdenburg's Great Complement Shift (see Introduction above), while the results obtained from the second part of the CLMETEV hinted at the opposite direction. I am curious to see how the situation has developed in Present Day English.

Five of the six *to*-infinitives occurred with +animate subjects:

- (25) I do *aim* [PRO] *to take her to see to see madam* to get her a place."  
(Hughes 1857, *Tom Brown's School Days*, line 892)

However, in one token the subject of the lower clause was –animate (example 26). This was also rather rare in the previous parts of the CLMETEV. *Aim* was listed among verbs that require their triggers to be +animate by Rudanko (see section 6.6 above), which makes token rather unique:

- (26) ...schoolman's science came after the training in language and expression, late in the educational scheme, and it *aimed*, it pretended – whatever its final effect was – *to strengthen and enlarge the mind* by a noble and spacious... (Wells 1902-3, *Mankind in the Making*, line 4864)

It looks as if *aim* selected +animate subjects more comfortably with the *to*-infinitive complement in the third part of the CLMETEV. All of the infinitival complements were found in tokens with the higher clauses in the active voice.

The AdvP complement (example 27) occurred with almost the same frequency in the third part of the CLMETEV as in the second. The frequency increased only by 0.1 from 0.7 to 0.8. I managed to find five AdvP complements:

- (27) At that time Yule was editor of a weekly paper called The Balance, a literary organ which *aimed high*, and failed to hit the circulation essential to its existence. (Gissing 1891, New Grub Street, line 4293)

Another complement that occurred with almost the same frequency as in the previous part of the corpus was the bare NP (example 28). The frequency of this complement has increased only slightly from 0.2 to 0.6.

- (28) ...and poising it in the manner suggested, is, of course, preposterous; and when one considers the attempt to *aim bombs* from a moving balloon high in the air the case becomes yet more absurd. (Bacon 1902, The Dominion of the Air, line 8857)

One of the more interesting findings in this part of the CLEMETEV was the emergence of the *for* + NP complement:

- (29) ...exclaimed Judy, tugging at her other hand. "Everything's free and careless, and so are we." *Aim for a path*, "Tim shouted by way of a concession. (Blackwood 1915, The Extra Day, line 9540)

This complement was introduced in the *OED* under sense 5 and the example sentence of this complement in the *OED* was from the year 1872. The date of publication of the sentence given in the *OED* coincides with the time period of the third part of the CLMETEV. It seems like the *for* + NP complement began to make its way into the English language during the latter part of the Late Modern English period.

The two least frequent complementation patterns attested in the third part of the CLMETEV were the  $\emptyset$  (example 30) and the *towards* + NP (example 31) complements. Both of these complements appeared for the first time in the third part of the CLMETEV. The  $\emptyset$

complement was introduced in the previous literature, but the prepositional complement with *towards* was a totally new acquaintance.

- (30) They evinced an extraordinary excitement – firing their rifles without any attempt to sight or *aim*, and only anxious to pull the trigger, re-load, and pull it again. (Churchill 1899, *The River War*, line 8489)
- (31) What, then, is the standard towards which we may venture to *aim* [t] with some prospect of realization in our time? (Booth 1890, *In Darkest England and the Way Out*, line 721)

There were only two zero complement tokens and one *towards* + NP complement in the data. It is interesting to see whether these two new patterns will retain a foothold as valid complements in Present Day English or whether they will fade into obscurity and be replaced by some other patterns.

Extractions were found in thirty-four tokens. This means that extraction occurred in about twenty-five percent of all the tokens, which means there has been a very slight but a steady increase in the amount of extractions during the Late Modern English period.

Extractions happened, once again, most readily out of the non-sentential *at* + NP complement (29 tokens):

- (32) The first thing that a good sportsmen [sic] considers with every animal is the point at which to *aim* [t] so to bag him as speedily as possible. (Baker 1855, *Eight Years' Wandering in Ceylon*, line 3442) RELATIVIZATION

The AdvP complement was extracted once:

- (33) All the while he was muttering, ‘Turncoat! eh? turncoat?’ – proof that the word had struck where it was *aimed* [t]. (Meredith 1870, *The Adventures of Harry Richmond*, line 471) WH-MOVEMENT

A few new movement processes, namely topicalization (5 tokens) and clefting (1 token), also occurred in this part of the data:

- (34) The main objects originally *aimed at* [t] in the construction of this kite related to military operations, such as signaling, photography... (Bacon 1902, *The Dominion of the Air*, line 7930) TOPICALIZATION



- (35) For though we theorize it is at action that our speculations will *aim* [t]. They will take the shape of an organized political and social doctrine (Wells 1902-3, *Mankind in the Making*, line 286) CLEFTING

One of the tokens was difficult to analyze (example 36) and I ended up analyzing it as a pseudo-cleft sentence:

- (36) The point is that if anything was *aimed at* [t] at all when things began to shape or to be shaped, it seems to have been a short life and a merry one... (Butler 1912, *Notebooks*, line 261) PSEUDO-CLEFTING

I suggest that example (36) corresponds to a sentence like: *When things began to shape or to be shaped, what was aimed at was a short and a merry life*. This would be the regular form of a pseudo-cleft sentence. However one ends up analyzing example (36), it is evident that the canonical order of constituents has been altered. Pseudo-clefting also occurred in the first part of the CLMETEV (see example (29), section 7.2 above).

Nonetheless, the three most rewarding cases of extraction occurred out of the sentential *at* + *V-ing* complements. It should be noted that according to the Extraction Principle (see 6.4 above) extractions should happen more easily out *to*-infinitival complements, but the data proved otherwise:

- (37) Do I seem to you a shallow optimist? 'No. A vigorous and rational optimist – such as I myself *aim at being* [t].' (Gissing 1893, *The Odd Woman*, line 6956) TOPICALIZATION
- (38) Now George Elliot absolutely does what Dickens aimed at doing [t]. She not merely seizes the outward and accidental traits of her characters: she pierces... (Blind 1883, *George Elliot*, line 2997) WH-MOVEMENT
- (39) What we really ought to *aim at creating* [t] is a nation in which every one was capable of doing useful or beautiful work of some kind or other... (Carpenter 1915, *The Healing of Nations and the Hidden Sources of Their Strife*, line 3138) PSEUDO-CLEFTING

I could not find any tokens with extractions out of infinitival complement clauses in the third part of the CLMETEV. Rohdenburg's Extraction Principle does not seem to apply very proficiently to the sentential complements of *aim*.

There were altogether fourteen insertion tokens in the third part of the CLMETEV.

Thirteen of the insertions took place in sentences with the *at* + NP complement:

- (40) The Parisians were convinced that the shells were *aimed* maliciously at hospitals and museums; and when a child happened to be blown to pieces their unspoken... (Bennett 1908, *The Old Wives Tale*, line 13156)

In example (40), the adjunct *maliciously* has been inserted between matrix verb and the preposition that accompanies it. I also managed to find one insertion token with the sentential *to*-infinitive complement:

- (41) schoolman's science came after the training in language and expression late in the educational scheme, and it *aimed*, it pretended—whatever its final effect was—to strengthen and enlarge the mind by a noble and spacious...

This example supports Rohdenburg's Complexity Principle, since in this cognitively complex environment *aim* has selected the more explicit infinitival complement instead of the gerundial complement. It is of importance to notice that the data has corroborated the Complexity Principle quite aptly so far, but examples contrary to the Extraction Principle have been found in the last two parts of the CLMETEV.

## 10 The British National Corpus: Contemporary English

Now, we can turn our attention to Present Day British English in order to see how *aim* is used in current writing. What is significant to notice right away is that the number of tokens for *aim* obtained from the BNC was much greater than from the CLMETEV. This, obviously, has to do with the fact that the BNC is a very large corpus containing about a 100 million words. As previously mentioned (see 2.4.2 above), I did not use the whole corpus for retrieving the tokens; instead, I decided to include three different text types in my search: the *imaginative* (300 tokens), *belief and thought* (200 tokens), *world affairs* (200 tokens) text types. The total number of tokens from these three text types was thinned down to a random sample of 700 tokens.

Unlike the CLMETEV, the BNC is a tagged corpus, which means that I was able to do a lemma search for the verb *aim*. The lemma search automatically includes all the inflected forms of *aim* and it should retrieve all the relevant tokens of the verb *aim* from the BNC. Since the BNC is so large, there were also 14 irrelevant tokens that I discarded from the results. This left me with 686 relevant tokens for the BNC part of the data. I will give a few examples of the discarded tokens next:

- (1) HR4 111 George had wisely slipped into a pattern of complete obedience and moved silently around the room to establish *aiming* points with the torch on the pictures Maxim indicated.

*Aiming points* constitutes a NP in example (1), and *aiming* is an adjective that modifies the noun in the NP. There were altogether five tokens where *aim* was an adjective. There were also two nouns in the BNC data:

- (2) FSR 826 'We don't share the others' *aims* here.

I classified the post head elements as adjuncts in two tokens:

- (3) F9X 2420 But we're OK if they can't *aim* better than this.

- (4) HH9 2375 He rubbed his hand down the side of his tight black jeans and *aimed* again.

I do not believe that leaving out the AdvPs in (3-4) results in ungrammatical sentences. The rest of the five discarded tokens included three repetitions (the exact same token was repeated twice in a row in the data) and two tokens with no context.

### 10.1 The senses found in the data

Out of the 686 tokens 441 represented the *OED* sense 5.

'to intend to do/achieve something'	5. To make it one's object to attain. Hence <i>fig.</i> To have it as an object, to endeavour earnestly. b. <i>intr.</i> Also with infinitive: to intend; to attempt (formerly chiefly <i>dial.</i> and <i>U.S.</i> , now <i>colloq.</i> )
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It is interesting to note that *aim* is mostly used in this 'to intend to do/achieve something' sense in Present Day British English. All of the sentential complements occurred again only with this sense:

- (5) AC4 342 ... they are members of Free People, the left-wing revolutionary that *aim to* 'break the tyranny of the blood tie and abolish the out-dated family unit'
- (6) EAX 242 Alongside national changes went directives *aimed at* increasing the power of elected local authorities...

Similarly to the CLMETEV, the most common non-sentential complement (35 tokens) occurring with this sense in the BNC was the *at* + NP complement:

- (7) H9D 2976 ...he *aimed at* cosy conversation rather than anything intimate.

Unlike in the third part of the CLEMETEV, the *for* + NP complement was used quite often (32 tokens) in the *OED* sense 5 as well:

- (8) B2G 643 The journal *aims* 'for peace, non-confrontation, unity in diversity, mental liberation and harmony with the Godhead'.

It appears as if the semantic range of the *for* + NP complement has broadened. In Present Day English, it seems to be used both in the ‘direct one’s course’ sense and also in the ‘intend to do/achieve something’ sense. In fact, both the *at* + NP and the *for* + NP complement occurred with almost the same frequency in the *OED* sense 5. Thus, it seems like it is possible to use either one of the most common non-sentential complements of *aim* almost interchangeably to express the *OED* sense 5. Similarly to the third part of the CLMETEV, the AdvP complement was found with this sense too:

- (9) A73 504 He and Charlie had a good laugh over that particular house, but there had been something serious in Charlie’s laughter and Jack had guessed he *aimed* high.

I also found out that the AdvP complement can be preceded by a NP:

- (10) ADY 2763 I became numb again to discomfort to a useful degree and plodded on methodically taking continual bearings, breathing carefully, *aiming* performance just below capability so as to last out to the end.

The *OED* sense 5 sub-sense of ‘to direct one’s course’ was also represented in the data with a few tokens.

‘to direct one’s course’	5. To calculate one’s course with a view to arriving (at a point); to direct one’s course.
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The non-sentential *for* + NP complement was the usual complement with this sense:

- (11) C85 1483 Jess elbowed through the crowd, *aiming* for the opposite side of the barn where a ladder led to a hayloft.

The other non-sentential *at* + NP complement occurred twice in this sense too:

- (12) CMP 616 A French force was advancing northwards from Charleroi, probably *aiming* at the gap between the British and Prussian armies.

The BNC data suggest that when the ‘direct one’s course’ is expressed, the usual complement is *for* + NP, but the *at* + NP complement can also be found with a similar meaning.

Different from the third part of the CLMETEV, the second most common sense for *aim* in the BNC was the *OED* sense 7 (173 tokens).

'to point something at something'	7 <i>trans.</i> To direct (a missile, or blow); especially, to direct it with the eye before its discharge; to point or level a gun, etc. Hence <i>fig.</i> To direct any act or proceeding against.
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The main complementation pattern occurring with this sense was the transitive NP + *at* + NP:

- (13) CEC 2797 D'Arcy lit his cigar and *aimed* a long stream of blue smoke at the ceiling.

On some occasions, the preposition *at* and the latter NP were omitted from this pattern leaving only a bare NP complement:

- (14) CM4 1486 Jaq jammed the discharged plasma gun away and was about to *aim* his laser.
- (15) CN3 88 A silhouette showed behind the net curtains, a silhouette *aiming* a pair of field glasses.

However, examples (14-15) retain the same sense as example (13). In this sense, the NP after was followed by an AdvP in a couple of tokens:

- (16) CMP 1554 Sharpe did the same, simply *aiming* the rifle in the direction of the column, and pulling the trigger so that the bullet whipped off through the stalks.

The preposition *at* in the NP + *at* + NP complement was replaced by *against* (example 17) in one token and twice by *towards* (example 18). These patterns also had the *OED* sense 7:

- (17) C8E 2042 I didn't want to *aim* a blow against the centre of his life.
- (18) H7H 2395 "Yes, she loves her animals," Lalage *aimed* an accurate kick towards the brown Lakeland terrier that was approaching her.

The third most common sense for *aim* in the BNC was the *OED* sense 6.a.

'to take aim'	6.a. <i>intr.</i> To calculate or estimate the direction of anything about to be launched (at an object); to deliver a blow, or discharge a missile (at anything) with design or endeavour to strike. Hence <i>fig.</i> To try to hit, gain, or bring into one's power; to have designs upon, to seek to obtain.
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*Aim* had this meaning in sixty tokens. The most common complement with this sense was the *at* + NP pattern:

- (19) FU8 1275 Pulling his rifle to his shoulder he squinted along the barrel, aiming at the broadest part of the deer's neck.
- (20) CE5 2727 Never mind the book, aim at the heart, shoot to kill, the other man will...

The *for* + NP pattern, not mentioned in the *OED* with this sense, was also encountered fourteen times:

- (21) B1X 2674 He drew back his arm, aiming for Gallagher's eyes, making his intention obvious and leaving himself open for a counterpunch.
- (22) EE5 1286 He taught me to aim for the knees since any weapon firing on automatic would climb high and right, and thus the fall of shot could be evenly distributed across the stomach and torso, ending in the head.

The *for* + NP complement seems to occur in this sense quite often in Present Day English.

The *for* + NP complement in this sense was especially common in the *imaginative* text type with 13 of the total 14 tokens coming from there. As in the CLMETEV, the AdvP complement also occurred with this sense on a few occasions:

- (23) AMU 254 Knowing that the barracuda would dart forward the moment he fired, Trent aimed halfway down the jaw.
- (24) CDA 2933 He held his automatic out sideways, away from his body so that hey could not aim in on its flash, and fired two shots at the left-hand headlight of the Dodge.

The least frequent meaning (12 tokens) for *aim* in the BNC was the *OED* sense 8.

'to take aim'	8 <i>absol.</i> In both preceding senses: To take aim;
'to point something at something'	to form designs.

This sense only occurred with the zero complement:

- (25) CAM 2399 The man behind him, holding the Skorpion with practiced casualness, not the careful tension of one unused to handguns; balanced,

relaxed, self-confident, knowing he could bring the machine-pistol to *aim* and fire in a fraction of a second.

## 10.2. The complementation patterns found in the data

This section will be devoted to a thorough syntactic analysis of the BNC data. It will be very intriguing to see what kind of developments have taken place in the complementation race of the verb *aim* during the forty years that separate the third part of the CLMETEV and the BNC from each other. After reading this part of the thesis, the reader will hopefully have gained a clear understanding of how the verb *aim* is used in contemporary British English. The syntactic analysis of the BNC data will follow the same methodology that was implemented with the CLMETEV data. The results obtained from the BNC data will be compared to the third part of the CLMETEV. The following table summarizes the results:

Complement	Raw frequency	Normalized frequency per million words
<i>to</i> -infinitive	236	13.5
NP + <i>at</i> + NP	138	7.9
<i>at</i> + V- <i>ing</i>	106	6.0
<i>at</i> + NP	84	4.8
<i>for</i> + NP	55	3.1
NP	32	1.8
AdvP	17	1.0
∅	12	0.7
NP + AdvP	4	0.2
NP + <i>towards</i> + NP	1	<0.1
NP + <i>against</i> + NP	1	<0.1
Total	686	39.1

**Table 6: The present day BNC complements and their raw and normalized frequencies**



There has been quite a significant rise in the frequency of the verb *aim* from 21.5 in the third part of the CLMETEV to 39.1 in the BNC. *Aim* seems to have lifted its status in contemporary British English. I believe this can be accounted for, partly, by the fact that *aim* is used more and more as a verb intention in Present Day English.

The most striking result in the BNC data is that the sentential *to*-infinitive complement has risen to the podium in the complementation race of *aim* and it is currently the most frequent complement of *aim*:

(26) BNS 1609 Wine is intended to be drunk, as I *aim* to be shortly after finishing this.

The normalized frequency of the infinitival complement has increased greatly from 1.0 to 13.5. As Egan (2008) (see chapter 5 above) pointed out, *aim* is now the 23<sup>rd</sup> most common subject control verb occurring with the infinitive in the whole BNC. This is an interesting finding because according to Rohdenburg's Great Complementation Shift (see Introduction above) the general tendency in the development of the English complements favors the expansion of the gerunds at the expense of the infinitives. *Aim* seems to be an exceptional verb in the sense that, currently, its most common complement is the *to*-infinitive and the gerund complement is only the third most frequent.

Examining the semantic properties of the subject NPs in the infinitival complements sentences might be a way to shed some light into the mystery of why the *to*-infinitive complement has become so frequent in contemporary British English. In 122 out of the 236 *to*-infinitive tokens, the subject NPs were –animate:

(27) H97 308 My designs *aim* to appeal to the style conscious young, whereas yours are strictly for retired country ladies. (*Imaginative*)

(28) AM9 529 Our policy for the countryside *aims* both to protect Britain's natural environment and to recreate success in one of Britain's greatest industries... (*World Affairs*)

- (29) CMN 1391 It is important to remember, however, that explanations of this type are also the stock-in-trade of such subjects as demography and criminology, which *aim to establish generalisations relating social factors to human behaviour*. (*Belief and Thought*)

This means that in around fifty-two percents of the infinitival complements the subject NPs were -animate. This finding differs quite significantly from what was said in the previous literature about the semantic properties of the subject NPs in infinitival constructions (see section 6.6). The situation has changed dramatically from the third part of the CLMETEV as well, which only had a single infinitival token with –animate subjects. *Aim* seems to allow both +animate and –animate subjects with the infinitival complement in current British writing. Most of the –animate subjects in infinitival complement sentences were found in the *World Affairs* and the *Belief and Thought* text types, with only three tokens coming from the *Imaginative* text type.

In the *Belief and Thought* and the *Imaginative* text types, which resemble the CLMETEV the most, there were altogether 162 *to*-infinitive tokens (122 in *Belief and Thought*, and 40 in *Imaginative*). The infinitival complement was clearly the most common complement in the *Belief and Thought* text type, but in the *Imaginative* text type it was only the third most frequent pattern. According to the *OED* (see chapter 4 above) the *to*-infinitive complement is particularly common in the spoken language, but it seems to have made its way also to writing.

What was also interesting to note was that in only two *to*-infinitive tokens the higher clauses were in the passive:

- (30) CHC 503 Alternatively, laws-of-war considerations can lead to advocacy of the enhanced radiation weapon or neutron bomb, on the grounds that it is *aimed specifically to destroy military targets*.
- (31) EBH 330 The day is *aimed to build awareness of communication and its uses*.

In the rest of the infinitival complement tokens, the higher clauses were in the active voice:

(32) JXW 3530 'I *aim* to see that she does, gorgeous,' Jim assured her.

Thus it is safe to say that *to*-infinitive complements are clearly favored in tokens that have the higher clause in the active voice.

Whereas the infinitival complement has become much more common, the non-sentential *at* + NP complement has become a lot less frequent:

(33) G0A 1255 Fergus was lying on the couch, *aiming* at the centre of the ceiling.

The relative frequency of the *at* + NP complement has plummeted from 14.7 to 4.8. The sentential complements, especially the *to*-infinitive, have taken a more prominent role in the complementation of *aim*, which contributes to the decrease of the non-sentential complements. The non-sentential *at* + NP complement was the most frequent complement in all three parts of the CLMETEV, but it no longer holds the pole position in the complementation race of the verb *aim*. In fact, it was only the fourth most frequent complement in the BNC data.

The second most common complement in the BNC was the transitive NP + *at* + NP pattern:

(34) G01 2309 'He stole the cab, drove it up Charing Cross road then *aimed* the fucking thing at the fountains outside Center Point.

(35) BNP 21 But the point that young Macaulay fails to realize is that if one is going to take potshots, there is no point in *aiming* a verbal blunderbuss at piddling little targets.

The frequency of this pattern has risen significantly from 1.3 to 7.9. The BNC data was laden with many passive transformations of the NP + *at* + NP complement:

(36) C85 1611 Deflecting the blow *aimed* at James Lambert's head with his left arm, he drove his right fist short but hard into the man's mouth, loosening teeth and skinning his knuckles.

(37) F9X 4191 Ace's missile launcher was *aimed* at Lacuna.

In fact, there were almost as many passive NP + *at* + NP sentences in the data as there were active ones.

The third most common complement of *aim* in the BNC data was the sentential *at* + V-*ing* complement:

(38) AC2 1003 Like all such schemes prepared by left-wing militants, this plan was *aimed at putting the company in a 'Catch 22' situation*.

(39) C8J 389 This is a project *aimed at encouraging older people* to take up new interests.

The normalized frequency of this complement has increased quite noticeably too from 2.1 to 6.0, but the increase is not as significant as with *to*-infinitive complement. 105 of the 106 gerundial tokens had –animate subjects. There was only a single token in the entire BNC data where the higher and the lower subjects were +animate:

(40) CKR 1084 Unlike Lanfranc who *aimed [PRO] at creating a model community* in accordance with the latest monastic thought without regard to local traditions...

There seems to be a fairly strong tendency in Present Day British English for *aim* to select the *at* + V-*ing* pattern with –animate subjects.

In addition, the prepositional gerund complement appears to be limited mostly to tokens where the higher clause is in the passive because I only managed to scavenge seven tokens from the BNC data where the higher clauses were in the active voice (examples 40, 41, 42):

(41) A9N 109 The summit also agreed to *aim at completing an ambitious co-operation agreement* with the new government in East Germany before the middle of next year.

(42) C9B 895 It *aims*, as we have shown, *at winning a man over* by the power of love and gentle persuasion and by arousing in him a sense of justice rather than by forcing him to submit out of fear and embarrassment.

There were altogether thirty-three *at + V-ing* tokens in the *Imaginative* and the *Belief and Thought* text types. These two text types resemble the CLMETEV data the most, which explains the interest to calculate the number of sentential complements in them. The *Belief and Thought* text type contained twenty-seven gerundial complements, while the *Imaginative* text type had only six gerundial complement tokens. The *at + V-ing* pattern was the third most frequent pattern in the *Belief and Thought* text type and only the eight most frequent in the *Imaginative* text type. The use of the verb *aim* seems to vary quite considerably in different registers. Hunston (2002) (see 2.2 above) has also noticed that different registers have an impact on the complement selection.

There has also been an increase (from 0.5 to 3.1) in the frequency of the *for + NP* pattern, which is now the fifth most typical complement of *aim*:

- (43) H9G 2551 Mother and daughter were glad of each other's company, while the electric storm boomed and crashed around them in the black night, as if *aiming* for this one exposed place.

The rise of the *for + NP* complement has also contributed to decline in the frequency of the *at + NP* complement. As was mentioned earlier, both the *at + NP* and the *for + NP* patterns share similar semantic senses in contemporary British English.

The five complementation patterns discussed above are clearly the most common. The rest of the complement patterns were relatively infrequent. For example, the normalized frequency of the bare NP complement was only 1.8 (a slight increase from 0.6):

- (44) BNC 1910 It was hard to *aim* the darts.

The marginal increase in the frequency of this particular complement can be explained by the overall rise in frequency of the verb *aim*. The seventh most frequent complement was the AdvP, which is already familiar from the CLMETEV part of the data:

- (45) CDA 2933 Manville *aimed* directly below one of them.

The frequency of this pattern has increased slightly from 0.8 to 1.0. A NP was inserted before the AdvP complement in four tokens:

- (46) HGF 2807 His mouth stretched as he *aimed* the thin jet down his throat amid clapping and stamping.

There were also a few other marginal complementation patterns with normalized frequencies below 1.0. The eighth most frequent complement with only twelve tokens was the  $\emptyset$  complement:

- (47) HGU 1991 No time to *aim*, Sam jerks the trigger.

The normalized frequency of the zero complement was 0.7. Two of the least frequent complementation patterns, with one token of each, were NP + *towards* + NP and NP + *against* + NP (examples 48-49). These two patterns seem to be variations of the more usual NP + *at* + NP complement.

- (48) H7H 2395 “Yes, she loves her animals,” Lalage *aimed* an accurate kick towards the brown Lakeland terrier that was approaching her.

- (49) C8E 2042 I didn’t want to *aim* a blow against the centre of his life.

It seems that some authors like to add a personal stylistic touch by changing the preposition located in between the two NPs.

There were only thirty-six tokens with extractions in the BNC data. This means that extraction occurred only in about five percent of the tokens. Extractions seem to have become quite rare in Present Day English, whereas in the third part of the CLMETEV extractions took place in around twenty-five percent of the tokens. I believe one of the reasons for the small number of extractions in the BNC data is the decline in the frequency of the non-sentential complements. Since extractions seem to occur most readily out of non-sentential complements, a decline in their frequency is reflected directly in the number of extraction as well. In fact, all of the extractions in the BNC took place from non-sentential complement

clauses. Twenty-six of them had the *at* + NP complement (example 50), nine had the *for* + NP complement (example 51) and one had the AdvP complement (example 52):

- (50) H8Y 747 With the unpredictability of fashion, it seems that sensitivity has replaced brains or athletic ability as the quality all boys should *aim at* [t]. RELATIVIZATION
- (51) H97 616 Her use of ‘weakness’ sounded belittling, precisely the effect that she had been *aiming for* [t]. RELATIVIZATION
- (52) FP6 1619 The generator revved up and down, providing power to the automatic launcher; it had some sort of randomly set variation built into where it was *aiming* [t] because... WH-MOVEMENT

No new extraction processes were encountered in the data. All of the extractions had been caused by either relativization or *wh*-movement.

Insertions, on the other hand, were quite common. There were altogether forty-two tokens with insertions in the BNC data. Twenty-eight insertion cases had non-sentential complements:

- (53) CAM 1584 Though his present audience was overwhelmingly composed of Texans he was *aiming* through the lens of the television camera at a much larger audience. *at* + NP
- (54) CN 32716 The huge articulated truck with a separate cab for the driver appeared out of nowhere, moving at high speed, lights undimmed and *aiming* straight for him. *for* + NP
- (55) HH8 416 Sabine pinned on a polite smile *aiming* it straight at the oncoming vehicle’s windscreen. NP + *at* + NP

I managed to gather fourteen insertions tokens with the sentential complements of *aim*. Ten on these had the *to*-infinitive complement:

- (56) FTX 1048 This new venture *aims* over a period of three years to train up to ninety students not only as teachers of BSL, but as BSL interpreters.

Four of the insertion tokens had the prepositional gerund complement:

- (57) HKY 1822 ...Barber Conable, urged the international community to make a concerted effort to reduce world poverty by adopting development policies and assistance programmes *aimed* specifically at helping the poor.

The BNC data seems to corroborate Vosberg's complexity principle (see section 6.4 above) quite adequately because a clear majority of the insertion sentences had the more sentential *to*-infinitive complement, and only four insertions were found with the less sentential prepositional gerund complement.



## 11 Summary

This section features a table that summarizes the normalized frequencies of all the different complements from the two corpora.

<b>Complement</b>	<b>1710-1780 NF per million words</b>	<b>1780-1850 NF per million words</b>	<b>1850-1920 NF per million words</b>	<b>Present Day NF per million words</b>
<i>to</i> -infinitive	1.3	3.8	1.0	13.5
<i>at</i> + NP	21.4	11.0	14.7	4.8
<i>at</i> + V- <i>ing</i>	1.9	2.8	2.1	6.0
NP + <i>at</i> + NP	1.6	2.8	1.3	7.9
<i>for</i> + NP	0	0	0.5	3.1
NP	0.3	0.2	0.6	1.8
AdvP	0	0.7	0.8	1.0
∅	0	0	0.3	0.7
NP + AdvP	0	0	0	0.2
NP + <i>towards</i> + NP	0	0	0	0.06
<i>towards</i> + NP	0	0	0.2	0
NP + <i>on</i> + NP	0	0.2	0	0
NP + <i>against</i> + NP	0.3	0	0	0.06
<b>Total</b>	27.1	21.5	21.5	39.1

**Table 7: Summary of all the complements and their normalized frequencies in the CLMETEV and the BNC**

## 12 Conclusion

I set out to do a diachronic corpus based study on the development of the different post-head complements of *aim*. In the beginning, I was hoping to observe even slight changes in the frequencies of the different complements of *aim* and I certainly think that the results of this thesis did not disappoint me on that. The broad theoretical framework for this thesis was Rohdenburg's Great Complement Shift, according to which, there is an ongoing change in the complementation of the English verbs. The fact that grammatical change can be observed in the shifting frequencies of certain complements was one of the biggest reasons why I decided to take on this project.

To my surprise, *aim* does not follow the general trend in the development of the complements of the English verbs. The most common complement for *aim* in Present Day English is the sentential *to*-infinitive complement. If the evolution of the complementation of the verb *aim* were to follow the Great Complement Shift, the prepositional gerundial *at* + V-*ing* complement should be more common in Present Day English. However, the data clearly shows that the infinitival complement of *aim* dominates the race of the different complements. The gerundial complement is only the third most common complement of *aim* in Present Day English, even though; at one point in time it was more common than the *to*-infinitive.

There was some fluctuation in the frequency of the infinitival complement. According to the data the *to*-infinitive complement occurred least frequently in the third part of the CLMETEV. This was a rather unexpected result because the first two parts of the CLMETEV indicated that the frequency of the *to*-infinite was increasing steadily. I believe to a certain extent that the sudden decrease of the *to*-infinitive complement resulted from the text selection in the third part of the CLMETEV. Despite this unexpected decrease of frequency, the *to*-infinitive complement emerged as the most common complement in the end.

The non-sentential *at* + NP complement was the most typical complement of the verb *aim* from 1710 to 1920. However, as already pointed out, it was ousted from its pole position by the steadily increasing infinitival complement. The frequency of the gerundial complement has also increased slightly, which contributes on its behalf to the decline of the *at* + NP complement. The second most frequent non-sentential complement of the verb *aim* in Present Day English is the *for* + NP pattern and it seems to be used in similar senses as the *at* + NP complement. The first *for* + NP complements appeared during the latter part of the 19<sup>th</sup> century. To summarize, all of these factors together have contributed to the decrease in the frequency of the *at* + NP complement.

The frequency of the transitive NP + *at* + NP pattern has increased steadily throughout the years. Actually, the NP + *at* + NP pattern has become the second most frequent complement of *aim* in Present Day English. This transitive pattern is commonly found in the passive voice. In a few instances, the preposition *at* was replaced by *against* in the different parts of the corpora. However, the switch of the preposition did not change the meaning of the complement dramatically. The AdvP complement introduced in Herbst et al (2004, 27) and in the *OED* was first encountered in the second part of the CLMETEV, after which it was found steadily in the latter parts of the data. The complementation patterns discussed above were also introduced in the previous literature and they are clearly the most typical complements of *aim*.

The more marginal complementation patterns of *aim* attested in the data were the zero, NP + AdvP, NP + *towards* + NP, *towards* + NP, NP + *on* + NP and NP + *against* + NP complements. The *for* + NP + *to*-infinitive complement, which was suggested as valid complement of *aim* (Rudanko 1989, 78; Dirven 1989, 121-122), was not found in the data at all, even though I performed a separate search for the pattern in the whole BNC.

Extractions occurred quite frequently in all of the three parts of the CLMETEV. Relativization was by far the most frequent movement process and *wh*-movement followed suit in the second place. Other extraction types encountered, in decreasing order of frequency, were topicalization, pseudo-clefting, comparativization, and clefting. Extractions took place most readily out of non-sentential complement clauses with *at* + NP and *for* + NP complements. There were only a few sentential extraction tokens in the data, and all of these were found in the CLMETEV. The data did not corroborate Vosberg's Extraction Principle (see 6.4 above) very adequately since extractions occurred out of the gerundial complement clause more often than the infinitival complement clause. There was also a dramatic decrease in the number of extractions in the present day part of the data. I believe this resulted partly from the significant decrease in the frequency of the non-sentential complements in the BNC.

Other extra semantic factors, such as insertion and *horror aequi*, were also considered during the analysis of the data. Insertions occurred steadily throughout the data. The majority of the sentences involving insertion had non-sentential complements. Nevertheless, I did manage to find eighteen sentential insertion tokens. Fourteen of these had the more explicit sentential *to*-infinitive complement. This was a significant finding in that it corroborates Vosberg's Complexity Principle (Vosberg 2003, 321) quite satisfactorily. The *Horror Aequi* principle (see section 6.5 above) validated itself as well given that there were no violations of this principle in the data.

In the earlier parts of the data, the *to*-infinitive complement was solely used with +animate subject NPs. But as the data approached the present day, the use of *aim* with -animate subjects became more common. In effect, the infinitival complement was found with -animate subjects more often than with +animate subjects in the BNC part of the data. I suggest that this is one of the major reasons why the *to*-infinitive complement has become so

frequent. In addition, the *to*-infinitive complement occurs mostly in sentences where the higher clause is in the active voice.

The gerundial complement, on the other hand, is nowadays most prototypically used with –animate subjects and in sentences where the higher clause is in the passive voice. However, in the earlier parts of the CLMETEV, the *at* + *V-ing* complement occurred often with +animate subjects and in sentences where the higher clauses were in the active voice. The change in the semantic properties of the subject NPs with the gerundial complement started to become more prominent in the third part of the CLMETEV. All in all, it seems like the infinitival complement has a much broader function in modern English than the gerundial complement.

Differences in the text types in the BNC also seemed to have an effect on the complementation of *aim*. The largest amount of sentential complements was found in the *World Affairs* text type with an almost equal distribution of infinitival and gerundial complements. The *World Affairs* text type had the most *at* + *V-ing* complements of all the text types. In contrast, the lowest number of sentential complements were found in the *Imaginative* text type, and its most typical complement was the non-sentential *at* + NP. The *Belief and Thought* text type contained the largest quantity of *to*-infinitives. Variation in text type seems to affect the selection of different complements quite significantly, but this area requires more research in order to make any firm conclusions.

There are many possibilities for further research. First, the sudden decrease in the frequency of the infinitival complement in the third part of the CLMETEV could be explained in a more profound way. It could be done, for instance, by retrieving and analyzing tokens from another corpus, which has data from the same time period as the third part of the CLMETEV. Second, by using the different text types of the BNC or differently composed corpora, it would be possible to study the effects of different registers on the complementation

of *aim* even further. Third, as this thesis focused only on British English, it leaves an obvious opportunity for studying *aim* in American English, and for performing a comparative study between American and British English use of *aim*. Fourth, there exists a possibility for performing a broader study on a larger selection of verbs of intention. For example, Denison (1998, 267) lists *intend* among verbs similar to *aim*, whose infinitival complements are increasing in modern English. It would be of interest to find out whether there is a pattern for the verbs of intention, which shows that they are moving in the other direction than most verbs of the Great Complement Shift. Possible reasons for this development could also be considered.

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### **Corpora:**

The British National Corpus (BNC)

The Corpus of Late Modern English Texts – Extended Version (CLMETEV)