

**Complementation of the adjective *accustomed* from the 18<sup>th</sup> century to the  
present day**

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Tässä pro gradu –tutkielmassa tarkastellaan adjektiivin *accustomed* komplementaatorakenteita ja niiden kehittymistä viimeisen 300 vuoden aikana. Tutkielman päämääränä on selvittää, minkälaisia komplementteja adjektiivi valitsee, minkälaisia muutoksia on tapahtunut sen komplementaatioissa ja mikä on mahdollisten muutosten aiheuttaja. Lisäksi tavoitteena on tutkia, onko adjektiivin valitsemien komplementtivarienttien välillä merkityseroja.

Tutkielman empiirinen aineisto on kerätty kolmesta elektronisesta korpuksista. Historiallisen aineiston lähteenä on The Corpus of Late Modern English Texts, Extended Version, joka tarjoaa empiiristä dataa englannin kielen käytöstä vuodesta 1710 vuoteen 1920. Nykypäivän englannin aineisto on puolestaan koottu kahdesta lähteestä, joiden rinnakkainen tutkiminen mahdollisesti britti- ja amerikanenglannin mahdollisten erojen selvittämisen *accustomed*-adjektiivin käytössä. Nykybrittienglannin aineisto on kerätty The British National Corpusista, joka kattaa vuodet 1960-1993, kun taas The Corpus of Contemporary American English tarjosi amerikanenglannin aineiston vuodesta 1990 vuoteen 2012.

Tutkielma on jaettu kahteen osaan: ensimmäinen puolisko esittelee tutkielman teoreettisen viitekehyksen ja toinen puolisko keskittyy empiirisen aineiston analyysiin. Ensimmäisessä osassa esitellään tutkielmassa käytetyt korpuksat ja tuodaan ilmi korpustutkimukseen liittyviä metodologisia periaatteita. Lisäksi ensimmäisellä puoliskolla esitellään komplementaatioon ja etenkin komplementaation vaihteluun liittyviä teorioita ja lopuksi aihetta pohjustetaan tarkastelemalla, miten tutkielman kohteena olevaa adjektiivia on käsitelty erinäisissä sanakirjoissa ja kieliopissa. Tutkielman toisella puoliskolla esitellään ja analysoidaan empiirinen aineisto. Empiirinen osio päätetään tekemällä kerätystä aineistosta yhteenveto ja siitä johdetut päätelmät.

Tutkielman tulokset osoittavat, että *accustomed*-adjektiivin komplementaatorakenteissa on ajan saatossa tapahtunut merkittäviä muutoksia. Tärkein ja näkyvin muutos on gerundiaalisen *-ing*-päätteisen komplementtityypin huomattava yleistyminen ja yhtäläinen *to*-infinitiivin harveneminen adjektiivin *accustomed* komplementtina. Tutkielma paljastaa, että molemmissa tutkielmaan valituissa nykyenglannin varianteissa *-ing*-muoto on pitkälti korvannut infinitiivin *accustomed*-adjektiivin ensisijaisena lausemuotoisena komplementtina. Kattavia semanttisia eroja rakenteiden välillä ei sen sijaan aineistossa havaittu.

Avainsanat: *accustomed*, adjektiivi, komplementaatio, komplementti, korpus, korpuslingvistiikka

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## 1 Introduction

According to *The Oxford English Dictionary* (2<sup>nd</sup> edition, 1989), the adjective *accustomed* is derived from the verb *accustom*. The dictionary gives it the definition “made customary, practised habitually; wonted, used; customary, habitual usual”. The *Oxford Advanced Learner’s Dictionary* (4<sup>th</sup> edition, 1989) distinguishes separate lexical entries for the adjective *accustomed* and the phrasal construction *accustomed to* and defines *accustomed to* as “used to something”, which is exemplified by this sentence in the dictionary:

(1) I soon got *accustomed* to his strange ways.

The aim of my thesis is to examine the variation found in the complementation patterns of *accustomed*, especially in the sentential ones, by using data of actual language use drawn from three different corpora. My primary research questions are as follows:

- What types of changes have occurred over time in the complementation patterns of *accustomed* and what has caused these changes?
- Are there semantic distinctions between similar complement patterns or are similar patterns in free variation?
- What types of complement patterns can *accustomed* select and are there perhaps undocumented complement types in real-life language data?

*Accustomed*, when it is in the predicative position, is followed by an obligatory complement and it forms a lexical unit either with the infinitival *to* marker or the preposition *to* (Quirk et al. 1985, 1222), i.e. the predicative *accustomed* is always followed by *to* and a complement. The complements that *accustomed* generally selects can be divided into three types. Below are examples of each complement type

taken from the British National Corpus. First, *accustomed* can be followed by noun phrase complements:

- (2) My eyes had become *accustomed* to the now semi-darkness, so I could pick out shapes about seventy-five yards away.

Secondly, *accustomed* can be complemented by an infinitive clause:

- (3) The Fellows were *accustomed* to do mostly what the Master, Sir Henry Willink, Bart., wanted.

And thirdly, *accustomed* can select an *-ing* form complement, which is a more recent variant that has been gaining ground at the expense of the infinitive form in present-day English:

- (4) The techniques will depend on the materials, the kind of learners you have and the kinds of task they are *accustomed* to doing.

The focus of this study is *accustomed* in the predicative position and in a few other constructions, such as adverbial clauses and the postmodifier position, where it similarly can take a complement. *Accustomed* also functions as an attributive adjective in the premodifier position, but this construction is irrelevant to the aims of the present research, as the premodifier cannot take any complement. Instances of such constructions in the corpus data will be noted, but not analysed further. Furthermore, the verbal constructions of *accustomed* will likewise be excluded from the study.

I will begin by briefly introducing the corpora used for the study at hand and mentioning some fundamental aspects of corpus-based research in section 2. Next, in section 3, I will summarise a few theories relating to complementation that potentially play a role in the variation in the complementation patterns of *accustomed*. Section 4 deals with previous documentation of *accustomed* in major dictionaries, grammars and other literature. Section 5 is dedicated to the empirical part of the study, where I present and analyse the corpus data. Finally in section 6 I will present some

concluding remarks, sum up the main findings of the study, and suggest directions for future research.

## 2 Corpora

The data for this study is drawn from three different collections of texts (known as corpora, corpus in the singular). The Extended Version of The Corpus of Late Modern English Texts (abbreviated hereafter as the CLMETEV) is used to obtain the historical data, that is, data from the 18<sup>th</sup>, 19<sup>th</sup> and early 20<sup>th</sup> century. The present-day British English data (more precisely, data from the years 1960 to 1993) is gathered from the British National Corpus (henceforth the BNC). And finally, the Corpus of Contemporary American English (COCA), covering the years 1990-2012, is utilised to discover any differences that may exist between contemporary British and American English concerning the complementation patterns of *accustomed*.

The construction methods, the make-up and some methodological issues of the CLMETEV, the BNC and COCA as well as some aspects of corpus-based studies will be discussed in the following six subsections.

### 2.1 Preliminary comments on corpus-based studies

Corpus-based research, or corpus linguistics, is an empirical method of studying language by using a large and structured collection of texts, i.e. a corpus, as the basis of research. A corpus is a sample collection of written and spoken language, which can be utilised to study and analyse how language is used in real life. Corpus linguistics is thus more or less the opposite approach to Chomskyan theoretical linguistics, which largely rejects real-life language as a viable research object. Corpora today are largely electronic, which enables quick and efficient information retrieval and the use of complex search strings that allow, among other things,



wildcards, searching for words in specific lexical categories, or restricting searches to certain text type domains. Corpora are structured collections of written material, the scope of which is usually limited by a theme pertinent to a specific methodology of research. For example, the corpora used for the present study are monolingual, i.e. focusing on a single language, and diachronic, i.e. they consist of texts written over a specific period of time.

## **2.2 Normalised frequencies**

The most basic statistic that can be obtained from corpus data is the raw frequency of a word, a phrase or a pattern. In a single corpus study, simple raw frequencies or percentages may serve as sufficient statistics, but when working with multiple corpora, frequencies in one corpus are not directly comparable with frequencies in other corpora simply because corpora vary in size and thus there are more opportunities for certain words, phrases or patterns to occur in larger corpora than smaller ones. In order for frequencies in different corpora to be comparable with one another, the frequencies have to be converted into relative frequencies, i.e. they have to be normalised (Gries 2010, 271).

The normalisation is achieved by dividing the raw frequency of a word by the total number of words in the corpus (or sub-corpus or subsection in the corpus), and then multiplying the remainder by a value that is the basis chosen for norming (Biber et al. 1998, 263). Frequencies are usually normed to the typical text length in a corpus. For example, the equation for norming frequency counts to a basis per 1,000,000 words would be:

$$\frac{\text{Raw frequency}}{\text{Total number of words in the corpus}} \times 1\,000\,000 = \text{Normalised frequency}$$

I will present my findings using raw frequencies, percentages of raw frequencies calculated from the total number of relevant tokens in the data as well as normalised frequencies with the accuracy of two decimal places using the above equation (i.e. frequency per million words) to allow comparisons across the corpora under study.

### **2.3 Precision and recall**

When retrieving information from a corpus, one has to ensure that the search queries yield a data set that is relevant for a particular study. Relevance in this sense means how well search results match a specific information need. Precision and recall are two criteria that are commonly used in information retrieval to measure the relevance of data.

Precision is the “the proportion of retrieved material that is relevant” (Ball 1994, 295). Precision thus measures the proportions of relevant and irrelevant tokens in the retrieved data. If precision is poor, the data set contains many irrelevant tokens and conversely if precision is high, the proportion of relevant tokens in the search results is similarly high. In the case of poor precision, data can be made more precise by manually editing the search results and removing all the irrelevant tokens by hand.

Recall, then, is “the proportion of relevant information that was retrieved” (ibid.). In other words, recall measures the proportion of relevant tokens in the search results out of all the relevant tokens in the data. Poor recall means that many relevant tokens available in the data are excluded from the search results. Recall tends to be a more difficult issue to deal with than precision, as one cannot know how much

relevant information is missing in one's data set without analysing the entire corpus by hand, which is most often too time-consuming a task to do manually. Poor recall is usually caused by too restrictive search criteria, but on the other hand, less restrictive search criteria potentially results in poor precision. That is why maintaining good precision and recall and finding the suitable search criteria can sometimes be a difficult balancing act.

As for the present study, recall was not an issue since all instances of *accustomed* found in the data were analysed manually. Precision of the data was also fairly good especially in the more recent data as the large majority of the tokens were considered relevant for the present study, i.e. they contained *accustomed* in a construction where it selects a complement, and only a comparatively small number of tokens were discarded as unanalysable or irrelevant for the purposes of the analysis undertaken in this study.

## **2.4 The Corpus of Late Modern English Texts, Extended**

### **Version**

The CLMETEV is a 10-million-word corpus of Late Modern English that consists of public domain texts drawn from three online archiving projects, the *Project Gutenberg*, the *Oxford Text Archive* and the *Victorian Women Writers Project*. The corpus was compiled by Hendrik de Smet and it spans the period from 1710 to 1920, which in turn is divided into three 70-year sub-periods. Part 1 covers the years 1710-1780, part 2 the years 1780-1850, and part 3 the years 1850-1920. The extended version contains the entirety of the original CLMET and an additional 5 million words of text.

The corpus data is distributed into the three subdivisions according to the publication date and the date of birth of the authors. Figure 1 illustrates how the CLMETEV data is subdivided:

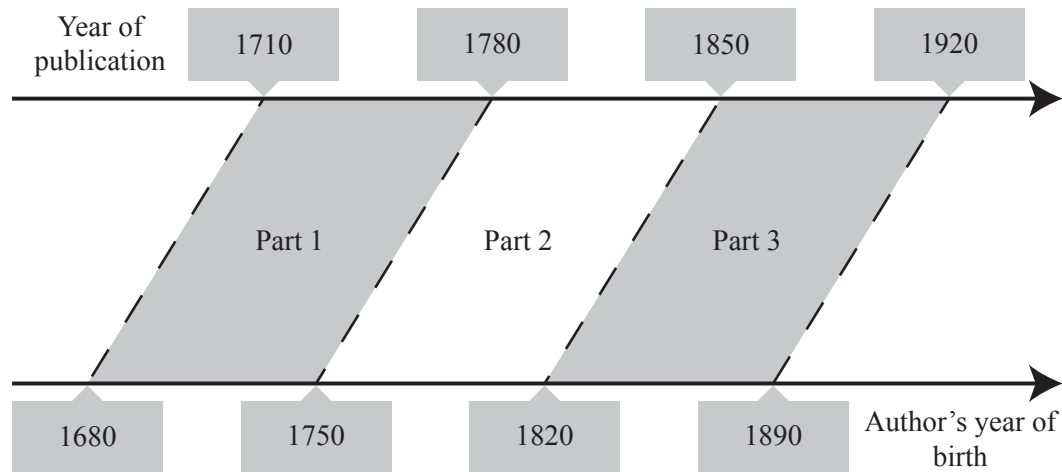


Figure 1. *Subsections of The Corpus of Late Modern English Texts, Extended Version.*

The compiler of the corpus only incorporated texts that were published within the timeframe of each subdivision and that were written by authors who were “born with a correspondingly restricted time-span” (de Smet 2005, 70). That is, the subdivisions only include texts by authors who were thirty years old by the starting decade of each division. This was done in order to “*increase the homogeneity within each sub-period*” and similarly to “*decrease the homogeneity between the sub-periods*” (ibid., emphasis added). This categorisation method, however, leads to the exclusion of authors whose date of birth does not correspond with the expected publication date of their work, as set in the subdivision timeframes by de Smet.

In order to reduce interference of dialectal variation and to keep the data as close to the standard variety of English as possible, the authors chosen for the corpus are all British native speakers of English (ibid., 71). Regional, foreign and ethnic dialects of English would exhibit varying degrees of morphosyntactic variation, which

in turn would be manifested as anomalies in the data since it aims to represent a standard British variety of Late Modern English.

The amount of text per each author is limited to 200,000 words. This prevents the data from being skewed by the style and predominant linguistic preferences, i.e. idiosyncrasies, of a single author.

Furthermore, the two primary data sources of the CLMETEV, the *Project Gutenberg* and the *Oxford Text Archive*, consist mainly of “literary, formal texts, mostly written by men who belonged to the better-off layers of 18<sup>th</sup> and 19<sup>th</sup> century English society” (ibid.). In order to reduce this bias, de Smet favours non-literary prose over literary text and texts of the lower register, whenever such option is possible within an author’s body of work. Additionally, the gender bias is toned down by paying “special attention to including texts written by women authors” (ibid., 72). Despite all this, the corpus remains somewhat biased to “literary texts written by higher class male adults” (ibid.).

Table 1 summarises the composition of the CLMETEV in terms of number of authors, number of text extracts, and the total number of words in each subsection of the corpus:

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

Table 1. *The composition of The Corpus of Late Modern English Texts, Extended Version.*

## 2.5 The British National Corpus

The BNC is a collection of texts and spoken material consisting of approximately 100 million words. The corpus consists of written and spoken language samples from diverse sources and it aims to provide a representative sample of British English usage from the later part of the 20th century.

The written samples of the BNC are extracted from local and national news publications, academic journals, various periodicals, fiction, letters and memoranda, essays and other various sources. The diversity of sources, which provides a high heterogeneity of text types, is the basis that offers a “cross-section” (BNC User Guide, 2009) of English language use. The written part of the BNC constitutes 90% of the material in the corpus, thus generating a significant bias towards written language. The authors of the corpus note that recording and transcribing speech is “significantly more expensive” (ibid.) than extracting and modifying written texts into computer-readable format. They nevertheless estimate that the remaining 10 per cent that constitutes the spoken part is large enough to provide “valuable empirical statistical data about spoken English” (ibid.).

The extracts are taken from random parts of the source material, using a maximum sample size of 45,000 words, although source texts shorter than the target sample size of 40,000 words were further reduced in order to avoid copyright infringements. Three selection criteria are used in the selection and inclusion of texts: domain (subject field), time and medium (books, periodicals and so forth). These criteria were used in order to provide a comprehensive data of English language and secondly to facilitate comparison and contrast of different types of texts.

The data in the BNC is thoroughly tagged for grammatical information with the CLAWS part-of-speech tagger software. The disadvantage of computer-generated

tagging is that it is prone to mislabel words that can belong to several different parts of speech and still be orthographically or structurally similar. And indeed, as *accustomed* can be both an adjective and a past participle verb form, the BNC assigns so-called ambiguity tags to tokens in which the tagging algorithm has been unable to reliably determine whether *accustomed* is a verb or an adjective. But even though the BNC recognises ambiguous constructions that it cannot properly analyse and employs ambiguity tags, the computer-generated tagging is not fail-safe and therefore in the data for *accustomed* a few adjectival tokens are mislabelled as verbs. At any rate, precision and recall issues that are caused by erroneous part-of-speech tagging can be avoided by refraining from using grammatical tags in the search criteria.

For the purposes of the present study, I filtered the BNC data to a sub-corpus that only contains texts in the domain of imaginative prose in order to match up the text type make-up of the BNC data with that of the CLMETEV. The composition of the BNC and the resulting user-defined sub-corpus is listed in Table 2:

	<b>Number of texts</b>	<b>Number of words</b>
The British National Corpus	4,048	98,313,429
Imaginative prose sub-corpus in the BNC	476	16,496,408

Table 2. *Composition of the BNC and the imaginative prose sub-corpus.*

## 2.6 The Corpus of Contemporary American English

COCA is a structured collection of texts in the present-day American English variety. The corpus was created by Mark Davies, Professor of Linguistics at Brigham Young University, and it contains more than 450 million words of text, the earliest extracts being from the year 1990 and the latest from 2012 (and it should be noted that the corpus is still being updated and new texts are added regularly). In order to avoid text-type bias, the texts in the corpus are divided equally among different genres of texts and authentic sources of language use, such as speech transcriptions, books of fiction, newspapers, magazines, and academic journals.

Like the BNC, COCA is electronically tagged word by word with the CLAWS tagger (Davies 2009, 164). Part-of-speech tagging allows users to search for words in a certain lexical category, words with certain inflections and so forth. The same risks apply, however, as with all corpora that employ electronic tagging and the tagging applied by a tagger software, however efficient it may be compared to manual tagging, is always prone to some errors.

The COCA search engine also allows the user to restrict searches to a specific subcategory of the corpus. This feature was used for the present study and the search for *accustomed* was restricted to narrative fiction section of COCA to obtain data comparable in text type composition to the data sets obtained from the other corpora used for this study. The composition of COCA on the whole and the aforementioned subset of the corpus are listed in Table 3.



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	<b>Number of texts</b>	<b>Number of words</b>
COCA	189,431	464,020,256
Subset of narrative fiction (books) in COCA	5,394	24,483,325

---

Table 3. *Composition of COCA and the subset of narrative fiction.*

### 3 Factors influencing complementation

In this section I present theoretical factors that potentially have an influence on the selection of complementation and linguistic environments that favour certain complement types over others as well as other structural and semantic issues that are relevant in the study of complement patterns and their variation. Later when I analyse the corpus data in section 5, I will examine whether these theories play any part in the variation of the complement patterns of *accustomed*.

#### 3.1 Distinguishing between complements and adjuncts

It is important to bear in mind that not all elements that appear in the syntactic environment of complements are necessarily complements and in a complementation study it is essential to make a distinction between complements and so-called adjuncts, which can occupy similar positions. Adjuncts are structurally dispensable elements that provide additional information in the sentence and they may appear between the head and the complement or after the complement. While *accustomed* takes an obligatory complement (Quirk et al. 1985, 1222), i.e. it is always followed by a complement, the complement may be adjacent to one or more adjuncts which are not part of the complementation itself.

Somers (1984, 508) defines complements as elements that complete the meaning of their heads whereas adjuncts are optional parts that complete the meaning of “the central predication.” As adjuncts are not bound to a specific head, they are syntactically rather peripheral, which is sometimes indicated by separation with

commas, and they can occur relatively freely in a sentence. Consider these examples from the BNC:

(5) **AKY 76** Mr Major voiced his concern *yesterday* at television coverage of the IRA bombing of the City of London.

(6) **A99 413** Yesterday at Lord's the Test and County Cricket Board announced separate deals involving both Sky TV and British Satellite Broadcasting for the transmission of a large segment of the domestic game for the next three years.

Adjuncts such as *yesterday* in the examples can occur at the beginning of the sentence (6), at the end or somewhere in between (5). Adjuncts can be single words (*yesterday*), phrases (*at television coverage of the IRA bombing of the City of London*) or clauses.

In example (5), the only element that directly completes the meaning of the verb *voiced* is the noun phrase *his concerns* and it is therefore the complement of the verb.

Similarly in sentence (6), the long noun phrase headed by *deals* is the complement, whereas *Yesterday* and *at Lord's* are adjuncts.

The division between adjuncts and complements is not a clear-cut dichotomy and it is not always easy to discern. Huddleston and Pullum (2002, 219) list several syntactic and semantic factors involved in the distinction, most important of which are described below.

Licensing, according to Huddleston and Pullum, is the most important property of complements. Complements require “the presence of an appropriate verb that licenses them” (ibid.). Consider the following example (ibid.):

(7)a. She mentioned the letter.    b. \*She alluded the letter.

The verb *mention* licenses a noun phrase object, as can be seen in (7a.), but *allude* licenses a prepositional phrase, so the noun phrase complement makes sentence (7b.) ungrammatical. Adjuncts, on the other hand, do not require the presence of a particular verb in order to occur in a sentence.

Complements are of two types, optional and obligatory, whereas adjuncts are invariably optional (*ibid.*, 221). Huddleston and Pullum list the following examples (*ibid.*):

- |                                       |  |
|---------------------------------------|--|
| (8) a. She perused the report.        | b. *She perused. [obligatory complement] |
| (9) b. She read the report.           | b. She read. [optional complement]       |
| (10) a. She left because she was ill. | b. She left. [optional adjunct]          |

The omission of obligatory elements results in ungrammatical sentences, as exemplified in (8), whereas optional elements can be freely omitted without loss of grammaticality. Obligatoriness, then, in essence forms a distinction between obligatory complements and adjuncts, but not between adjuncts and optional complements.

One way of distinguishing between complements and adjuncts is by means of anaphoric expressions, especially by utilising the phrase *do so* (*ibid.*, 222). Anaphora is a ‘substitute’ linguistic element used to refer back to another linguistic element, the antecedent. Consider these examples (*ibid.*, 223):

- |      |  |
|------|--|
| (11) | a. *Jill keeps her car in the garage but Pam does so in the road.    |
|      | b. Jill washed her car in the garage but Pam does so in the road.    |
| (12) | a. *I didn’t read all the reports but I did so most of them.         |
|      | b. I didn’t cover this topic last time but I shall do so on Tuesday. |
| (13) | a. *She rode her bicycle and she did so to school.                   |
|      | b. She performed all the tasks and she did so remarkably well.       |

The anaphoric expression must cover for “all internal complements of the verb” (*ibid.*, 223) in the antecedent and for this reason it cannot occur alongside another complement. Sentences (11a.), (12a.) and (13a.) are ungrammatical because the elements that follow *do so* are part of the complementation of the verb. Thus, all the elements that can be substituted with *do so* are part of the head and its complementation, whereas elements that cannot be antecedents of *do so* but can occur

adjacent to it are adjuncts. The *do so* test can be used to distinguish between complements of *accustomed* and adjuncts that modify *accustomed* or its complementation, but are not themselves arguments of *accustomed*.

### 3.2 Bolinger's generalisation and other semantic distinctions

Bolinger (1968, 127) adopts the view that “a difference in syntactic form always spells a difference in meaning.” His generalisation assumes that languages are economical and efficient systems and that such economical systems have no need for different constructions with identical meanings. By studying minimal pairs involving infinitival and *-ing* complements, Bolinger discovers semantic differences between the two forms.

Bolinger's main finding is that there exists a semantic contrast of “reification versus hypothesis or potentiality” (ibid., 124) between the infinitive and the *-ing* form. According to this distinction, infinitive complements express hypothetical or potential events, whereas the *-ing* form has reference to actual situations:

(14) Can you remember to do that?

(15) Can you remember doing that?

Sentence (14) is an interrogative about something that is not actually done yet, while in sentence (15), the question is related to actual past event. This semantic distinction would suggest that in interrogative sentences or in constructions involving modality and other non-assertive clauses where the hypothetical meaning is possible, *accustomed* selects the infinitival complement and in turn, the *-ing* clause with its reification sense should act as a complement to *accustomed* in assertive contexts.

Similarly, Bolinger adds that the infinitive may be used when “an observation is made in general terms” (ibid., 126), whereas the *-ing* form is preferred when an observation

is made about something that is being performed while the observation is made.

Bolinger gives the following example (ibid.):

(16) It's nice to play golf in the rain.

(17) It's nice playing golf in the rain.

Another interesting aspect that Bolinger presents is the different “degrees of vividness” (ibid.) that are caused by the aspectual differences of the *-ing* form and the infinitive:

(18) I like skiing.

(19) I like to ski.

Bolinger notes that the “reification of the *-ing* brings the action more sharply in focus.” (ibid.). That is to say, the *-ing* form may be used when the action denoted by the complement needs to be focused.

In the same breath it should be noted, however, that there have been a number of authors who have since either criticised or made amendments to Bolinger’s generalisation (Wierzbicka 1988, Duffley 2000). Wierzbicka (ibid., 24) discredits the generalisation of semantic distinction between the hypothetical and the actual that Bolinger attributed to the infinitive and the *-ing* form. She uses both [-actual] and [+actual] verbs such as *imagine*, *manage* and *succeed* to illustrate that Bolinger’s semantic distinction of reification versus hypothesis simply cannot be generalised as it does not apply in cases such as the ones below:

(20) \*He imagined to be blind.

(21) He imagined being blind.

(22) \*He succeeded to do it.

(23) He succeeded (\*managed) in doing it.

Wierzbicka (ibid., 33-35) herself attaches to the infinitival complement the meanings of wanting, tentative intention and future expectation and maintains that the selection of the infinitival pattern is governed largely by the presence or absence of the semantic similitude of the matrix verb.

Simultaneity of observation and performance, for that matter, only applies when the matrix predicate is dynamic, i.e. it has semantic temporality, and thus such simultaneity is not relevant with stative verbs denoting facts or possibilities. Duffley (2000, 222) notes that even with verbs where temporality is relevant, the *-ing* pattern does not consistently evoke sameness of time. He uses the verb *postpone* as an example:

(24) He postponed calling a meeting for a whole month.

It is obvious the act of postponing and calling do not happen simultaneously in the sentence. Duffley claims that the *-ing* form complement patterns can in fact refer to events that occur before, after or simultaneously with respect to the event of the main verb. He uses the matrix verbs *remember*, *consider* and *enjoy* as examples:

(25) I remember working with him on it.

(26) I am considering working with him on it.

(27) I am enjoying working with him on it.

In (25), the act of working denoted by the lower predicate has naturally happened before the subject remembers doing so. Then again, consideration in (26) must occur before the action that is expressed in the lower clause. Finally, in (27), the acts of enjoying and working occur simultaneously.

Another interesting semantic difference between the infinitival and the *-ing* form complement that applies exclusively to the argument selection of *accustomed* is brought up by Poutsma, who offers the following analysis:

The infinitive-construction is, presumably, rather more common than the gerund-construction, and appears to be used to the exclusion of the latter when mere recurrency of an action or state, without any notion of a habit or custom, is in question. (Poutsma, quoted in Rudanko 2006, 39)<sup>1</sup>

Poutsma uses these two example sentences to illustrate the semantic distinction between the sentential complements:

- (28) An age that is accustomed to seeing its clergy in plus-fours;
- (29) The nation of British Commonwealth are accustomed to settle by free and friendly discussion such difficulties as inevitably arise between them.

Rudanko (2006, 39) further elaborates on the above distinction by noting that sentence (28) expresses the sense of ‘being used to a regular situation’, whereas (29) conveys the sense of ‘tending to do something regularly’. Poutsma’s distinction is of special interest in the present study as it specifically proposes that the argument selection of *accustomed* correlates with semantic differences.

The semantic distinction offered by Poutsma as well as Bolinger’s generalisation, together with the remarks made about it by other authors, will be taken into account in the corpus investigations of the present study, notably in the analysis of sentential complements. We shall later see whether any of these semantic distinctions hold true for the complementation of *accustomed* in the corpus data.

### 3.3 The complexity principle

The complexity principle states that the English language has a tendency to favour more explicit grammatical options in environments that are cognitively more complex. (Rohdenburg 1996, 151). Grammatical explicitness is defined by the “bulkiess” of the grammatical option. That is, grammatical alternatives that contain more

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<sup>1</sup> The analysis is from an unpublished dictionary written by Dutch grammarian Hendrik Poutsma in the



morphosyntactic elements are considered more explicit. For example, the *to*-infinitive construction is more explicit than the bare infinitive due to the infinitive marker *to* that is omitted in the bare infinitive. The type of complex environments, on the other hand, which trigger the more explicit option, involve “discontinuous constructions”, “complex surface objects preceding finite and nonfinite clauses”, “heavy subject expressions”, “complex subordinate clauses” and “passive constructions” (ibid., 173). As for *accustomed*, the complexity principle may potentially play a role in the selection of the infinitive over the *-ing* form.

### 3.4 Extractions and insertions

Extractions are “deviations from the canonical sentence structure” (Vosberg 2003, 201) where a linguistic unit is extracted from its original position. Postal (1994, 162) lists eight different structures involving extractions. Below are examples of each with the verb *eat* and its direct object as the extracted element. The symbol [t] indicates the trace, the original position of the extracted element.

Topicalization	The cake, I did eat [t].
Relativization	The cake that I ate [t] was delicious.
Clefting	It was cake that I ate [t].
Comparativization	This is more cake than I can eat [t].
Interrogation	How much cake did you eat [t]?
Pseudo-clefting	What I want to eat [t] is cake.
Negative NP extractions	No such cake did I eat [t].
Exclamatory extraction	What a delicious cake I ate [t]!

Extractions can occur in both matrix and subordinate clauses. Extractions in subordinate clauses entail that a constituent of the sentential complement is extracted and is repositioned outside the subordinate clause. Extractions therefore may cross clause boundaries. The relative degree of difficulty in processing extractions is caused by the so-called filler-gap dependencies (Hawkins 1999, 246) that the extraction

processes produce with syntactic rearrangement. The dependency between the filler (the extracted element) and the gap (or trace, the place where the extracted element would normally be in a canonical sentence structure) and the relative distance between the two correlates with the overall sentential complexity, as the processing of non-canonical sentence structures requires “effort to relate the filler to its appropriate gap” (ibid.).

Following these linguistic processes and notions of different degrees of required linguistic processing, Vosberg (2003, 202) formulates his ‘extraction principle’ as follows:

In the case of infinitival or gerundial complement options, the (perfect) infinitive will tend to be favoured in environments where the object of the dependent verb is extracted (e.g. by topicalization, relativization, comparativization, or interrogation) from its original position and crosses clause boundaries.

The extraction principle correlates with the complexity principle, or in other words, it is one instance of how complexity triggers more explicit linguistic variants, the infinitive over the *-ing* form in this case.

Insertions, i.e. intervening material between matrix and complement clause (ibid., 217), similarly increases complexity that tends to influence the choice of the infinitival complement over the *-ing* form. Intervening material “complicates the processing of the relevant structure” (ibid.), i.e. increases cognitive complexity and thus the more explicit variants may be preferred to compensate for the increased complexity.

### 3.5 The horror aequi principle

Horror aequi refers to the (perhaps universal) tendency to avoid the use of structurally similar grammatical elements close to each other. Rohbenburg (2003, 236) formulates the principle as follows:

the horror aequi principle involves the widespread (and presumably universal) tendency to avoid the use of formally (near-) identical and (near-)adjacent (non-coordinate) grammatical elements or structures

The principle primarily plays a role in verb complementation where the co-occurrence of structurally similar heads and complements are often avoided, e.g. infinitival complements are avoided with infinitival heads and similarly *-ing* form complements are avoided with *-ing* form heads. It may, however, also affect the complementation of adjectival heads if the adjective is preceded by a predicate and the complement is verbal, which would set two verbs with potentially similar forms in near-adjacent position.

### 3.6 The Great Complement Shift

English complementation has undergone significant changes over the course of past few centuries, perhaps the most prominent of which is the rise of the *-ing* form complement at the expense of the *to*-infinitive. Rohdenburg (2006, 143) coined the term The Great Complement Shift, which refers collectively to these changes in the English verbal complementation system. This is one of the aspects to take into account in the study of complementation, to see whether a certain headword has been affected by The Great Complement Shift by looking into the diachronic development of its sentential complement patterns.

### 3.7 Theta theory

Different verbs form different types of semantic relationships between their arguments. These relationships are referred to in terms of thematic roles or theta roles (Haegeman 1991, 41). For example, the verb *kill* requires an AGENT, “the one who intentionally initiates the action” (ibid.), and a PATIENT, “the person or thing undergoing the action expressed by the predicate” (ibid.):

- (30)        Mavigret killed Poirot  
                  AGENT        PATIENT

Predicates in general have this type of thematic structure, that is, they assign certain theta roles to their arguments. Haegeman (ibid.) distinguishes between eight different theta roles:

- AGENT/ACTOR: the one who intentionally initiates the action expressed by the predicate.
- PATIENT: the person or thing undergoing the action expressed by the predicate.
- THEME: the person or thing moved by the action expressed by the predicate.
- EXPERIENCER: the entity that experiences some (psychological) state expressed by the predicate.
- BENEFACTIVE/BENEFICIARY: the entity that benefits from the action expressed by the predicate.
- GOAL: the entity towards which the activity expressed by the predicate is directed.
- SOURCE: the entity from which something is moved as a result of the activity expressed by the predicate.
- LOCATION: the place in which the action or state expressed by the predicate is situated.

Haegeman notes that this list is only tentative since linguists are not unanimous on the number, labels and nature of the theta roles and for that reason different lists do exist. The list provided by Haegeman, however, is adequate for the purposes of the present study and will therefore be adopted here.

### 3.8 NP movement and subject control construction

This subsection aims to clarify a fundamental dichotomy in the deep structure of sentences, the understanding of which is essential in the study of complementation patterns, that is, the one between NP movement and subject control constructions.

Consider the following sentences (Davies and Dubinsky 2004, 3):

(31) Barnett seemed to understand the formula.

(32) Barnett tried to understand the formula.

On surface level, the sentences appear to be structurally similar, the only difference being the dissimilar matrix verbs, *seem* and *try*. However, if we look into the deep and thematic structures of these two sentences we will discover that they are structurally quite different.

Sentence (31) exhibits what is known as NP movement. The subject of the sentence, *Barnett*, is semantically linked to the verb *understand* in the lower clause and to it alone; the subject is not semantically connected to the matrix verb *seem*, i.e. *Barnett* is the one who does the act of understanding, but not the act of seeming in the sentence. Thus the subject *Barnett* receives a thematic role of EXPERIENCER from the embedded verb *understand*. In order to better understand the role of *seem* in the sentence and to understand the deep structure of NP movement, the sentence can be paraphrased as follows (ibid., 4):

(33) It seemed that Barnett understood the formula

Sentence (33) remains thematically identical to (31). In terms of thematic roles, *Barnett* is still EXPERIENCER in both examples. In (33) the matrix subject position is occupied by a semantically empty pronoun, *it*, which enables the subject of the lower clause to be raised in the corresponding position in the matrix clause, thus creating the process of NP movement.

Sentence (32), on the other hand, is an instance of a subject control construction. Here *Barnett* is linked semantically to *both* the matrix verb *tried* and the embedded verb *understand*, i.e. Barnett is the one who does the act of trying and understanding in the sentence. The lower sentence contains an implicit, understood subject, also known in the literature as PRO. The implicit subject satisfies the Extended Projection Principle (Haegeman 1991, 69), according to which “sentences must have subjects regardless of their argument structure.” The higher subject and the lower implicit subject are co-referential since they both refer to *Barnett*, so the higher subject can be seen as controlling the reference of PRO.

There are several tests that can be used to distinguish between NP movement and control constructions. Davies and Dubinsky (2004, 7) offer, among other tests, the *it* used in meteorological expressions and the existential *there* construction. NP movement allows both the weather *it* and existential *there* in the subject position, whereas control construction allows neither. To illustrate, below is a common NP movement verb *seem* in weather *it* and existential *there* constructions:

(34) It seems to be raining

(35) There seems to be something wrong with my computer

In order to see whether *accustomed* involves subject control or NP movement, I can test *accustomed* with the existential *there* and the weather *it* constructions as with *seem* above:

(36) \*It is accustomed to rain

(37) \*There is accustomed to be something wrong with my  
computer

The above tests prove that *accustomed* is a subject control adjective and does not involve NP movement. What this entails, according to the theory of subject control, is

that if *accustomed* selects a sentential complement, the lower clause contains an implicit subject that is always co-referential with the subject in the higher clause.

## 4 *Accustomed* in the literature

This section discusses the previous documentation of *accustomed* in different dictionaries and grammars. *The Oxford English Dictionary* is treated as the primary source here. Two other dictionaries, namely *The Oxford Advanced Learner's Dictionary* and *Collins English Dictionary*, are consulted for comparison and corroboration of the senses.

### 4.1 Oxford English Dictionary

*Accustomed* is defined as a participial adjective in the second edition of the OED, meaning that it is an adjective derived from past participle form of the verb *accustom*. Let us first look at the senses of the verb *accustom* in the OED, which are presented in Table 4 along with their respective example sentences.



<p><b>1. trans.</b> To make (a thing) customary, habitual, usual, or familiar; to practise habitually. Most common in the passive, to be accustomed: to be made customary, to be practised habitually. <i>Obs.</i></p>	<p><b>1768</b> BLACKSTONE <i>Comm.</i> III. 88 Whether such tithes be due and accustomed cannot be determined in the ecclesiastical court.</p>
<p><b>b.</b> To use (a thing) customarily or habitually; to frequent as a customer. <i>Obs. rare exc. in pa. pple.</i></p>	
<p><b>2. intr. (refl. pron. suppressed).</b> To become familiar, go or act familiarly. To accustom to: to resort to, frequent; to accustom with: to consort or cohabit with. <i>Obs.</i></p>	<p><b>1670</b> MILTON <i>Hist. Brit.</i> Wks. 1738 II. 33 We with the best man accustom openly; you with the basest commit private adulteries.</p>
<p><b>3.</b> To habituate, familiarize (a person or thing to (in, into, for, with obs.) something, or to do something).</p>	<p><b>1851</b> RUSKIN <i>Mod. Paint.</i> I. II. I. ii. §2. 50 The ear is not accustomed to exercise constantly its functions of hearing; it is accustomed to stillness.</p>
<p><b>b. refl.</b></p>	<p><b>1718</b> LADY M. W. MONTAGUE <i>Lett.</i> I. xxxii. 112, I cannot enough accustom myself to this fashion to find any beauty in it.</p>
<p><b>c. intr. (from refl.)</b> To be wont, to use, to have the habit <i>to do</i> something. <i>Obs.</i></p>	<p><b>1668</b> EVELYN <i>Mem.</i> (1857) III. 209 Those, therefore, who accustom to wash their heads, instead of powdering, would doubtless find the benefit of it.</p>
<p><b>d. pass.</b> To be habituated, to be in the habit, to be wont or used.</p>	<p><b>1846</b> MILL <i>Logic</i> II. v. §6 (1868) 269 Were we not well accustomed to see the sun and moon move.</p>

Table 4. *Senses for the verb accustom in the OED.*

Noteworthy here are senses 1, 3 and 3d that seem to be structurally similar to the predicative adjective *accustomed*. The construction *to be accustomed* is given under the first sense and it is defined as a passive instead of a predicative adjective or copulative complement, but in essence there is no discernable structural difference between these classifications and it is thus only a matter of how the construction is analysed. Moreover, senses 3d and 1 seem to be very similar, one being a passive construction and the other being “most common” in the passive. Sense 3 can be structurally similar to the adjectival form, as can be seen in the example sentence, but it can also take a direct object. The present study concerns *accustomed* as an adjective

and therefore I have decided to disregard tokens in the corpus data that are clearly verbal, i.e. when *accustomed* is followed by a direct object or the forms *accustom*, *accustoms* and *accustoming*.

The participial adjective function of *accustomed* is given a separate entry in the OED, with two different senses, although the second is marked as obsolete. This further increases the redundancies between the senses of the verb and the adjective. Sense 1 here is similar to sense 1 of *accustom* and sense 2 is analogous to sense 1b of the verb form. The two senses and their respective example sentences are listed in Table 5.

1. Made customary, practised habitually; wonted, used; customary, habitual, usual.	1876 M. E. BRADDON <i>J. Haggard's Dau.</i> II. 28 They had both grown accustomed to the half light of the wood by this time, and saw each other's faces very clearly.
2. Frequented by customers. <i>Obs.</i>	1772 GRAVES <i>Spiritual Quixote</i> IX. vi. (D.) [He] observed to my landlord that his seemed to be a well-accustomed house.

Table 5. *Senses for accustomed in the OED.*

As sense 2 is marked as obsolete and more importantly, its use is restricted to the attributive premodifier position, sense 1 is the only possible meaning for the predicative use of *accustomed*. This definition, however, is somewhat ill-suited for the constructions *accustomed to something* or *accustomed to do/doing something*, and it mainly seems to describe *accustomed* in the premodifier position, e.g. in the phrase “the sudden disappearance of the hoard from its *accustomed* hiding-place” the hiding-place is something that is ‘wonted, used, customary, habitual, usual or made customary’. The definition ‘practised habitually’ is apt to describe habitual action performed by the subject, as in “I became *accustomed* to make the laborious and exquisite journeys down to the sea”, but not when the complement refers to something

that is not done or caused by the subject, but rather to something that is an existing condition, e.g. “you know you are *accustomed* to these tempests”. Thus, the OED definition is only fit for phrases where the theta role of the subject is more agentive than experiential.

## 4.2 *Accustomed* in other dictionaries

*The Oxford Advanced Learner’s Dictionary* (4<sup>th</sup> edition, 1989, abbreviated hereafter as OALD) lists an entry for *accustomed to* with the definition “used to sth”. This is an improvement to the OED definition in three ways. First, it defines the preposition that *accustomed* selects. Secondly, the simple definition covers both meanings, although it does not distinguish these explicitly: being accustomed to something that is performed by the subject, i.e. accustomed to something that is familiar through use, and being accustomed to something that is not performed by the subject, but rather to something that is an existing condition. And thirdly, the predicative use of the word is distinguished from the attributive use.

*Collins English Dictionary* (9<sup>th</sup> edition, 2007) similarly lists the attributive and predicative *accustomed* separately, the difference being that the *Collins* dictionary uses the label “postpositive” to denote a predicative adjective. While the term in its strict sense refers to an adjective that appears right after the noun that it modifies, *Collins English Dictionary* uses it to label both predicative and actual postpositive adjectives. The postpositive function is given two senses that cover both the experiential and the agentive senses of the word: “used or inured (to)” and “in the habit (of)”. These senses are similar to those made by Poutsma (“recurrency of an action or state” vs. “habit or custom”), which I mentioned earlier in 3.2, but the difference is that *Collins English Dictionary* does not state that these senses would

govern the argument selection of *accustomed*. *Collins English Dictionary* likewise mentions that these constructions are followed by the preposition *to*. The definition is more precise than the one in the *OALD* or the *OED*. I shall henceforth refer to the two senses of *accustomed* as agentive (‘familiar through use’, ‘practiced habitually’) and experiential (‘adapted to existing conditions’, ‘recurrence of an action or state’).

Both the *OALD* and *Collins English Dictionary* offer accurate definitions for the predicative use of *accustomed*, whereas the definition in the *OED* is perhaps somewhat lacking and out-dated.

### 4.3 *Accustomed* in grammars

Quirk et al. (1985, 1221) classify *accustomed* as a participial adjective complemented by a prepositional phrase headed by the preposition *to*. They add that *accustomed* takes an obligatory complement, which makes the “lexical bond” between the adjective and the preposition stronger. They do not distinguish between the type of complements that *accustomed* takes, but they do specify that, unlike *accustomed*, the less formal synonym *used to* cannot occur with a following infinitive (ibid., 1222). Furthermore, Quirk et al. note that *accustomed* has a tendency to “coalesce with the preceding copula to form a semi-auxiliary verb” (ibid., 1228). In their view, the phrase *be accustomed to* can be seen as a semi-auxiliary due to the strong coalescence, or lexical bond, of the copula, the adjective and the preposition.

Huddleston and Pullum (2002, 542) note that many adjectives select complements almost invariably in the form of prepositional phrases or clauses and list *accustomed* as an adjective selecting a prepositional phrase headed by the preposition *to* or an infinitival clause (ibid., 559). They also add that *accustomed* cannot occur in attribute (i.e. premodifier) position when it licenses a complement.

Biber et al. (1999, 716) classify *accustomed* as an adjective of habitual behaviour “controlling post-predicate to-clauses”, adding that adjectives in general are not complemented by bare infinitives, but *for*-phrase complements are acceptable in cases where the subject of the infinitival complement needs to be explicitly stated. Biber et al. (ibid., 749) also recognise adjectival predicates that select *-ing* clause complements, but they do not explicitly classify *accustomed* as one of such adjectives. As for the *to* particle, Biber et al. (ibid., 77) make a distinction between the preposition *to* and the infinitive marker *to*. They note that the prepositional *to* “is followed by a noun phrase or an *-ing* form” (ibid.), whereas the infinitival *to* is followed by an infinitive clause. They (ibid.) add that the distinction between the preposition *to* and the infinitive marker is “blurred with some adjectives and verbs which can be followed by either a prepositional phrase with an *-ing* form as complement or by an infinitive.” This is the case with *accustomed* as well as it allows both infinitives and *-ing* clauses as complements. The dichotomy of the two different functions of the *to* particle also entails a distinction between the sentential complement variants in terms of their sententiality, as the infinitival *to* followed by a verb phrase can be seen as a more sentential complement than the prepositional *to* followed by an *-ing* clause, which is seen as more nominal (Rudanko 2000, 46).

Biber et al. (ibid.) list four different grammatical patterns for the adjective + *to*-clause construction:

- 1) Subject of the *to*-clause is the same as the subject of the main clause:  
“Millar was obstinately determined to change the content of education.”
- 2) Subject-to-subject raising with degree of certainty adjectival predicates:  
“The government is unlikely to meet the full cost.”
- 3) Object-to-subject raising with adjectives of ease or difficulty: “He would be very difficult to reach.”

- 4) Constructions where the *to*-clause is optional: “You’re lucky to be alive.”

As *accustomed* requires a complement and patterns two and three are restricted to certainty and difficulty adjectives, the only possible pattern for *accustomed* is the first one, where “the absent subject of the *to*-clause is understood to be the same as the subject of the main clause” (ibid.), a condition which is generally referred to as subject control and which was already discussed in more detail in section 3.8. Patterns two and three can be paraphrased with pre-predicate *to*-clauses, which proves that they do not function with *accustomed*. Consider the following example of pattern two:

(38) For the government to meet the full cost is unlikely.

(39) \*For the government to meet the full cost is accustomed.

While the sentence “The government is accustomed to meet the full cost.” is grammatical, the pre-predicate *to*-clause paraphrase is not, which shows that *accustomed* could not possibly occur with patterns two or three, but with pattern one only.

## 5 Corpus findings

In the next seven subsections I will present and analyse the corpus findings concerning the adjective *accustomed* and its complement patterns, starting from the CLMETEV data and then moving on to the BNC and finally concluding with the findings from the COCA data. The search string utilised to obtain the data in all three corpora was simply *accustomed*, which, however, returns both the predicative and attributive adjectives as well as verbal past participle forms of the word, resulting in some amount of irrelevant data. The past participles, attributive adjectives and other constructions that are irrelevant for the present study are naturally not included in the analysis but will be briefly illustrated in each subsection alongside the distribution of the relevant complement patterns found in the data.

### 5.1 CLMETEV Part 1 (1710-1780)

The search for *accustomed* produced 133 tokens in the first subsection of the CLEMETV, 113 of which were considered relevant for the present study, inasmuch as they contained *accustomed* in the predicative position or in any other construction where it takes a complement. Irrelevant constructions included eleven tokens containing premodifiers (“went into it with her *accustomed* cheerfulness”) and nine tokens of verbal forms (“where he has *accustomed* the people to be not only easy, but unguarded, before him”). The relevant tokens in the data involved either noun phrase, infinitival or zero complements (zero complements are a rather special case, more discussion of which below). The distribution of the complement patterns found in the data is presented in Table 6 in order of frequency.

Complement	Number of tokens	Percentage	Normalised frequency
The infinitive	59	52%	19.42
Noun phrase	52	46%	17.12
Zero	2	2%	0.66

Table 6. *The complements of accustomed in the first subsection of the CLMETEV.*

The data contained two peculiar tokens where *accustomed* appears without an explicit complement. These constructions are contrary to the notion of Quirk et al. (1985, 1222), according to which *accustomed* is a type of adjective that selects an obligatory complement, i.e. it cannot occur without a complement in its predicative function.

- (40) or ever hereafter, into Portugal, the woollen cloths, and the rest of the woollen manufactures of the British, as was *accustomed*, till they were prohibited by the law ; nevertheless upon this condition
- (41) was ready to burst with indignation; which impatient to give vent to, parted from her lover much sooner than she was *accustomed*, in order to wreak on the poor Louisa all that rage and malice could suggest. That innocent maid, little suspecting (1693 haywood 1744 - the fortunate foundlings)

These elliptical constructions are, if a bit unidiomatic, still perfectly comprehensible.

In token (40), “*as was accustomed*” seems to have the same meaning as “*as was customary*” and the complement that has been elided, if it was transformed into an explicit complement, could be semantically similar to “*to be done*” or something along those lines. Likewise in (41), which also contains a comparativisation, the complement and also the *to*-particle has been elided and the implicit complement in this construction is simply the pronoun *what*. I have treated these two tokens as instances of zero complementation.



### 5.1.1 Nominal complements

Noun phrases represent roughly the half of the total number of the relevant tokens.

These complements refer directly (42) or anaphorically (43) to the action of the subject (44) or some other phenomena (42). The higher subject is either [+animate] (42) or part of an animate entity, which in most cases means a sensory organ of some kind (42):

- (42) the dry manner of the Roman school was very ill calculated to please eyes that had been *accustomed* to the luxuriance, splendour, and richness of Venetian colouring. (1723 reynolds 1769-76 - seven discourses on art)
- (43) for my lord and lady have no delight in all this magnificence; for, by being so *accustomed* to it, they walk through all these apartments (1710 fielding 1749 - the governess)
- (44) but no sensible disorder, arose from so great a change in the situation of more than 100,000 men, all *accustomed* to the use of arms (1723 smith 1766 - wealth of nations)

Out of the 59 noun phrase complements, sixteen tokens involve extractions. The most frequent type is relativisation with thirteen tokens, followed by comparativisation with three tokens:

- (45) made her take a particular pleasure in hearing him speak: that rough blunt behaviour to which she had been *accustomed* since her being brought a captive into Muscovy (1693 haywood 1744 - the fortunate foundlings)
- (46) began to treat her with freedoms which she could not help resisting with more fierceness than he had been *accustomed* to from women of a much higher rank (1693 haywood 1744 - the fortunate foundlings)

In sentence (45), the noun phrase complement *that rough blunt behaviour* has been extracted from its regular position by means of relativisation. In (46), the non-canonical sentence structure is formed by means of comparativisation.

Both the agentive and experiential senses of *accustomed* were found in nominal complement patterns. Token (44) is an example of the agentive sense, where

*accustomed* and its complement conveys the sense of ‘habitual activity’ or ‘familiarity through use’, whereas example (42) expresses the experiential sense of ‘adapting to existing conditions’ or ‘being used to a regular situation’.

### 5.1.2 Sentential complements

The infinitive is the only sentential complement of *accustomed* in the first subsection of the CLMETEV. With 59 tokens, infinitives are slightly more frequent than noun phrase complements. These infinitival constructions involve subject control, i.e. the subject of the higher predicate is co-referential with the implicit subject of the lower predicate. In other words, infinitival complements of *accustomed* always refer to the action of the higher subject. Semantic properties are the same as with NP complements.

- (47) But what became of mademoiselle Charlotta de Palfoy! her tender soul, so long *accustomed* to love Horatio, had not courage to support the shock of losing him (1693 haywood 1744 - the fortunate foundlings)
- (48) I was at last so *accustomed* to see this little Frisk (for so I called it) playing round me, that I seemed to miss part of myself in its absence (1710 fielding 1749 - the governess)

Twenty instances of extractions out of infinitive clauses were found in the data, all of which were formed by relativisation:

- (49) and turned into the rue St. Dennis instead of the rue St. Honore, where he had been *accustomed* to leave his horses and servant. (1693 haywood 1744 - the fortunate foundlings)
- (50) A life anything like this could not, to be sure, be entered upon in the midst of such company as he had been *accustomed* to keep (1701 doddridge 1750 - the life of col. jamesgardiner)

In these constructions, the extracted element that has been moved from the lower to the higher clause is usually a direct object (50), but the data shows that also adjuncts (49) can be extracted, which indicates that, in addition to direct objects, also adjuncts

can cross clause boundaries via extraction and thus the extraction principle, as stated by Vosberg (2003, 202), could be reformulated to also include environments where repositioned adjuncts create complex syntactic structures that can potentially favour the infinitival complement variant over the *-ing* form.

Insertions, on the other hand, were rare, occurring in six tokens only:

- (51) so that I was *accustomed*, not only in words to speak truth, but also not to endeavour by any means to deceive. (1710 fielding 1749 - the governess)

Extractions and insertions in these tokens are in accordance with the extraction principle as all the complement patterns are of the infinitival type in the cases (and in every other case as well where the complement is sentential) where extractions or insertions occur.

Both the experiential and agentive senses were attested in the infinitival complement patterns. Infinitival complements, such as the one in (48), can express in the experiential sense a recurring situation or a habitual activity, like in sentence (49), which conveys the agentive sense.

## 5.2 CLEMETEV Part 2 (1780-1850)

The second subsection of the CLEMETEV returned 413 tokens for *accustomed*, out of which 314 tokens were considered relevant for the present study. In addition to verbal forms, other irrelevant tokens in the corpus data included *accustomed* in the premodifier position and one obscure extract which could not be analysed due to insufficient context in the sample. *Accustomed* was used fairly frequently as a premodifier still in the 18<sup>th</sup> and 19<sup>th</sup> century: it is found in the premodifying position in 92 tokens. Purely verbal constructions, on the other hand, were rare: *accustomed* takes a direct object only in six tokens.

The distribution of the complement patterns found in the corpus data is presented in Table 7 in order of frequency:

Complement	Number of tokens	Percentage	Normalised frequency
The infinitive	181	58%	31.62
Noun phrase	127	40%	22.19
The <i>-ing</i> form	4	1%	0.70
Zero	2	1%	0.35

Table 7. *The complements of accustomed in the second subsection of the CLMETEV.*

Again, the data revealed two instances of *accustomed* where it functions as a predicate adjective and in which case it should therefore select an obligatory complement, but does not seem to do so:

(52) made his breakfast of two other of his unfortunate prisoners, then milked his goats as he was *accustomed*, and pushing aside the vast stone (1775 lamb 1808 - adventures of ulysses)

(53) It was a very dark night, as the moon had not yet risen; they did not land at the harbour, but, as they had been *accustomed*, at a creek about two miles below. (1797 shelly 1818 –frankenstein)

Notable in these two constructions is the conjunction *as*, which would suggest that the complement should be a pro-VP *do*, which is used to avoid the repetition of the full verb phrase. I have again treated these constructions as instances of zero complementation.

### 5.2.1 Nominal complements

Accustomed is complemented by a noun phrase in 127 tokens, which is roughly 40% of all the 314 relevant tokens. Below are some examples of typical nominal complements found in the data:

- (54) The trot of the dromedary is a pace terribly disagreeable to the rider, until he becomes a little *accustomed* to it. (1809 kinglake 1844 - eothen)
- (55) I hope to pursue the plan to which I have been *accustomed*, of seeking my own happiness only in the happiness of others. (1812 ellis 1839 - the women of england)
- (56) In the end, when the eyes of men in civil stations had got *accustomed* to military show and parade (1779 galt 1823 - the provost)

Extractions occur with nominal complements in 25 tokens. In these constructions, the noun phrase complement has been extracted from its original position, either by means of relativisation (57), comparativisation (58) or topicalisation (59):

- (57) but it was not one of those bright glorious mornings to which they had been *accustomed* since their arrival at the island (1792 marryat 1841 - masterman ready)
- (58) yet it is not greater than the Roman women are *accustomed* to- it is not greater than the Grecian ought to be. (1803 bulwer-lytton 1834 - the last days of Pompeii)
- (59) This was not what you was *accustomed* to once, sir (1811 thackeray 1847-8 - vanity fair)

Insertions, i.e. intervening material between the head and the complement, similarly interrupt the canonical sentence structure. Insertions with nominal complements were detected in seven tokens. Below is a typical example:

- (60) Young and inexperienced as you are, and early as you must have been *accustomed*, from your mother as well as from Mr Belfield, to far other doctrine, the clearness of your judgment (1752 burney 1782 - cecilia 1-2)

The semantic properties of nominal complements remain the same between the first and the second subsection of the CLMETEV. Both the experiential (57) and the

agentive (55) senses of *accustomed* occur with these nominal complements found in the second subsection of the corpus.

## 5.2.2 Sentential complements

The second subsection of the CLMETEV introduces significant changes in the sentential complementation of *accustomed* as the *-ing* form type emerges as a rare sentential complement variant alongside the still vastly more frequent infinitival complement.

### 5.2.2.1 The infinitive

The infinitive clause continues to be the dominant sentential complement of *accustomed* in the second subsection of the CLMETEV, although it is not anymore the sole verbal complement. 98% of the sentential complements found in the data are of the infinitival type:

- (61) He had been *accustomed* to believe that the gods had lived upon earth, and taken upon themselves the forms of men (1803 bulwer-lytton1834 - the last days of pompeii)
- (62) He arrested, he commanded her, by the magic of a mind long *accustomed* to awe and to subdue. (1803 bulwer-lytton 1834 - the last days of Pompeii)

Extractions out of infinitival complement patterns are exceptionally regular; altogether 58 extractions among the 181 infinitival complements were attested in the corpus data. Relativisation is the most frequent type of extraction with 51 tokens. In these constructions a complement (63) or an adjunct (64) in the lower infinitive clause is moved to the higher clause:

- (63) The alderman, a man of uncultivated mind and manners, and whom the doctor had been *accustomed* to see in sordid attire (1756 godwin 1831 - thoughts on man)

- (64) his reason for appearing at that place, and, as might be supposed, were soon contented to learn, where they had been *accustomed* to teach (1770 cottle 1847 - reminiscences of samuel taylor coleridge and robert southey)

In addition to relativisation, other types of extractions found in the data are comparativisation and topicalisation, with five and two tokens respectively. Insertions between *accustomed* and the infinitive clause were found in 15 tokens:

- (65) so much had they been *accustomed*, in reading poetry, to receive pleasure from the separate images and phrases successively (1772 coleridge 1817 - biographicaliteraria)

Again, the occurrence of the infinitival complement in conjunction with complex sentence structures involving extractions or insertions is in accordance with the complexity principle, as the more explicit complement variant is used in environments that are more difficult to process than canonical sentence structures.

Again, the infinitival complement patterns seem to encompass both the agentive and experiential senses of *accustomed*. In sentences such as (64) the infinitival complement completes the sense of ‘habitual activity’, whereas in sentence (63), the complement pattern conveys the experiential sense of ‘adapting to existing conditions’.

### 5.2.2.2 The *-ing* form

The *-ing* form emerges in the middle part of the CLMETEV alongside the infinitival complement as a second type of sentential complement creating variation in the sentential complementation of *accustomed*. This pattern is, however, still quite rare compared to the infinitive and altogether only four tokens of such patterns were attested in the data:

- (66) In the morning I started with six horses and two Gauchos: the latter were capita men for the purpose, and well *accustomed* to living on their own resources. (1809 darwin 1839 - voyage of the beagle)

- (67) He started from Guasco, and being *accustomed* to travelling in the Cordillera, did not expect any difficulty in following the track to Copiapo; (1809 darwin 1839 - voyage of the beagle)
- (68) At first they consisted principally of policemen; who, being much *accustomed* to giving evidence, knew what were the material points they were called on to prove (1810 gaskell 1848 - marybarton)
- (69) I was *accustomed*, now, to keeping silence when things distasteful to my ear were uttered; (1820 brontë 1847 - agnes grey)

Tokens (66) and (67) are from a travel memoir, *The Voyage of the Beagle*, by Charles Darwin, first published in 1839. The source of (68) is Elizabeth Gaskell's novel *Mary Barton*, published in 1848, and (69) is from *Agnes Grey*, the debut novel of Anne Brontë, published in 1847. As evidenced by the emergence of the first *-ing* form complements in the data, it would seem that the *accustomed + to -ing* pattern started to appear in the mid-19<sup>th</sup> century British English.

There are also a number of tokens in the data where the complement ends with the *-ing* inflection, but the *-ing* form in question is hardly verbal:

- (70) for Lawrence, though lazy, had not yet learned to be a wicked boy. But, by degrees, he was *accustomed* to the swearing and quarrelling, and took a delight and interest in their disputes and battles. (1767 edgeworth 1796-1801 - the parent's assistant)
- (71) who trembled as though conscious of the perilous expedition on which he had entered. Mr. Coleridge who had been more *accustomed* to rough riding than myself, upon understanding that I through cowardice had forsaken the saddle

The presence of the definite article *the* makes the complement in (70) unambiguously nominal. Another simple test is to transform the *-ing* form into an infinitive and to see if it produces an acceptable verb. If we apply this test to token (71), we see that “*to rough ride*” is hardly a verb in the English lexicon and therefore the complement should be considered as nominal. The presence of an adjectival modifier in (71) is naturally a clear indicator of a nominal complement, as a sentential complement



would have to be modified by an adverb. But these distinctions are not always this clear-cut. In his study of the complementation of *accustomed*, Rudanko likewise found that among the first appearances of the *-ing* form complement selected by *accustomed* (which, as he also notes, started to emerge in the nineteenth century), there were a “number of cases where the *-ing* form in question, in the absence of modification associated with verbs, may be interpreted as a verbal noun or a nominalization” (2006, 36). On that note, the presence of such modification — one common example being the direct object complement — would set aside the question of whether the *-ing* form under consideration is nominal or sentential. And indeed, in two (68) (69) of the four tokens found in the data the constituent in the *-ing* form selects a direct object, which makes the complements clearly verbal. Furthermore, the complement in token (66) is the *-ing* form of the prepositional verb *live on* which similarly sets aside any doubts about the verbality of the complement. This leaves (67), which remains ambiguous as the complement *travelling* lacks purely verbal or purely nominal modification. The prepositional phrase “*in the Cordillera*” that modifies *travelling* is an adjunct of place that can modify both verbal and nominal phrases and thus it cannot help to resolve the nature of the constituent that it modifies. While the complement in (67) is devoid of purely verbal characteristics and its category remains unclear, I have nevertheless decided to include it in the analysis of sentential complements as it equally lacks nominal features that would negate its classification as a verbal constituent.

Another point that Rudanko notes about the earliest examples of the *-ing* form complements in the nineteenth-century British English data that he examined is that “in two of the three [examples of the *to -ing* pattern in the British English corpus] the copula is a more dynamic verb than the generally more usual *be*” (ibid., 37) and he

points out that such dynamic copulas (*become* and *grow* in his examples) “express metaphorical movement toward a goal, and as such they are also suitably compatible with the preposition *to*” (ibid.). In my data, however, all of the first four tokens of the *-ing* form complement were found in conjunction with the regular *be* copula and thus the first rare occurrences of the *-ing* form complements in the CLMETEV data, at least, do not support the hypothesis that dynamic copulas would have given the *-ing* form a footing as a sentential complement variant.

In terms of semantics, I would argue that these *-ing* form patterns express the agentive sense of *accustomed*, with perhaps the sole exception being the token (66), which can also express the experiential sense of ‘adapting to existing conditions’, depending on the interpretation. If we look into semantic distinctions, as laid out in section 3.2, and especially into the one made by Poutsma, I would have to argue that at least three of the first four *-ing* form complements found in the corpus data do not convey the sense of ‘recurrence of an action or state’, i.e. the experiential sense, as in the three examples the lower clauses seem to express a customary action with an implicit subject in an agentive role (whereas Poutsma’s analysis would perhaps indicate that the *-ing* form complement should contain an experiencer as the implicit subject). As regards for the semantic distinctions made by Bolinger, while it is true that all of the four *-ing* form complements refer to actual situations, we can set aside the semantic contrast of reification and hypothesis, as it is evident that the majority of the infinitival complements found thus far in the data also have a factual meaning, and not a hypothetical one. All things considered, it would seem that the first four *-ing* form complements do not show any degree of semantic specialisation and they appear to occur in free variation with the infinitival complements.

Another thing to look at in seeking for the causes of variation in sentential complementation is the verb in the lower clause. By adopting the method of minimal pairs, as used in phonology, we can determine whether the *-ing* form or the infinitival pattern favour certain verbs. The prepositional verb *live on* attested in (66) is indeed not found in the infinitival complement form, but this may be due to the fact that it is a relatively rare verb. The verbs *travel*, *give* and *keep*, on the other hand, were found to occur also in infinitival complement patterns:

- (70)        in vain he cried out against the enormity of turtle and champagne that was fit for an archbishop. "I've always been *accustomed* to travel like a gentleman," George said, "and, damme, my wife shall travel like a lady. As long as there's a shot (1811 thackeray 1847-8 - vanity fair)
- (71)        are exceptions to the general rule; while the great proportion of individuals thus circumstanced are not only *accustomed* to give their time and attention to religious observances, but, there is every reason to believe, are materially (1812 ellis 1839 - the women of England)
- (72)        had hitherto varied but little as to number, and consisted of those, both from the town and country, who had been *accustomed* to keep up a connexion with the house. But now things were altered, and many people came to dine there daily with (1760 clarkson 1839 - the history of the abolition of the african slave-trade)

These minimal pairs give another opportunity to assess whether the two sentential complement patterns varying in form exhibit semantic specialisation or, for example, whether the matrix verb has characteristics (other than the aforementioned distinction between dynamic and static) that govern the selection of the complement type. Semantically I fail to discern any differences between the minimal pairs. The meanings between the infinitive/*-ing* pairs are similar and in general they all convey the agentive sense of performing habitual practices.

The matrix verbs may at first glance offer little clue, as they are all various forms of the verb *be* in all the minimal pairs. But one noteworthy point is that the present participle form of the matrix verb *be* appears only in conjunction with *-ing*

form complements in adverbial constructions, in (67) and (68), and in none of the infinitival pairs is the matrix verb in the present participle (i.e. *being*) or the infinitival complement found in an adverbial construction. And in fact, if we look outside these minimal pairs, the second part of the CLMETEV does not contain any instances of infinitival complements in adverbial constructions such as (67) or (68).

Another interesting thing about these adverbial constructions is their semantic quality. If we reflect back to section 3.2, which outlined semantic distinctions, we could extend the notion of simultaneity between observation and performance beyond clause level to comprehend sentence level analysis. There seems to be a sense of simultaneity of observation and performance between the adverbial and the entire clause in (67) and (68). The adverbial contains an observation about the performance that occurs simultaneously with the performance in the main clause. Although these adverbial constructions are stative in nature, the continuous aspect in the adverbial implies a distinct sense of temporal simultaneity with the main clause, making the state expressed in the adverbial more dynamic and giving the subject, or implied subject, more agentivity in the state (Ziegeler 2006, 52). Due to the fact that such adverbial constructions seem to favour the *-ing* form complement, it could be argued that the *-ing* form may have been seen as a more dynamic sentential complement variant of *accustomed* with a more distinct sense of agentivity and continuous temporality. We shall later see whether such adverbial patterns continue to favour the *-ing* form over the infinitival complement.

Similar to infinitives, the *-ing* form also exhibits subject control, i.e. the implicit agent of the action expressed by the *-ing* clause is co-referential with the subject in the higher clause.

Token (69) contains an insertion between the head and the *-ing* form complement. This seems to be a slight violation of the complexity principle. The insertion, however, is relatively short and it does not make the sentence structure overly complex.

### 5.3 CLMETEV Part 3 (1850-1920)

Out of the 291 tokens found for *accustomed* in the third subsection of the CLMETEV, 246 tokens were considered relevant for the present study. The irrelevant tokens included 30 instances of *accustomed* in the premodifier position (“with its *accustomed* ingenuity”), two adjectival noun constructions (“the old, the *accustomed*, the well-accredited”), one obscure token which could not be analysed due to discontinuity (“Besides, I am not *accustomed* to--to--”) and 12 constructions that were clearly verbal, i.e. transitive forms (“Amy had *accustomed* herself to compromises”) and constructions involving the auxiliary verb *have*.

The distribution of the complement types found in the corpus data is presented in Table 8 in order of frequency.

Complement	Number of tokens	Percentage	Normalised frequency
Noun phrase	144	58,5%	23.03
Infinitive clause	88	35,8%	14.08
The <i>-ing</i> form	13	5,3%	2.08
Zero	1	0,4%	0.16

Table 8. *The complements of accustomed in the third subsection of the CLMETEV.*

The data contained one peculiar token that I once again decided to analyse as an instance of a zero complement:

- (73) the furniture solid and old-fashioned; scanty, perhaps, yet more than he was *accustomed* to; and the spaciousness was very pleasant after the cramped quarters of stuffy London lodgings. (1869 blackwood 1910 - the human chord)

The token contains extraction by means of comparativisation, but it seems that the complement of *accustomed* is nowhere to be found in the sentence. My analysis is that (73) contains an implicit complement, the pronoun *what* (“more than what he was accustomed to”, to make the construction explicit), the omission of which does not render the sentence incomprehensible.

### 5.3.1 Nominal complements

Noun phrases have become the most frequent complement pattern of *accustomed* in the final subsection of the CLMETEV, although the share of infinitives is still also fairly large. In slightly more than half of the tokens the complement is nominal:

- (74) His eyes grew *accustomed* to the darkness. (1840 hardy 1873 - a pair of blue eyes)
- (75) They were all picked elephant-hunters--Moormen; active and sinewy fellows, *accustomed* to danger from their childhood. (1821 baker 1854 - the rifle and the hound in ceylon)
- (76) Thus no person can thoroughly enjoy elk-hunting who is not well *accustomed* to it (1821 baker 1854 - the rifle and the hound in ceylon)

29 instances of noun phrase extractions were attested in the data. The most frequent type is relativisation (77) with 21 tokens. In addition, five tokens involving comparativisation (78) and three involving topicalisation (79) were discovered in the data:

- (77) Things to which I have become *accustomed* now, and which are as natural to me as old home habits, were then strange and unusual (1822 linton 1885 - the autobiography of christopherkirkland 1-3)

(78) He now wore more fashionable clothes than he had yet been  
*accustomed* to (1835 butler 1903 - the way of all flesh)

(79) when he tried to edge in a word or two, that he had to let him have it  
all his own way, and this was not what he was *accustomed* to. (1835  
butler 1903 - the way of all flesh.)

One token involving extraction was open to at least two alternate interpretations and the complement in it could be seen either as a noun phrase or an *-ing* form. The extraction in the token is formed by an inverted pseudo-cleft and the whole complement including the verb and its direct object has been extracted to the higher clause:

(80) Sellin' papers is not what I been *accustomed* to; but the Westminster,  
they tell me that's one of the most respectable of the evenin' papers  
(1867 galsworthy 1904 - the island pharisees)

Linguists have differing views on the nature of pseudo-clefts such as the one above. Depending on the analysis, the complement in (80) is either an *-ing* form, *Sellin' papers*, or a noun phrase, *what*. Biber et al. (1999, 958-960) regard pseudo-clefts as corresponding to simple sentences. The simple sentence structure of (80) could then be *I have not been accustomed to sellin' papers* and the complement would thus be of the *-ing* form type. At any rate, I have analysed all cases where *what* functions as the filler in extracted environments as instances of nominal complementation, and I shall not make an exception here.

Insertions between *accustomed* and the noun phrase complement were found in nine tokens. Below is an example of a typical insertion found in the data:

(81) Having been *accustomed* during confinement to the implicit  
submission of themselves to the will of another (1829 booth 1890 - in  
darkest england and the way out)

No changes have occurred in the semantic properties of noun phrase complements.

Both the agentive (76) and experiential (74) senses of *accustomed* are covered in these nominal complement patterns.

### 5.3.2 Sentential complements

The period covered by the third subsection of the CLMETEV marks the first time when sentential complements, namely the infinitive, are no longer the most frequent type of complement pattern of *accustomed*.

#### 5.3.2.1 The infinitive

With 88 tokens, the infinitive continues to be the prevalent sentential complement pattern of *accustomed*. Below are three typical examples of infinitival complements found in the data:

- (82) This snake was of a very poisonous description, and was evidently *accustomed* to lodge behind the pillow, upon which the unwary sleeper might have received a fatal bite. Upon taking possession of (1821 baker 1854 - the rifle and the hound in ceylon)
- (83) To Mrs. Pratten all men were marked with the Sign of the Beast; and she was *accustomed* to say that nothing tried her faith in God so severely as the creation of such monsters as men. (1822 linton 1885 - the autobiography of christopher kirkland 1-3)
- (84) This solitude oppressed her; she was *accustomed* to have her thoughts confirmed by others or, at all events, contradicted; it was too dreadful not to know whether she (1879 forster 1908 - a room with a view)

Seventeen tokens involving extractions were found in the data, which is a relatively low number when compared to the frequencies reported in the earlier subsections of the corpus. All the usual types of extractions still occur, it just seems that the extraction process in general has become less frequent:

- (85) This crisis he was *accustomed* to regard as manifesting itself in a sudden and definite upheaval. (1849 gosse 1907 - father and son)



(86) what place more likely for the king to choose than his hunting-lodge, where he is *accustomed* to go when he wishes to be alone? (1863 hope 1898 - rupert of henzau)

(87) She detested that woman now whom in happier days she had been *accustomed* to think so kind. (1867 galsworthy 1906 - the man of property)

Token (85) is an example of an extraction formed by topicalisation, whereas (86) and (87) contain extractions by adjunct relativisation and object relativisation, respectively.

Likewise, insertions between the head and its complement remain rare, occurring in six tokens only:

(88) Miss Marks was *accustomed*, while putting me to bed, to dwell darkly on the incidents of her past, which had, I fear, been an afflicted one. (1849 gosse 1907 - father and son)

Again, these constructions are in agreement with the complexity principle as the more explicit sentential complement variant is used in environments with increased complexity.

Both the agentive (86) and experiential (85) senses of *accustomed* were again detected in the infinitival complement patterns. In the agentive sense, the infinitival complement pattern refers to habitual activity whereas in the experiential sense, it refers to habituation to a recurring situation.

### 5.3.2.2 The *-ing* form

The *-ing* form continues to slowly increase in frequency, although it is still definitely marginal compared to the infinitive. Altogether thirteen tokens were found in the data, which is a roughly 13% share of all the sentential complements in the third subsection of the corpus. Below are some typical examples of *-ing* form complements from the third part of the CLMETEV:

- (89) But the Robin, *accustomed* to seeing scarecrows in the dawn, showed not the slightest fear; (1869 blackwood 1915 - the extra day)
- (90) They were so *accustomed* to being rebuked by her that the actual words made small impression. (1869 blackwood 1915 - the extra day)
- (91) Well, I am *accustomed* to estimating distances and I put it at between eighty and ninety feet. (1877 beesley 1912 - the loss of the ss titanic)
- (92) Perkes, having been much more *accustomed* to riding than walking during his career as groom, was determined to ride the elephant down the pass (1821 baker 1855 - eight years' wandering in ceylon)

One instance of insertion between *accustomed* and the *-ing* form complement was also found in the data, so it may be that the *-ing* form may gradually begin to appear in more complex sentence structures as well. The insertion is not the only factor making the construction complex, as it also involves subject–verb inversion and fronting of *accustomed* to sentence-initial topic position, which consequently is the cause of the intervening material between the head and the complement:

- (93) *Accustomed* as Daffodil had become to meeting with deference and submission, she nevertheless was struck by a something (1837 webster - 1884 daffodil and the croΣxaxicans)

The above construction may be counted as a violation of the complexity principle, as the less explicit *-ing* complement is chosen over the infinitive complement in a complex environment with an inserted element between the head and its complement.

The *-ing* form complement appears again quite often in adverbial constructions, although this time without the present participle form of *be*, which is contrary to what was prevalent in the second subsection of the CLMETEV. In five instances the *-ing* complement is inside an adverbial clause, in one instance it is found accompanying *accustomed* as a postmodifier of a noun and in six instances it is part of the main clause. In comparison to the infinitival complements, of which 8 are found in adverbial clauses, it would seem that the *-ing* form complement pattern shows a stronger tendency to occur in adverbial clauses, especially in ones without a subject,

such as (89). The adverbial constructions found in the data exhibit similar semantic quality as seen among the first four tokens involving *-ing* complements in the second subsection of the CLMETEV. Sentences, such as (89), (92), and (93), that involve the *accustomed + to + V-ing* pattern in an adverbial construction indicate simultaneity of observation, expressed in the adverbial, and performance, which is carried out in the main clause. On top of that, similar simultaneity is now found occurring with the *-ing* form complement also outside adverbial clauses. In example (91), the *accustomed + to + V-ing* pattern is found in the main clause in a coordinating conjunction, and the sentence seems to express similar simultaneity of observation and performance as in aforementioned adverbial constructions, with the observation expressed by *accustomed* and its complement and the performance conveyed in the second main clause. I would hazard a guess that the dynamic nature of the *-ing* form may have given the sentential complement variant a semantic specialisation in its early uses and it may have been used primarily to express temporal simultaneity and pronounced agentivity.

As for the copulas in the cases where *accustomed* is part of the matrix clause, eight examples contain various forms of the verb *be* and only two tokens have a more dynamic copula, namely *get* and *become*, thus once again the data provide no strong support for the hypothesis advanced by Rudanko (2006, 37) that “dynamic copulas may have aided the emergence of the *to -ing* pattern with *accustomed*”.

If most, if not all, of the first four *-ing* form patterns exhibited the agentive sense of *accustomed*, the findings of the third part of the CLMETEV now clearly indicate that both the agentive and experiential senses of *accustomed* are present in the *-ing* form complement patterns. Sentence (89) is one example of the experiential sense (‘adapted to existing conditions’), and in (91) *accustomed* is used in the

agentive sense (‘familiar through use’). The coexistence of both senses in these *-ing* form complement patterns further contradicts the semantic distinction made by Poutsma between the sentential complements of *accustomed*, as it would seem that both the infinitival and the *-ing* form complement patterns exhibit both the agentive and the experiential senses of *accustomed* interchangeably.

#### 5.4 Summary of the CLMETEV data

The three subsections of the CLMETEV contained altogether 837 instances of the word *accustomed*, which yielded a total of 672 tokens relevant for the present study. Table 9 lists the raw frequencies (Freq.) and the normalised frequencies per million words (NF) of all the complement patterns found in the three subsections of the CLMETEV:

	CLMETEV part 1		CLMETEV part 2		CLMETEV part 3	
	Freq.	NF	Freq.	NF	Freq.	NF
Noun phrase	52	17.12	127	22.19	144	23.03
Infinitive	59	19.42	181	31.62	88	14.08
Zero	2	0.66	2	0.35	1	0.16
The <i>-ing</i> form			4	0.70	13	2.08
<b>Total</b>	<b>113</b>	<b>37.20</b>	<b>314</b>	<b>54.86</b>	<b>246</b>	<b>39.35</b>

Table 9. *Complement patterns in the three parts of the CLMETEV.*

Considering the CLMETEV data as a whole, I can make two interesting observations. One is the percentage of infinitival complements involving extractions or insertions, which decreased to a considerable extent between the second and third subsection of the CLMETEV. The percentages of infinitival, noun phrase and *-ing* form complements involving extractions or insertions are presented in Figure 2.

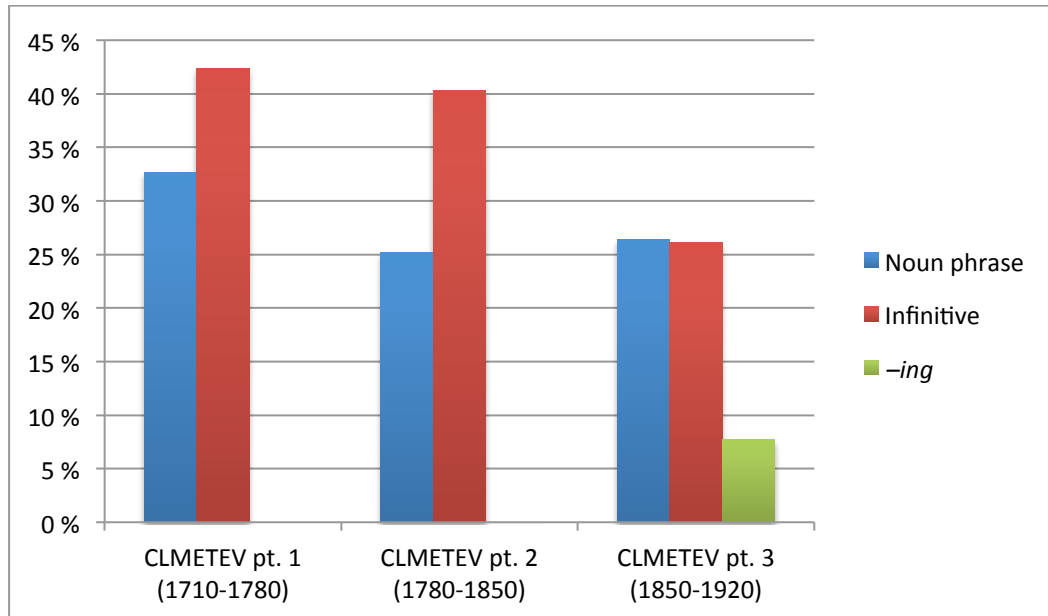


Figure 2. *The percentages of complement patterns involving extractions or insertions in the CLMETEV.*

As can be seen from the figure, the drop in the share infinitival complements with extractions or insertions is considerable from the second to the third subsection of the corpus. To allow comparison, the percentage of noun phrases involving extractions or insertions is illustrated in the same graph, which sees some 7% drop from the first to the second part of the CLMETEV but stays somewhat constant after that. The infinitival complements featuring either of these causers of syntactic complexity see a drop of a greater magnitude as their share decreases 16,24% from the first to the third subsection of the corpus. Also noteworthy is the fact that the *-ing* form complement appears in a complex environment in the third subsection of the corpus. Although the data included only one such token where the *-ing* form appears in a syntactically complex environment, it still represents a somewhat considerable share of all the thirteen *-ing* form complements found in the data. Although the percentage of infinitival complements involving extractions or insertions keeps decreasing throughout the subsections of the CLMETEV, the number of extractions out of

infinitival complements had a considerable peak in the middle part of the corpus, so the decline is not quantitatively linear and the variation in frequency may be just statistical fluctuation. We shall later see in the analysis of the BNC and COCA data whether the aforementioned decline continues or whether, as said, the drop in frequency can be accounted for by fluctuation in the CLMETEV data.

The other interesting observation is the advent and the increase of the *-ing* form complement. The first token is dated 1839, after which the construction slowly begins to become more frequent. Figure 3 shows the frequency of the *-ing* form by decade, starting from the decade when the *-ing* form complement was first attested:

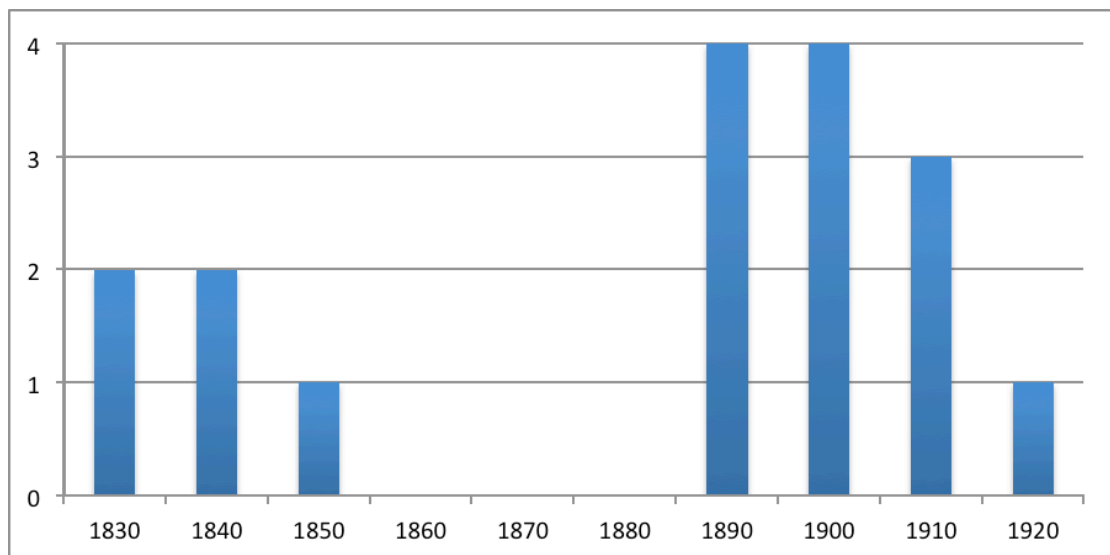


Figure 3. *The number of attested -ing form complements by decade in the CLMETEV.*

While the *-ing* form seems to be slowly gaining ground, the above graph shows that there is still a thirty-year gap during which the *-ing* form does not appear at all, so it could be argued that the occurrence of the *-ing* form complement is still rather sporadic and the rate of the increase is not constant, as of yet at least.

The CLMETEV data do nevertheless suggest that the ratio of infinitives to *-ing* forms is gradually decreasing. Figure 4 presents the normalised frequencies of the

three prevalent complement types in each CLMETEV subsection. The graph reveals the slowly narrowing gap between the infinitive and the *-ing* form:

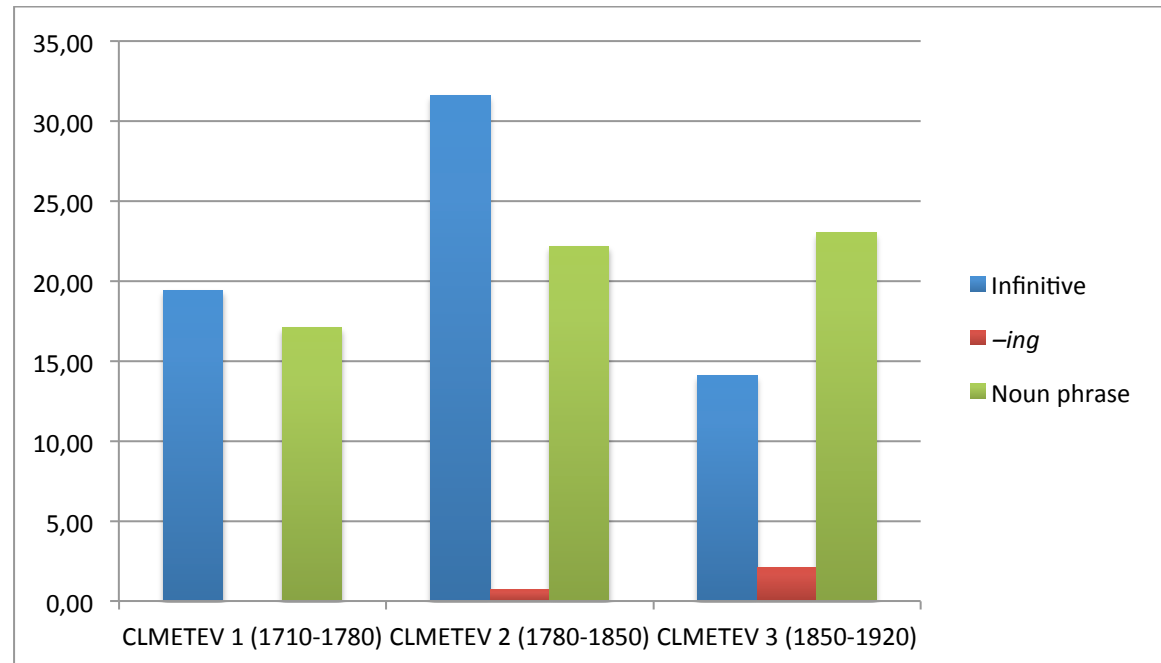


Figure 4. Normalised frequencies of the infinitive, the *-ing* form and the noun phrase complements in the three subsections of the CLMETEV.

Although the *-ing* form is still definitely rare compared to the infinitival complement, Figure 4 shows that the decreasing ratio of infinitival complements to *-ing* form complements can be accounted for by two factors: towards the end of the period covered by the corpus the infinitival complement pattern is on a steep decline while the *-ing* form complement is on a slow rise. We shall see in the analysis of contemporary British and American English data whether this trend continues or not.

### 5.5 The British National Corpus (1960-1993)

A simple search for *accustomed* returned 892 hits in the BNC. In terms of text type, 278 tokens were categorised in the imaginative prose domain and the rest 614 hits in

the different informative text domains. In order to parallel this analysis with that of the CLMETEV, I tried to obtain a set of data with similar text types by narrowing the BNC data to imaginative prose only. 23 tokens in the imaginative prose domain were considered irrelevant for the present study. The total number of relevant tokens thus amounted to 255.

The irrelevant tokens include the usual premodifiers (“the thick, *accustomed* smell of the city”) and verbal constructions (“As my eyes *accustomed* to the gloom”). With 15 and 7 tokens respectively, these constructions are relatively rare in modern usage and it seems that the predicative adjective is by now the prevalent function of *accustomed*. In addition to attributive and verbal uses of *accustomed*, one obscure token was also found in the data (“Perhaps they would not understand, my lady, being men and *accustomed* to...”), which could not be analysed due to discontinuity. The distribution of the different complement patterns found in the BNC is presented in Table 10.

<b>Complement</b>	<b>Number of tokens</b>	<b>Percentage</b>	<b>Normalised frequency</b>
Noun phrase	160	63%	9.70
The <i>-ing</i> form	66	26%	4.00
Infinitive clause	16	6%	0.97
ACC <i>-ing</i>	6	2,4%	0.36
Zero	5	2%	0.30
POSS <i>-ing</i>	2	0,8%	0.12

Table 10. *The complements of accustomed in the BNC.*



Zero complements, first found in the CLMETEV, make another appearance here with five tokens. This pattern consists of *accustomed* in the predicative position where it normally should select an obligatory complement, but in these constructions it the complement has been omitted. Again, most, if not all, of these tokens seem slightly unidiomatic:

- (94) **A0N 2664** Confinement, which had gradually become *accustomed* and endurable, now chafed like chains.
- (95) **A73 3001** Then, as his eyes grew *accustomed*, he saw that it was no darker than on any summer evening after heavy rain.
- (96) **EDN 1678** She did not need Jarvis to tell her of the phenomenon of the shivering platform at West Hampstead as a train approaches, that and the singing of the rails, because she was *accustomed* to the point of no longer noticing it.
- (97) **G1L 1055** I'll get a bit more *accustomed* first.

Some of these sentences contain elements that seem to make the zero complement construction more acceptable. In (94), *accustomed* is coordinated with an adjective that functions more naturally in the predicative position without a complement, which seems to make the use of *accustomed* with a zero complement more agreeable. Token (95) partially contains the idiomatic phrase “*his eyes grew accustomed to the darkness*”, but the difference is that the noun phrase complement has been made implicit. The semantic content of the omitted complement is however hinted at in the next clause (“*it was no darker than...*”). In example (96), *accustomed* is followed by what seems to be an noun phrase complement, but is in fact a modicative adjunct expressing the scope of “customariness”.

### 5.5.1 Nominal complements

The proportion of noun phrase complements continues to increase in the BNC. With a 63% share of all complement patterns in the data, nominal complements are now

clearly more frequent than sentential ones. No semantic changes were discerned in the nature of the higher subject or the complement and both the experiential (98) and the agentive (99) senses of *accustomed* were found in conjunction with nominal complementation, although it should be noted that the experiential sense is far more common with nominal complements. Noun phrase extractions were attested in 27 tokens, with two instances of comparativisation (98) and the rest regular relativisations (99):

(98) **EWC 1943** Both the drainage and the ventilation were better than he had been *accustomed* to.

(99) **BMX 2369** He had been able to moisten his throat at the clear streams of water which crossed the track but the sustenance of ale or wine to which his great frame was *accustomed* was denied him and he had taken no food since he had shared bread, cheese, and ham with Marian and Allen after the fight with the sturdy beggars.

Insertions were found in eleven tokens. Again, this process occurs slightly less frequently than extractions in conjunction with noun phrase complements.

(100) **H97 2305** You give the impression of a man who has been *accustomed* all his life to wealth and privilege.

Overall, the frequency of both of these processes remains relatively constant with no major fluctuation one way or the other.

### 5.5.2 Sentential complements

The BNC data on sentential complements gives credence to the claim that the Great Complement Shift has in fact taken place in the sentential complementation patterns of *accustomed*. The data indicates that the *-ing* form has now become the most frequent sentential complement and that the infinitive is becoming more and more rare. Unfortunately the periods covered by the data from the third and final subsection of the CLMETEV and the BNC form a 40-year gap of no data, which is especially

unfortunate considering the fact that the shift was still taking place in the CLMETEV and seems to be nearing completion in the BNC, so the full process of the change is left undocumented with the current corpora in use.

### 5.5.2.1 The *-ing* form

With 66 tokens, the *-ing* form represents a 73% share of all the sentential complements found in the data. The process of the Great Complement Shift is advanced to such a stage that the *-ing* form is also occasionally found in complex environments:

- (101) **ARK 34** But not the immaculate Howard that Newman was *accustomed* to seeing.
- (102) **HA9 1862** The hotel was a good one, not luxurious, but considerably better than she was *accustomed* to staying in while working.
- (103) **FSC 445** Julia, *accustomed* for years to keeping her own counsel, listened but did not reciprocate.

Extractions out of *-ing* clauses were attested in eleven tokens, three of them involving comparativisation (102) and the rest were instances of relativisation (101). Insertions between *accustomed* and the *-ing* form complement (103) were relatively rare and only found in two tokens.

Another factor which may give credence to the advancement of the Great Complement Shift is the fact that the *-ing* form complement is in few instances found in collocation with a similar present participle:

- (104) **BP9 275** It seemed to my amused eyes that the two chefs were in chilly unfriendliness, marking out their territories, each, in the normal course of events, being *accustomed* to being the boss.

Constructions such as (104) above may be counted as violations of the horror aequi principle, even though the similar forms of the verb *be* are set apart by the intervening

headword and preposition *accustomed* + *to*. These violations nevertheless illustrate that the *-ing* form complement appears in close proximity to similar verbs, which might have been previously avoided.

Not surprisingly, both the experiential (101) and the agentive (103) senses occur with the *-ing* form complements found in the BNC data. Now as the *-ing* form has become clearly the most frequent sentential complement of *accustomed*, it would be unreasonable to search for semantic specialisation for the pattern, as the *-ing* form has become a sentential complement of *accustomed* for all intents and purposes, and while it is still found in adverbial constructions, such as (104) above, it is equally found in, say, main clauses and it no longer shows any tendency to appear in specific environments or constructions.

### 5.5.2.2 The ACC *-ing* and POSS *-ing*

The ACC *-ing* and the POSS *-ing* were new types of sentential (or nominal-verbal hybrid) complement patterns in the BNC data that were not found in any of the three subsections of the CLMETEV. They are variants of the regular gerundial *-ing* form complement in that are both headed by a subject noun phrase, one in the accusative and the other in the possessive case.

The ACC *-ing* complement construction involves the *-ing* form headed by a subject noun phrase in the accusative (also known as the objective case) case, if there is such for the noun phrase. Noteworthy in these pseudo-verbal constructions, and a significant difference to infinitival and the regular *-ing* form complements, is that they do not exhibit subject control and do not contain an understood PRO subject, but an explicit subject that is not co-referential with the higher subject:

- (105) **BP9 331** We emerged from the shadow of the station into the bright light of noon, and Daffodil Quentin under her sunburst of curls

made an entrance from the dome car end, looking about her as if *accustomed* to people leaping up to help.

- (106) **GUM 1710** She grew *accustomed*, as she had before, to her feet hurting and burning, to the rudeness and tiplessness of many customers, and the matey chatter of her fellow workers of both sexes.

Six tokens containing the ACC *-ing* complement type were found in the data, with one instance containing a non-canonical sentence structure caused by an insertion (106).

Another peculiarity found in the BNC is the POSS *-ing* construction, which similarly was not found in any of the earlier three parts of the CLMETEV. These *-ing* forms are headed by a possessive noun:

- (107) **ADY 3321** Perkin's absence was to me almost a shock, so *accustomed* had I become to his being there.
- (108) **JY6 422** Charity was quite *accustomed* to her cousin's eliciting rather dramatic responses from the male population

These forms are however rare; the two tokens presented above are the only ones found in the data. Similarly to the ACC *-ing* pattern, the POSS *-ing* differs from the expected sentential patterns, the infinitive and the regular *-ing* form, in its lack of subject control.

In terms of semantics, these patterns necessarily exhibit only the experiential sense of *accustomed*, because the subject of the matrix clause, which is a indispensable part of the meaning of *accustomed*, cannot be co-referential with the agent of the lower clause as the subject position is already occupied by an explicit noun phrase acting as the agent and therefore the matrix subject can only have the role of an experiencer, giving the adjective an experiential sense.

Biber et al. (1999, 750) note that there is a semantic distinction between these two gerundial forms when they are selected by verbal heads. The possessive *-ing* form “focuses attention on the action described in the *ing*-clause”, whereas the

accusative *-ing* form “emphasizes the person doing the action”. Huddleston and Pullum (2002, 1189) acknowledge the difficulty in classifying the possessive *-ing* complement, as it undoubtedly contains both a possessive determiner and a verb phrase, so it has equally nominal and sentential characteristics. They argue, however, that it is better to regard the genitive as the subject of the clause and justify their claim with the fact that the determiner + VP is a marginal construction, that the possessive form can be easily replaced with the accusative (or plain) case, and that the possessive noun phrase is an optional constituent. They hold the view that the difference between the POSS and the ACC *-ing* is a matter of register, and while they can be seen as “two quite separate constructions” (ibid., 1190), it is simpler to treat the accusative (or objective) gerundial form as a less formal variant of the possessive *-ing* form complement.

### 5.5.2.3 The infinitive

The decline of the infinitive, which slowly started in the third subsection of the CLMETEV, continues at a high rate in the BNC. Only 16 tokens containing an infinitival complement were found in the data, which is roughly 20% of all the sentential complements in the data set. Most of the infinitives appear in canonical, simple sentence structures:

- (109) **EWC 2515** I am not *accustomed* to be kept waiting.
- (110) **HGN 1256** First of all, they have been so *accustomed* to avert their eyes piously from unknown members of the female sex that they no longer see them.
- (111) **FUB 679** Now, being a shepherd, he was *accustomed* to doze at noontime, and so he fell asleep, and his hand relaxed on the rein.

Now as the infinitival complement type has been pushed to the margins and the *-ing* form has become the standard sentential complement of *accustomed*, it would perhaps

be more relevant to search for semantic or syntactic specialisation in the infinitival complement pattern. Semantic distinctions, however, again prove to be troublesome, as the *-ing* form and the infinitival complement pattern seem to be semantically similar. The infinitival as well as the *-ing* form complement both express the agentive and experiential senses of *accustomed*; one example of the infinitival complement with the agentive sense would be sentence (111) and the experiential sense is found, for example, in **Error! Reference source not found.** As for structural considerations at the clause or sentence level, one syntactic factor that may prolong the existence of the infinitival complement is described in the extraction principle.

To reiterate, according to the extraction principle, non-canonical sentence structures with extracted elements are one of the environments where the infinitival complement should persist. However, out of the total of 16 infinitival complements, only three tokens involve extractions, whereas there was a total of 11 extractions out of *-ing* form complements. Below are the three tokens found in the data that involve extractions out of infinitival complements:

- (112) **J17 3127** It would be, in fact, in the nature of a political decision and as such one which Civil Servants are *accustomed* to leave to their masters.
- (113) **APU 1460** The manorial style was what Robert Forbes had been *accustomed* to portray in his early days in Hollywood, when Paramount had tagged him “the young Ronald Colman” and cast him in half a dozen minor heroic roles with reasonable success.
- (114) **HRC 1610** His fingers and thumb were stained with ink still , from the long hours with the quill that had assembled there at Dunblane the cartloads of tenting and weapons, of beef and pork and ale-kegs and mattocks, of campaign cauldrons and ovens, of sacks of charcoal for the blacksmiths, of meal for the griddles, and of oats for the couriers, horses, and the toisechs ' garrons, and the powerful mounts that the Normans, alone among Western fighting-men, were *accustomed* to ride into the battle itself.

Tokens (112) and (114) are regular instances of relativisation, whereas in (113) the extraction is formed by an inverted pseudo-cleft. These three instances of extractions represent 18,75% of all the infinitival complements found in the data and the percentage is only slightly higher than the 16,67% share of *-ing* form complements involving extractions. The percentages indicate that the infinitival complement has not gained a markedly stronger tendency to appear in complex environments than the *-ing* form, which is largely contrary to the postulations of Rohdenburg's complexity principle. In plain numbers, the three instances of infinitival extractions is also notably lower than the 11 instances of extractions out of *-ing* clauses, but this is perhaps already quite expected due to the overall higher frequency of the *-ing* form complement.

Insertions, the occurrence of which should cause a similar preference towards the selection of infinitival complements, were attested in only two tokens:

- (115)     **HA0 3456** We are accustomed, almost from birth, to hear of children being maltreated.
- (116)     **BNT 320** Dr.Mawhinney has become *accustomed* over the years to bring in the middle of political contention and has taken very good care to cultivate his patch.

Considering the two complexity factors of extractions and insertions in conjunction, structures with either extractions or insertions represent a total of 5 tokens and a 31% share of all the tokens containing an infinitival complement, which already shows a clearer contrast to the 19,70% of all the *-ing* form complements containing either extractions or insertions. In the light of these figures, it may be still valid to claim that the infinitival complement shows a slightly stronger tendency to appear in complex sentence structures than the *-ing* form complement, but it is by no means the only sentential complement appearing in such structures, and with 13 *-ing* form



complement tokens involving extractions or insertions, violation of the complexity principle seem to be more the rule than the exception in contemporary British English.

## 5.6 Corpus of Contemporary American English (1990-2012)

The COCA data was obtained by using the simple search string *accustomed* without tags or wildcards to allow all the instances of the word to be found from the corpus. *Accustomed* appears altogether 4749 times in COCA. Again, as the CLMETEV contained text mostly in the domain of imaginative prose, I decided to utilise only the subsection of books of narrative fiction in COCA in order to match as closely as possible the text types of the results from this corpus with those of the earlier corpus data I obtained from the CLMETEV and the BNC. After narrowing down the results to include narrative fiction only, the number of tokens dropped to 436, of which 408 entries were considered relevant and 28 tokens were discarded as being irrelevant for the present study. There were no surprises in the types of irrelevant tokens, which included the usual premodifiers (15 tokens), verbal forms (9 tokens) and one obscure token that I was unable to analyse due to insufficient context in the token.

Table 11 lists in order of frequency all the complement types found for the headword *accustomed* in COCA. All in all, out of all the corpus data sets that I have analysed for the present study, the COCA data, alongside with the BNC results, includes the most diverse range of complement types.

Complement	Number of tokens	Percentage	Normalised frequency
Noun phrase	244	59,8%	9.97
The <i>-ing</i> form	144	35,3%	5.88
ACC <i>-ing</i>	7	2%	0.29
The infinitive	6	1,5%	0.25
Adjectival noun	5	1,2%	0.20
Zero	1	0,3%	0.04
POSS <i>-ing</i>	1	0,3%	0.04

Table 11. *The complements of accustomed in COCA.*

Like all the earlier data sets that I have analysed, the COCA data also included one token where *accustomed* is found without a complement in a predicative position, which should normally call for an obligatory complement:

- (117) **2011 FIC Bk:ChasingMoon** The moon called to Calvin. After all this time he should've become *accustomed*, but it was always a distraction. Especially during the new moon when the

Again, this type of zero complementation pattern of *accustomed* is somewhat unidiomatic English, which is evidenced by the fact that such complement types are exceedingly rare in both historical and contemporary corpus data.

### 5.6.1 Nominal complements

With 244 instances of nominal complements in the COCA results, noun phrases represent the lion's share of the complementation selected by *accustomed* in the contemporary American English data. Below are examples of typical noun phrase complements found in the data.

- (118) **2009 FIC Bk:JackLondonInParadise** Hobart opened the door and the brightness startled him. He had grown *accustomed* to the darkness of Willoughby's home. He felt Willoughby moving up behind him
- (119) **2008 FIC Bk:ChasingHarryWinston** so different from the baggy polyester chef uniforms to which she'd grown so *accustomed*. Or maybe it was the way he seemed to know everyone and offered backslaps
- (120) **2011 FIC Bk:BadBird** as it lost altitude. The horses weren't as transfixed as I was, *accustomed* as they were to the sound of small aircraft buzzing into East Hampton Airport about
- (121) **2009 FIC Bk:KingJamesConspiracy** The reason was just beyond his mind's grasp. The room itself seemed *accustomed* to harsh words. # " Yes, " the cardinal managed, " but

Example (118) contains *accustomed* in a canonical sentence structure, whereas the non-canonical sentence structure examples (119) and (120) involve an extraction and an insertion, respectively. Extractions were found occurring in 45 tokens (18,44% of all noun phrase complements) and insertions in five tokens (2,05% of all noun phrase complement patterns). Extraction of noun phrase complements continues to be a fairly frequent process also in contemporary American English.

As regards semantics, tokens (118), (120) and (121) can be counted as examples of the experiential sense of *accustomed*, 'adapted to existing conditions', and in (119) *accustomed* has the agentive meaning, i.e. 'familiar through use'. Example (121), on the other hand, illustrates inventive use of the word *accustomed*. In the example the subject "The room" is definitely [-animate] whereas *accustomed* would normally require a [+animate] subject. This type of figurative use can bypass the semantic requirements normally imposed by the matrix adjective, thus making the [-animate] subject acceptable.

### 5.6.2 Adjectival noun complements

Adjectival nouns represent a new complement type only found in the COCA data.

These complement patterns are of the form *to* + adjective phrase. Five tokens of such complement patterns were found in the corpus:

- (122) **1995 FIC Bk:Rainmaker** destined to be sneered at by the boys from Trent & Brent. They're *accustomed* to the finest, and I hate the thought of enduring their snobbery as they
- (123) **2006 FIC Bk:OneLastLook** "His name was Jorge Ruiz, " he told the attendant grimly. " No next of kin. " The tech nodded, blandly *accustomed* to the unclaimed and unmourned, handed Sonterra a clipboard, watched in silence as
- (124) **2008 FIC Bk:XXXMarksSpot** Kennedy tossed her bag on the couch, sparing the barest glance at their surroundings. The girls had oohed and aahed when they first arrived, forcing Kennedy to take a second look -- at her life, as well as her surroundings. She was *accustomed* to the best, along with someone who provided it. What fun to share
- (125) **2010 FIC Bk:TouchScandal** The cottage was elegant and expensive, but certainly neither as elegant nor as expensive as a duke's sister was *accustomed* to. Willy was in financial straits and only employed four servants -- Kate,
- (126) **2001 FIC Bk:ChristmasShoes** due to yet another snow day. After twenty-nine years of teaching, Doris was *accustomed* to the unexpected. Where some saw chaos, she saw opportunity. When the

Adjectival noun, although very similar to regular noun phrases, is a complement type that was not found in either of the earlier British English corpora utilised in the present study and it is a complement pattern unique to the Corpus of Contemporary American English. The adjectival noun complements appear in canonical structures in tokens (122), (123), and (124), and in (125) the adjectival complement has been extracted from its canonical position. While syntactically these adjectival complements behave similarly to other nominal complements, they differ from them in that the adjectival noun generally cannot be pluralised, even if it refers to a group of

objects or people, and it can take an adverb premodifier, which is typical of adjectives but not of nouns (Biber et al. 1999, 519).

With respect to semantics, these complement patterns seem to exhibit the experiential sense of *accustomed* ('adapted to existing conditions') and the role of the adjectival complement is to refer to a certain quality of existing conditions. Leech and Svartvik (2002, 238) note that adjectives that head noun phrases either denote "a class of people (plural)" or "an abstract quality (singular)". As for the adjectival complements found in the data, (122), (124) and (125) refer to the abstract quality of existing conditions, whereas the adjectival complements in (123) refer to classes of people. Conversely, agentive meanings in the sense of 'familiar through use' were not identified in any of the adjectival noun complement patterns found in the data.

### 5.6.3 Sentential complements

If the infinitival complement has become quite rare in present-day British English, it is even more so in contemporary American English and the rare signs of infinitival complementation in the data show a stronger tendency to appear in complex linguistic environments than the infinitival complements in contemporary British English data.

#### 5.6.3.1 The *-ing* form

The *-ing* form is the second most frequent complement type in the data with 144 tokens and with roughly a 89% share of all sentential tokens, it is, like in the BNC, clearly the most frequent sentential complement of *accustomed* in the data. Below are examples of *-ing* form complement patterns found in the COCA data. The first extract is an example of an *-ing* form complement in a canonical sentence structure, the second example involves an extraction, and the third example contains an insertion:

- (127) **FIC 2010 FIC Bk:Firebrand** Scandalized gasps and a few titters swept through the audience. Lucy was *accustomed* to being ridiculed and often told herself that all visionaries were misunderstood. Still,
- (128) **2011 FIC Bk:Forbidden** rain. The serrated blade of a knife. Not the ceremonial variety Rom was *accustomed* to seeing in pictures, but a weapon strictly forbidden. # " Run!
- (129) **2009 FIC Bk:BronxJustice** that wore the two-day-old stubble of a nightshift worker for the Transit Department. As *accustomed* as Inez was to hiding her feelings, Marlin was not, and his face

Extractions out of *-ing* forms and insertions preceding *-ing* forms were relatively rare in COCA. Extractions were found in ten tokens (one instance of topicalisation and nine instances of relativisation, together representing roughly 7% of all the *-ing* form complements) and insertions in five tokens (3,5% of all the *-ing* form complements). Approximately 10% of the *-ing* form complements thus contain what one could call violations of the complexity principle, which suggests that the Great Complement Shift of *accustomed* has evolved to such a state that the less explicit sentential complement variant may be selected even in complex sentence environments.

Both senses, the agentive sense of ‘familiar through use’, found for example in sentence (129), and the experiential sense of ‘adapted to existing conditions’, found in examples (127) and (128), were perhaps unsurprisingly attested in the *-ing* form patterns, and the *-ing* form complement patterns do not seem to show a strong preference for either sense of *accustomed*.

### 5.6.3.2 The ACC *-ing* and POSS *-ing* forms

Seven tokens of the ACC *-ing* construction were attested in COCA. Below are two typical examples of the ACC *-ing* pattern found in the data:

- (130) **2010 FIC Bk:DontCry** was dating an assistant district attorney, even in an on-again/off-again relationship, he became *accustomed* to their dates being interrupted by business. Of course, it worked both ways
- (131) **2000 FIC Bk:GoodPeoples** other than his ego being bruised. He was handsome and rich and simply not *accustomed* to women not going along with his program. They had been introduced a while

The ACC *-ing* pattern, to reiterate, is headed by a subject noun phrase in the accusative case (if there is one for the noun phrase) and followed by a verb in the *-ing* form. All of the patterns found in the data were in canonical sentence structures. In terms of argument structure, the ACC *-ing* pattern differs from the prototypical sentential complement patterns, i.e. the infinitival and the regular *-ing* form, as the ACC *-ing* does not have an implicit PRO subject, but rather has an overt accusative subject, and therefore it does not allow subject control.

Furthermore, one instance of a POSS *-ing* complement pattern was also found in the data:

- (132) **1998 FIC Bk:LowCountry** quiet he had become, how far into himself he had drawn. I was *accustomed* to Clay's going away inside his own head when there was a new project

This complement pattern is headed by the subject noun phrase of the embedded clause in the possessive case and followed by the *-ing* form. Similar to the ACC *-ing*, this pattern does not exhibit subject control, as there is an explicit subject in the lower clause.

Again, due to the nature of these constructions, these patterns can only exhibit the experiential sense of *accustomed*, as the matrix agent cannot have an agentive role in the lower clause, which is already occupied by a separate subject acting as the agent.

### 5.6.3.3 The infinitive

With eight reported instances, the infinitival complement is definitely a rarity in the COCA data. What is more telling of the role of the infinitival complement in contemporary American English is that in half of the tokens the infinitival complement is found in a non-canonical sentence structure surroundings. The eight infinitival complement tokens found in the data merit closer inspection. Two of the tokens involve the use of extraction:

- (133)     **2006 FIC Bk:SPQRX** the old meeting place of the comitia, where all the year's candidates were *accustomed* to congregate, stand around, preen, and generally proclaim their willingness to serve
- (134)     **2002 FIC Bk:FortunesRocks** my study, " her father says in the ordinary manner in which he is *accustomed* to speak to her, though even she can see that something between them has

In (133), the lower clause contains a number of verbs and the adjunct that modifies them has been extracted to the higher clause. The complexity and heavy sentence structure caused by the extraction and coordinating conjunction are factors that favour the use of the infinitive over the *-ing* form to make the structure less complex and heavy. Similarly in (134), an adjunct from the lower clause has been extracted to the matrix clause. Although no argument has been extracted from the lower clause in either token, the appearance of the adjunct in a non-canonical position increases the cognitive complexity of the sentence and may thus influence the selection of sentential complement variant.

Two of the eight tokens contain an insertion of a syntactic element between the headword *accustomed* and its complement:

- (135)     **2011 FIC Bk:StudyInSherlock** a rare, but nonetheless documented phenomenon which arises only in those who have been *accustomed* to drink, from birth, the iron- rich waters of certain spas.



- (136) **1991 FIC Bk: Buffy Vampire** ideas of what we want, delirious, everywhere presuming the utmost gratification, so *accustomed* are we to seek benefits where we believe they should be met. We listen

The insertion in (135) is in the lower clause between the verb and its complement and in (136) it is between *accustomed* and its infinitival complement. Arguably these constructions are considerably less complex than the ones involving extraction, such as (133) and (134), as the insertions are relatively short ("*from birth*" and "*are we*"), but I would argue that the insertion is nevertheless a factor that has an impact on the selection of the infinitival complement over the *-ing* form pattern.

In the remaining four tokens *accustomed* and its infinitival complementation is found in canonical sentence structures:

- (137) **1995 FIC Bk: Moo** her credit card to call the Stouffer Orlando Resort. A voice answered that was *accustomed* to curry favor. Room rates? High season? Why, of course.
- (138) **1994 FIC Bk: Interior Land** he is unlikely to think there could have been any consequences -- she was *accustomed* to see to that. Perhaps he might feel a momentary stab of betrayal
- (139) **2001 FIC Bk: Columnist** (He lived, as Max Weber once said, in the belief that "a man does not 'by nature' wish to earn more and more money, but simply to live as he is *accustomed* to live. ") My parents were people from whom a kind of wisdom
- (140) **1993 FIC Bk: CutQuick** told me his real name when I engaged him. But he said he was *accustomed* to be called Dipper, and as I thought it suited him, I've

The selection of the infinitival form in (137) could be influenced by the idiomatic expression *curry favor*, but COCA shows no drastic differences in the frequencies between *currying favor* and *curry favor* (the *-ing* form of the idiom appears 0.10 times per million words in COCA, while the infinitival form is only marginally more frequent with 0.37 occurrences per million words).

Token (138), on the other hand, is extracted from the novel *None to Accompany Me* by South African author Nadine Gordimer, who is of British and

Lithuanian-Jewish descent, and thus it hardly qualifies as an authentic sample of American English usage.

The origin of the infinitival complement in (139) is also rather peculiar. The infinitival complement is found in a quote by German sociologist Max Weber and the quote<sup>2</sup> is taken from the book *The Protestant Ethic and the Spirit of Capitalism* (1905). The book was translated into English in 1930 by American sociologist Talcott Parsons, so in that sense the infinitival pattern may be counted as an authentic use of American English, but as the translation is from 1930, I would be inclined to disqualify it as a representative example of contemporary language use.

Finally, the extract in (140) is from *Cut to the Quick* by American author Kate Ross, a mystery novel set in 19<sup>th</sup> century Great Britain, and it may be that the writer has tried to reflect in her writing the language of the place and time where the story occurs and has decided to use an infinitival complement instead of the now far more common *-ing* form complement.

Be that as it may, I would be inclined to regard at least tokens (138) and (131) as inauthentic examples of contemporary American English, thus leaving only two straightforward examples of the infinitival complement in canonical sentence structures. With that in mind, it is clear that in present-day American English the infinitival complement as a complement of *accustomed* is not only very marginally used, but its use is also primarily limited to complex environments.

Extractions and insertions were indeed found occurring in the *-ing* form complements as well in COCA, but, although the number of infinitival complements in the data may be insufficient to make any definite claims, the percentages of insertions and extractions for each sentential complement type may corroborate the

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<sup>2</sup> For reference, see Weber 1930, 60.

special function that the infinitival complement seems to have in contemporary American English: 66% of infinitival complements out of the total six tokens that I considered as authentic extracts of present-day American English involved either an extraction or an insertion, as opposed to the *-ing* form complements, out of which only 10% contained an insertion or an extraction.

Lastly, although the infinitival complement of *accustomed* has become exceedingly rare, it still occurs with both agentive (133) and experiential (140) senses of the adjective, although example (140) was the only clear case of an experiential sense with an infinitival complement.

## 5.7 Summary of the corpus findings

The corpus data analysed in this study was drawn from three different corpora, together covering the period from 1710 to 2012, although it should be noted that there is a forty-year gap of no data between the CLMETEV and the BNC data that is not covered by any of the corpora utilised for the present study. The aggregate data consisted of texts in the Late Modern English and present-day American and British English language variants. The text samples were mostly drawn from the domain of narrative fiction. The total number of relevant tokens gathered from the three corpora amounted to 1,336. Table 12 lists the raw frequencies (Freq.) and the normalised frequencies (NF) of all the complement patterns found in COCA, the BNC, and the three subsections of the CLMETEV:

	CLMETEV part 1 1710-1780		CLMETEV part 2 1780-1850		CLMETEV part 3 1850-1920		The BNC 1960-1993		COCA 1990-2012	
	Freq.	NF	Freq.	NF	Freq.	NF	Freq.	NF	Freq.	NF
Noun phrase	52	17.12	127	22.19	144	23.03	160	9.70	244	9.97
Infinitive	59	19.42	181	31.62	88	14.08	16	0.97	6	0.25
Zero	2	0.66	2	0.35	1	0.16	5	0.30	1	0.04
The <i>-ing</i> form			4	0.70	13	2.08	66	4.00	144	5.88
ACC <i>-ing</i>							6	0.36	7	0.29
POSS <i>-ing</i>							2	0.12	1	0.04
Adjectival									5	0.20
<b>Total</b>	<b>113</b>	<b>37.20</b>	<b>314</b>	<b>54.86</b>	<b>246</b>	<b>39.35</b>	<b>255</b>	<b>15.46</b>	<b>408</b>	<b>16.66</b>

Table 12. *Complement patterns in the CLMETEV, the BNC and COCA.*

Inspection of the figures on the table reveals primarily three noteworthy observations about the diachronic development of the adjective and its complement patterns under present scrutiny.

First, the frequencies of the two primary sentential complement variants have changed in an almost linear fashion, the frequency of the infinitive dropping drastically after the peak that occurred in part 2 of the CLMETEV and the frequency of the *-ing* form steadily increasing after its emergence in the same subsection of the corpus. Yet, even though the *-ing* form has gained ground at the expense of the infinitival complement in Contemporary English, it still has not attained a frequency comparable to that of the infinitival complement in the Late Modern English data. All in all, the frequency of sentential complements that *accustomed* selects has dropped drastically since the peak that occurred between the 18<sup>th</sup> and 19<sup>th</sup> centuries. One of the downsides of the data sets chosen for the present study is that it does not cover the period where the frequencies of the two primary sentential complements are close to each other, when it would also be possible to better assess whether the sentential complement variants are found in free variation or in contrastive distribution. For

British English, the present data indicates that such a phase and the tipping point where the *-ing* form became more frequent than the infinitival complement must have occurred sometime between the years 1920 and 1960. Present-day American English data, on the other hand, indicates that, in the case of *accustomed*, the Great Complement Shift has progressed even further, and the use of the infinitival complement appears to be restricted primarily to complex environments and the aforementioned tipping point may have occurred even earlier in American English.

Second, the number of different types of complement patterns that *accustomed* selects increases as the data becomes more recent. Alongside the regular nominal and sentential complement patterns come the new pseudo-sentential forms, the ACC *-ing* and the POSS *-ing*, which emerged in the 20<sup>th</sup> and 21<sup>st</sup> century British English and American English data, and the adjectival complement patterns, which are found only in the Contemporary American English data. The number of these new complement patterns is however very low compared to the frequencies of the complement patterns that *accustomed* typically selects.

Third, it is also relevant to note that the word *accustomed* itself has become markedly less frequent in contemporary British and American English data than it was in the Late Modern English data. One of the possible reasons behind the decline in the use of the word that I want to advance here is the advent of the *used + to + V-ing* pattern which has a meaning similar to the *accustomed + (to + V-ing) / (to-infinitive)* construction, but the difference is that *used + to + V-ing* is somewhat less formal. The question may be perhaps beyond the scope of the present study, but a cursory look into the Corpus of Historical American English reveals that 1950s is the decade when the *used + to + V-ing* became more frequent than *accustomed* with a sentential complement in the American English data. As for the data used in this study, the most

drastic drop in the total frequency of the word, from 39.35 instances per million words to 15.46, occurs between the third subsection of the CLMETEV and the BNC, which together, perhaps not coincidentally, cover periods before and after the 1950s.

Figure 5 illustrates the development of the normalised frequencies of the three most common complement patterns of *accustomed* across the three corpora under investigation in the present study. I have omitted the marginal constructions (zero, ACC *-ing*, POSS *-ing*, adjectival) from the graph as their frequencies do not exhibited any significant change one way or the other and the number of these patterns seems to remain constantly low.

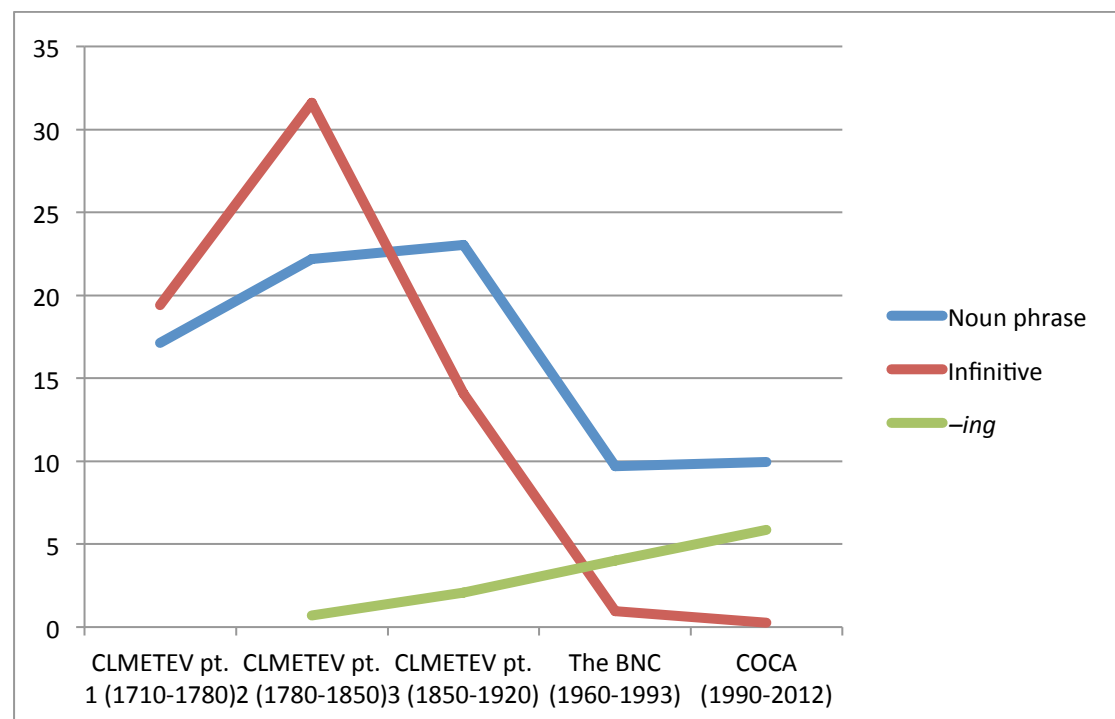


Figure 5. *The normalised frequencies of the noun phrase, the infinitival, and the -ing form complement across the three corpora used for the present study.*

The figure shows that the frequency of the infinitival complement has declined considerably from the 19<sup>th</sup> century to the present day and it is even less frequent in present-day American English than British English data from the same period. The –

*ing* form complement, conversely, has been on a steady increase since its emergence in the second subsection of the CLMETEV and it is somewhat more frequent in present-day American English than in contemporary British English data. The frequency of nominal complementation has similarly dropped in contemporary data, which can most likely be explained by the fact that the headword itself has become less frequent. All in all, noun phrases have been the most frequent complement type of *accustomed* from the third subsection of the CLMETEV to the most recent data in COCA. I shall further elaborate on the key findings from the corpus data analysis in the following four subsections, which touch upon the advancement of the *-ing* form at the expense of the infinitival complement, semantic differences between sentential complement variants, extractions and insertions, and undocumented complement patterns of *accustomed*.

### **5.7.1 The rise of the *-ing* form and the decline of the infinitival complement**

The changes that have occurred in the sentential complementation patterns of *accustomed* were one of the specific phenomena that I have pursued to clarify in the present study. The corpus findings proved that infinitive was the sole sentential complement in 18<sup>th</sup> century British English and while the *-ing* form first emerged as a sentential complement variant in the first half of the 19<sup>th</sup> century, the infinitival complement continued to be predominant until we find out that in contemporary British English, the *-ing* form has taken over the infinitive as the most frequent sentential complement and the infinitive has become so rare that it seems to be taken over by the *-ing* form even in syntactically complex environments. Figure 6 illustrates the significant quantitative changes that have occurred in the sentential

complementation of *accustomed* from the 18<sup>th</sup> century Late Modern English to present-day British and American English.

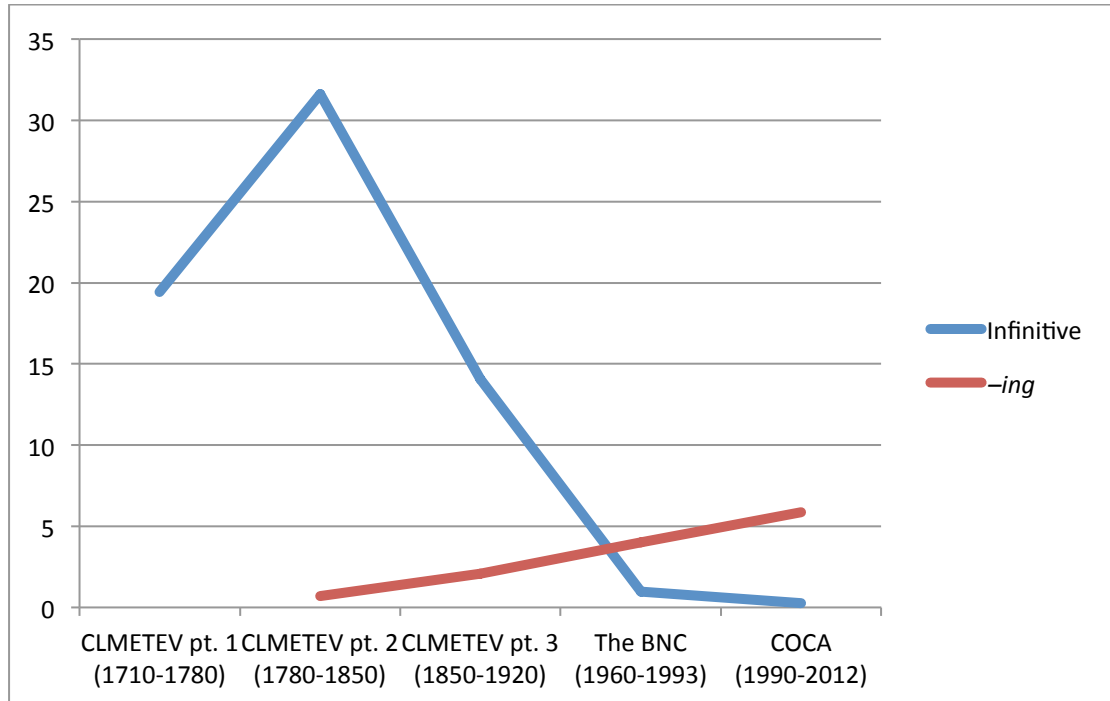


Figure 6. *The normalised frequencies of the infinitival and the -ing form complement in the CLMETEV, the BNC, and COCA.*

The graph shows the heavy decline of the infinitival complement that started after the 1780-1850 CLMETEV data and the moderate increase in frequency of the *-ing* form complement that has continued after its first appearance in the same set of data. In contemporary American English, the infinitival complement is even less common but a marked contrast to present-day British English is that the infinitival complement shows a stronger tendency to appear in complex environments, even though in plain numbers the *-ing* form complement is more frequent in places where complexity is a factor in the modern American English variant as well.

So the distribution of the sentential complement variants in the earliest set of data where the *-ing* form first emerged is almost the opposite to the distribution in the



latest data of present-day British and American English, and there are stages in between where the distribution is developing towards the present-day situation.

Rudanko (2006, 47) distinguishes five stages in the development of complement patterns of *accustomed*:

- Stage 1: Sentential complements are invariably or almost invariably of the *to* infinitive form
- Stage 2: *To –ing* complements begin to emerge. *To* infinitives are still much more frequent than *to –ing* complements
- Stage 3: *To –ing* complements are becoming more frequent in relation to *to* infinitives. There may be a semantic difference between the two types of complement.
- Stage 4: *To –ing* complements advance further and *to* infinitives become more and more rare, except where protected by extraction
- Stage 5: *To –ing* complements become readily compatible with extraction, and *to* infinitives become rare even in such environments

The data in the subsections 1 and 2 of the CLMETEV represented respectively above stages 1 and 2 in the present study. Stage 3 could be seen occurring between the second and the third part of the CLMETEV where the gap in normalised frequency between the infinitive and the *–ing* form complement diminished from 24.62 to 12.16. Contemporary American and British English data are somewhere between the stages 4 and 5 and in both data the *–ing* form has surpassed the infinitival complement in numbers, even in complex environments. The infinitival complement is most infrequent in American English data, and it would seem that the development of sentential complementation is nearing completion in that variant, but interestingly, if we look at the shares of sentential complements involving extractions, we see that in present-day American English, the infinitival complement shows a markedly stronger tendency to appear in complex environments than it does in contemporary British English data. So even though now the *–ing* form appears more frequently than the

infinitive in non-canonical structures, it could be argued that complex environments protect the infinitival complement type to some degree, especially in present-day American English.

These changes that have taken place in the sentential complement patterns of *accustomed* are of course part of the overall development of sentential complementation in modern English, also known as the Great Complement Shift. It is important to note that this development has not by any means affected all headwords that select sentential complements and there are syntactic and semantic factors, well-documented in earlier literature, that favour the spread of the *-ing* complement. The nominal quality of the *-ing* form complement is one such syntactic factor, for which reason matrix predicates that select both noun phrase and infinitival complements have a greater tendency to also select *-ing* form complements than predicates that select infinitival complements but not noun phrase complements (Rudanko 2006, 36). As for semantic factors, due to the fact that the preposition *to* generally suggests movement or direction, the infinitival *to* and the infinitival complement is more likely to be replaced by the prepositional *to* and the *-ing* form for predicates that include the meaning of direction or movement (ibid.). In the case of *accustomed*, the syntactic prerequisite is quite well satisfied, as *accustomed* has frequently selected noun phrase complements alongside infinitival complement and, as for semantic factors, there may be a sense of metaphorical movement involved in *accustomed*. Rudanko suggests that such meaning is included in *accustomed* and that the adjective implies metaphorical movement towards “a goal or a target, designating what one is habituated or used to” (ibid.).

I also suggested in the corpus data analysis that adverbials may have been an environment that may have aided the emergence and spread of the *-ing* form as a

complement of *accustomed* and that there may have been a distinct semantic quality to the *-ing* form that supported its appearance in adverbial constructions where a sense of temporal simultaneity between observation and performance was prominent. This is supported by the fact that the *-ing* form is found quite frequently inside such adverbials among the earliest examples of *-ing* form complements.

### 5.7.2 Semantic differences between the infinitival and the *-ing* form complements

Another important research question laid out in the introduction was whether the two sentential complement variants can be semantically distinguished, and whether they possess distinct semantic roles. The adjective *accustomed* has three distinct senses, one of which is now obsolete (glossed as ‘frequented by customers’ in the OED). The remaining two senses, which I have coined as the agentive and the experiential senses, are recognised by most dictionaries, although the OED, which is regarded by many as one of the most authoritative dictionaries in the English language, distinguishes only one sense for the word in addition to the now obsolete sense. The agentive, ‘familiar through use’, and experiential senses, ‘adapted to existing conditions’, of the adjective are found in all the five data sets drawn from the three corpora, from the 18<sup>th</sup> century to the present-day language data, and they occur with almost all the complement patterns of *accustomed*. The rare exceptions are the POSS *-ing* and ACC *-ing* forms, where the occupied subject position in the lower clause prevents the expression of the agentive sense, and the adjectival forms, which were only found conveying the experiential sense, which however may be attributed to the overall low number of adjectival complements in the data.

But most importantly, both the infinitival and the *-ing* form complement have conveyed both senses of *accustomed* interchangeably throughout the periods covered by the corpus data. Several eminent authors have proposed a number of semantic distinctions concerning sentential complement variants, one of which relates to the complementation of *accustomed* specifically, but the corpus data shows no clear indications that the sentential complement patterns of *accustomed* would strongly manifest any of these distinctions. The fairly high number of early appearances of the *-ing* form complements in adverbial constructions, however, could imply a semantic specialisation for the *-ing* form in a sense that it could have been used to express a temporal simultaneity between the observation made in the adverbial and the performance of the action in the main clause. Nonetheless, from its earliest emergence, the *-ing* form has also appeared in other environments, such as in the main clause, where it does not exhibit a similar semantic role. Thus it can be concluded that the use of the *-ing* form was not restricted to one specific semantic area, although it may be so that one specific semantic area, namely the simultaneity of observation and performance, may have been exclusive to the sentential complement of the *-ing* type inasmuch as the infinitival complement type does not seem to be used in this semantic domain.

The mere fact that these two forms have coexisted as sentential complement variants of *accustomed* in a rather slanted distribution and now the once-rare form has virtually superseded the form that used to be prevalent would suggest that no semantic distinctions or even nuances have existed between the sentential forms. Or if they have, the distinct semantic value of the once-frequent infinitival complement type has now become as obsolete as the form itself, which is unlikely considering that the infinitival complement type used to be the only sentential complement of *accustomed*.

An alternative hypothesis would be that as the form of the sentential complementation has changed, the semantic content of *accustomed* has changed at the same time. But the two primary senses of *accustomed*, the agentive and the experiential, seem to have remained the same from the 18<sup>th</sup> to the 21<sup>st</sup> century and the present-day data does not exhibit any indications of new meanings attached to *accustomed* or even slight semantic shifts in the use of the adjective.

### **5.7.3 The share of sentential complements involving extractions or insertions**

Another interesting phenomenon attested in the corpus findings was the considerable number of infinitival complements that involved either insertions or extractions in the first and second subsection of the CLMETEV and the decline of such constructions that followed in the third subsection of the corpus. Table 13 lists the percentages of infinitival, *-ing* form and nominal complements involving insertions or extractions in the five corpus data sets utilised for the present study. Nominal complements have been included in the table to allow comparison of the magnitude of changes that have occurred in the percentages of complement patterns involving either of the two processes that influence the cognitive complexity of sentences.

	CLMETEV part 1	CLMETEV part 2	CLMETEV part 3	The BNC	COCA
Noun phrase	32,69 %	25,20 %	26,39 %	23,75 %	20,49 %
The infinitive	42,37 %	40,33 %	26,14 %	31,25 %	66,67 %
The <i>-ing</i> form		0,00 %	7,69 %	19,70 %	10,42 %

Table 13. *Shares of insertions and extractions in the three most frequent complement patterns.*

Although the number of infinitival complements involving extractions or insertions has dropped considerably along with the overall decrease of infinitival complementation in the contemporary data, the above table reveals that drastic changes have occurred in the *shares* of sentential complements involving extractions or insertions. While the share decreased notably between the second and third subsection of the CLMETEV, infinitival complements with extractions or insertions have regained their share to a considerable extent in the contemporary data, although quantitatively they have become almost negligible. Thus it could be argued that in present-day usage, as the infinitival complement becomes more and more infrequent, at the same time it gains a stronger tendency to appear in complex environments, especially in contemporary American English. Figure 7 illustrates this development.

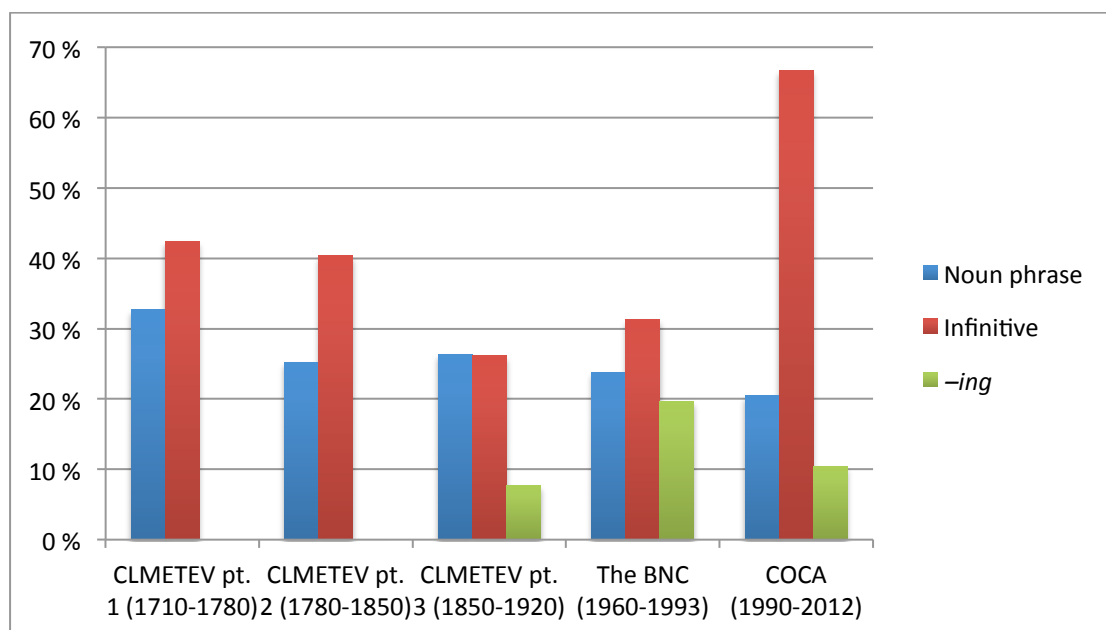


Figure 7. Percentages of noun phrase, infinitival and *-ing* form complements involving extractions or insertions.

The share of *-ing* forms with extractions or insertions has been similarly increasing and they have surpassed similar infinitival forms in numbers, although their share has still constantly remained lower than that of infinitival forms with extractions or insertions. The percentages of nominal complements involving extractions or insertions, on the other hand have remained more constant, fluctuating between 20% and 33%. The considerable variation in the percentages of sentential complements involving extractions or insertions, and on the other hand, the relative stability in the shares of nominal complementation involving the same processes are manifestations of the ways how the complementation of *accustomed* has developed. The adjective has a more explicit sentential complement variant, the infinitive, which is favoured in more complex environments, and at the same time the distribution of sentential complementation has been affected by the Great Complement Shift, making the infinitive more and more rare and the *-ing* form more frequent, almost replacing the infinitival complement.

#### 5.7.4 The undocumented complement patterns

The complement types that were not documented in any of the dictionaries or grammars taken into account in the present study were yet another interesting finding that was discovered in the analysis of the corpus data. While none of the dictionaries that I consulted explicitly categorises any complement patterns that *accustomed* selects, the undocumented patterns, i.e. the adjective phrase, the zero complement, the POSS *-ing* and the ACC *-ing* forms, were neither found in any of the example sentences presented in the dictionaries. Neither did any of the grammars explicitly state that *accustomed* allows any of the above patterns.

Although the accusative and possessive gerundial forms are somewhat similar in form to the regular *-ing* form, they decisively differ from it and the infinitival complement pattern in that they are not control constructions and also because they can only convey the experiential sense of *accustomed*. The infrequency and the relative recentness of these forms can perhaps be regarded as the reasons why they are not recognised in dictionaries or grammars as valid complement patterns of *accustomed*, but the marginal acceptance of an overt subject in the sentential complementation of the adjective should be documented as it imposes semantic restrictions on its use, i.e. the ACC and the POSS *-ing* can only occur with the experiential sense of *accustomed*. The difference in formality, as noted by Huddleston and Pullum, can perchance be regarded as the most practical distinction between the possessive and the accusative *-ing* form, and this distinction can be seen in the corpus data, as the supposedly more formal POSS *-ing* is even more marginal than the ACC *-ing* form, and it is in fact the most infrequent complement pattern in the corpus data.

Zero complements of *accustomed* were first attested in the 18<sup>th</sup> century data and they have continued to appear infrequently in conjunction with *accustomed* ever



since. The zero complement patterns are elliptical constructions where the complement of *accustomed* has been omitted without affecting the meaning of the sentence, as the meaning of the unexpressed complement is can be inferred from the surrounding context. Again, these constructions seem to be only marginally acceptable and therefore they may not have been recognised in dictionaries or grammars as valid complements of *accustomed*.

Adjectival noun phrase complements are also a somewhat special case, which I decided to treat separately from regular noun phrases on the grounds that they exhibit both adjectival and nominal characteristics and therefore they cannot be classified as purely nominal complement patterns. Complements of this type were, however, only found in the present-day American English data, so on the whole they too seem to be only marginally acceptable as complements of *accustomed*.

## 6 Conclusion

In this concluding chapter I will summarise the findings of the present study and evaluate how they relate to the research questions and theoretical underpinnings that were covered in the first half of this study. Finally I will indicate some possible directions for further study of the complementation patterns of *accustomed*, which would require additional research and data.

The objective of this study has been to survey the complementation patterns of the adjective *accustomed* by analysing real-life language data covering periods ranging from the 18<sup>th</sup> century to the present day. In the introduction I specified three research questions concerning the complementation of *accustomed* that I set out to answer. The questions were the following:

- What types of changes have occurred over time in the complementation patterns of *accustomed* and what has caused these changes?
- Are there semantic distinctions between similar complement patterns or are similar patterns in free variation?
- What types of complement patterns can *accustomed* select and are there perhaps undocumented complement types in real-life language data?

The corpus data gives clear indications that the complementation of *accustomed* has indeed undergone some significant changes over the last 300 years. The most important development has been the spread of the *-ing* form complement at the expense of the infinitival clause. The infinitive, which once used to be the only sentential complement of *accustomed*, has now been almost completely replaced by the sentential complement of the *-ing* type. This change reflects larger developments that have occurred in the English complementation system, the reasons for which may be manifold and difficult to pinpoint, but some factors that have been previously

suggested include the development of the infinitive from nominal to verbal constituent and its consequent inability to occupy a nominal position as well as the distinction of the prepositional *to* from the infinitival *to* and the new role of the *to* particle as a part of the prepositional predicate (Denison 1998, 266). In addition to the changes that have occurred in the distribution of sentential complements, present-day data indicates that *accustomed* has acquired new sentential and nominal complement patterns, which it previously has not selected.

Semantic distinctions may be difficult to justify with corpus data due to their apparent subtleness and openness to subjective interpretation. I have therefore intentionally avoided venturing too deeply into semantics and I have tried to infer semantic characteristics only from syntactic and lexical features apparent in the corpus examples. Consequently, I have had to dismiss many of the claims about semantic differences voiced by previous authors due to lack of direct empirical evidence in the data, or even conflicting evidence found in the data. The simultaneity of observation and performance, I would say, was the only semantic domain that showed a marked propensity for a specific linguistic form, namely the sentential complement of the *-ing* type. This binding of a semantic domain to a sentential construct was attested in the historical data and the domain may have initially helped the spread of the *-ing* form, but it must be admitted that the *-ing* form complement of *accustomed* no longer has a strong tendency to bind to a specific semantic domain in the present-day data, as it has now become the primary sentential complement of *accustomed*, appearing equally in various semantic and syntactic environments. Thus it can be concluded that, while the *-ing* form may have exhibited a degree of semantic specialisation when it first emerged, there is no significant semantic distinctions between the sentential complement variants of *accustomed* in present-day English.

The three most frequent complement patterns of *accustomed* in the corpus data, i.e. the noun phrase, the infinitive, and the *-ing* form, were well-documented in dictionaries and earlier literature, although it must be again noted that the entry for *accustomed* in the illustrious *Oxford English Dictionary* seems to be somewhat outdated as the now-frequent *-ing* complement type is not presented in the example sentences for *accustomed*. In addition to these previously documented patterns, the corpus data revealed four new complement types, namely the ACC *-ing*, the POSS *-ing*, the zero complement and the adjectival noun complement, which are not widely recognised as complements of *accustomed* in the previous literature. Some of the forms, primarily the accusative and possessive *-ing* forms, may entail semantic restrictions and changes in the usage of *accustomed*, but all in all, the comparative infrequency of these forms in the data indicates that they seem to remain only marginally acceptable as complement patterns of *accustomed*.

This study, as well as previous related research, has answered several questions about the development that has occurred in the complementation of *accustomed*, but there are undoubtedly several open issues that fall outside the scope of the present study and necessitate further research. A more comprehensive set of diachronic data, preferably of both British and American English, is required for a detailed study of the development of complement patterns. Another potential area of research that I have briefly touched upon in the present study concerns the parallel development of the *used + to + V-ing* and the *accustomed + (to + V-ing) / (to-infinitive)* patterns. A diachronic study of these two constructions would potentially shed more light on the questions whether the less formal *used + to + V-ing* pattern has had an influence on the development of the sentential complementation of *accustomed*, or whether the said pattern has affected the overall frequency of

*accustomed*. Semantics, I would argue, is also an area that still requires further research. A proper semantic methodology, such as the one used by Wierzbicka (1988), would be required to truly discern semantic differences between sentential complement variants of *accustomed* and to achieve objective results.

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