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A CORPUS-BASED STUDY ON THE COMPLEMENTATION OF THE ADJECTIVE *DESIROUS* IN FOUR DIFFERENT VARIETIES OF ENGLISH

TIIVISTELMÄ

Tässä Pro gradu- tutkielmassa tarkastellaan adjektiivin *desirous* komplementaatiota neljässä eri englannin varieteetissa kahtena eri aikakautena. Tavoitteena on saada selville, onko komplementaatiossa eroa eri varieteettien välillä tai eri aikakausina. Nämä varieteetit, Britannian, Amerikan, Intian ja Pakistanin englanti, valittiin niiden historiasta löytyvien kytkösten takia; Amerikka, Intia ja Pakistan ovat olleet Brittiläisen imperiumin siirtomaita. Esimerkkilauseet näistä neljästä varieteetista tulevat GloWbE-korpuksesta. *The corpus of Global Web-based English* eli GloWbE-korpus sisältää esimerkkilauseita 20 eri englannin varieteetista ja se on kasattu Internetistä löytyvistä teksteistä joulukuussa 2012. Aiempaa aikakautta edustavat esimerkkilauseet ovat peräisin CLMET3.1-korpuksesta. Kyseinen korpus on koottu brittienglannista vuosilta 1710-1920.

Teoriaosiossa komplementaation käsitettä avataan vertaamalla komplementtia adjunktiin. Tästä huomataan, että komplementti tarvitaan, jotta lause on kieliopillisesti oikein, toisin kuin adjunkti, joka voidaan jättää lauseesta pois ilman että lauseesta tulee kieliopillisesti virheellinen. Komplementaation tutkimisen mahdollistaa se, että yhdellä predikaatilla on useampia komplementtivaihtoehtoja. Teorioita ekstrasemanttisista tekijöistä, tärkeimpinä Rohdenburgin kompleksisuusperiaate ja horror aequi-tendenssi, käsitellään, sillä niillä voi olla vaikutusta siihen mitä komplementtia käytetään. Sanakirjoista saadaan tietoa siitä, mitä komplementteja *desirous*-adjektiivilla on jo havaittu olevan. Sanakirjojen perusteella näitä on viisi: *of* + *-ing*, *to*-infinitiivi, *that*-lause, *of* + nominilauseke ja nollakomplementti. Tutkittavien varieteettien historiaa ja ominaispiirteitä tarkastellaan myös. Analyysiin käytettyinä metodeina mainitaan sekä määrällinen että laadullinen menetelmä, sillä ne ovat molemmat tarpeen korpuslingvistisessä tutkimuksessa.

Tutkimuksen tulokset viittaavat siihen, että sanakirjoissa mainituista viidestä eri komplementtivaihtoehdosta kolmea (*of* + *-ing*, *to*-infinitiivi ja *of* + nominilauseke) käytetään huomattavasti enemmän kuin kahta muuta (*that*-lause ja nollakomplementti). Jokaisessa eri varieteeteista ja eri aikakausista kerätyssä aineistossa nämä kolme komplementtia esiintyvät yhteensä yli 90 %:ssa esimerkkilauseista. Kaikissa varieteeteissa on myös vähintään yksi esimerkkilause, jossa komplementti ei ole mikään aiemmin mainituista viidestä. Yhteensä 20 esimerkkilausetta sisältää tällaisen "uuden" komplementin. Komplementti *for* + nominilauseke löytyy kymmenestä esimerkkilauseesta ja osassa horror aequi- tendenssi saattaa olla ollut vaikuttamassa komplementin valintaan, sillä lauseessa on komplementin läheisyydessä ollut jo prepositio *of*. Huomattavaa on myös se, että kaikissa muissa paitsi Intian englannissa näitä "uusia" komplementteja löytyy useammasta esimerkkilauseesta kuin nollakomplementtia.

Avainsanat: Komplementaatio, korpuslingvistiikka, adjektiivi, *desirous*

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1. Introduction

The aim of this thesis is to examine the complementation of the adjective *desirous* in four different varieties of English and in different time periods. The focus will be on what different patterns can be found in the different data sets and how frequently each of the patterns occurs. The varieties that will be investigated here are American English, British English, Indian English and Pakistani English.

I chose this topic because of my interest in complementation and in different varieties of English. Charles F. Meyer writes that "it is important to base one's analysis of language on real data… rather than on data that are contrived or "made-up"" (2002, xiii). This supports the approach chosen here to investigate the complementation of a specific word in different varieties of English through actual, authentic data of language in real use. The adjective *desirous* was chosen due to the fact that I have already worked on *desirous* in my Bachelor's thesis and there I noticed that the complementation did not always follow the rules or tendencies set by theories. This sparked an interest to find out more about the complementation of this adjective. These particular varieties were chosen because of their interlinked histories, India, Pakistan and America having been colonies of the British Empire.

This topic is worth studying because of the recent changes that have taken place in the area of complementation. These changes are referred to as the Great Complement Shift, which is described by Günter Rohdenburg as a "massive restructuring of its [English's] system of sentential complementation" (2006, 143). The change that will be focused on in this thesis is "the establishment of the gerund at the expense of infinitives (and *that-* clauses)" (2006, 143).

Corpus linguistics as a way of studying language may seem new but as Douglas Biber et al. note "corpus-based methods" (1998, 21) were already used by Johnson as he compiled his dictionary in the 18th century. In his book *Practical Corpus Linguistics: An*

Introduction to Corpus-Based Language Analysis Martin Weisser defines a corpus as a "collection of spoken or written texts to be used for linguistic analysis and based on a specific set of design criteria influenced by its purpose and scope" (2016, 23). A corpus does not have to be electronic, but Weisser notes that most used today are computerised. Biber et al. introduce the two different ways language can be examined: by studying structure or by studying use. For the latter approach, actual data of language in use is needed, and a corpus can provide this data. Biber et al. point out that "comprehensive studies of use cannot rely on intuition, anecdotal evidence, or small samples; they rather require empirical analysis of large databases of authentic texts, as in the corpus-based approach" (1998, 9). They also state that the corpus-based method has made several new inspections of language use possible by providing a way of managing "large amounts of language and keeping track of many contextual factors at the same time" (ibid., 3). Writing this thesis without the two corpora the data comes from would be impossible. For example, the word *desirous* appears 391 times in the American English subcorpus, which consists of over 380 million words. Trying to find those 391 instances without the aid of a corpus, even if one had the access to all those webpages the texts come from, would be impossible.

Luckily, it is not necessary to begin the analysis of the data without any prior knowledge about the complementation of *desirous*. Dictionaries provide a good starting point as they give examples of the word in use and the complementation patterns. Therefore later on in this thesis a few dictionary entries of *desirous* are compared. It is also important to note that the choice of which complementation pattern to use may be motivated by other factors as previous research has established. The factors that will be taken into consideration in the analysis of the data, the complexity principle and the horror aequi tendency, are introduced after the dictionary entries have been discussed. After that the varieties of English examined in this

thesis are introduced as well as the methods used in analysing the data. Through analysing the data this thesis attempts to answer the following questions

1. Are all the five different complementation patterns established in the theory part found in all the varieties?

2. Do the complexity principle or the horror aequi tendency appear to have an effect on which complementation pattern is chosen?

3. Are there any new complementation patterns in the data?

These questions will be answered in the second part of this thesis. The first part, the theory part, is structured as was described in the previous paragraph but before moving to the complementation of *desirous* and what factors may affect it, it is necessary to examine complementation and complements in general. This is the topic of the next section.

2. Complements and adjuncts

As the topic of this thesis is complementation, an introduction of the concept of complement is due. Here it will be conducted by contrasting complements with adjuncts as I believe this makes understanding complements easier. A complement is needed in order for the sentence to be complete whereas an adjunct offers additional information that could be omitted without the sentence becoming incomplete or ungrammatical. James Huang explains this difference with the concept of c-selection (1997). C-selection (Category-selection), also known as strict subcategorization, refers to what the predicates choose as their objects or complements (ibid.). Huang exemplifies this by comparing verbs that seem to have fairly similar meaning:

      1. Anteaters resided in Southern California.

      2. Anteaters inhabited Southern California.

Both are grammatical like this but if they were combined with each other's complements, the resulting sentences would not be grammatical:

      3. *Anteaters resided Southern California.

      4. *Anteaters inhabited in Southern California.

From this it can be seen that *reside* c-selects a Prepositional Phrase, PP, and *inhabit* c-selects a Noun Phrase, NP (ibid.). Only complements can be c-selected as "almost all adjuncts can (optionally) occur with all verb types" (ibid., 75). C-selection applies to adjectives and nouns as well.

Liliane Haegeman also describes the difference between complements and adjuncts by defining adjuncts as "optional phrasal constituents" (1991, 32). She also mentions the concept of subcategorization frames and states that "verbs are characterized on the basis of the frames in which they occur" (ibid., 34) and these subcategorization frames identify the subcategories of verbs (ibid.).

Huddleston and Pullum on the other hand divide complements into core complements and non-core complements with the distinction that the "core complements are generally more sharply differentiated from adjuncts" (2002, 219). They list eight "major factors", five of which have to do with syntactic differences: licensing, obligatoriness, anaphora, category and position. The other three are related to semantic issues: argumenthood, selection and role.

Huddleston and Pullum state as "the most important property of complements in clause structure" (ibid., 219) the fact that they need an appropriate verb or adjective that licenses their presence. An adjunct is not "restricted to occurrence with a particular kind of verb" (ibid., 219) or adjective. Huddleston and Pullum likewise use the term subcategorization to describe the "dependence between complements and their head verbs" (ibid., 219). They also point out that most verbs allow more than one pattern of complementation. This is the fact that makes it possible to investigate complementation, the fact that there are alternatives. The goal is to find out, if possible, why a certain complement was chosen. In this thesis two particular complements are given extra attention because of what has stated about them in previous literature. In the next section these two sentential complementation patterns are introduced.

3. Reification vs. hypothesis or potentiality

It can already be mentioned that *desirous* has both the complementation pattern *of* + *-ing* and the complementation pattern *to* infinitive. The differences between these two patterns have been examined in earlier research and from that research a few generalizations have been made. As both of these patterns appear with *desirous* it is worthwhile to briefly go through those generalizations here. In his article "Entailment and the Meaning of Structures" Dwight Bolinger argues that using *to* infinitive or *-ing* creates a difference in meaning: using an *-ing* construction denotes something actual whereas using a *to* infinitive signifies something imaginative (1968, 123). Bolinger demonstrates this view with minimal pairs such as:

> 1. I like him to be nice to you.
> 2. I like him being nice to you.

In the second example, it is felt that someone's actual behavior is referred to (reification) whereas the first one is felt to refer to future behavior (hypothesis) (ibid.). As further evidence Bolinger gives the sentences:

> 3.*To wait has been a mistake.
> 4. Waiting has been a mistake.

The fact that example three with the *to* infinitive is ungrammatical gives further proof to the argument that *to* infinitive is not used when something is referred to that is actually happening or has happened (ibid., 124).

Bolinger also gives evidence that suggests that the "*ing* is advancing at the expense of the other" (1968, 125). He exemplifies this by examining common verbs of perception and less common ones. The less common ones need to be used with *ing*, which is "analogous to weak verbs taking regular endings—the less used forms are leveled first" (ibid., 125).

David Allerton (1988, 21) examines this difference further and lists as the characteristics of *to* infinitives the following: infrequent, intermittent, interrupted and uncompleted activity, possible event, particular time and place, specific subject, and more verbal character.

As was mentioned, *desirous* has both *to* infinitive and *of + -ing* complementation patterns. That means that this difference can be examined in the data to see for example if it motivates the use of one of the two patterns in a situation where one would expect to find the other.

4. Subject Control or NP movement

This section provides more information on the nature of the word *desirous*. Examining whether *desirous* is a subject control predicate or a NP movement predicate tells us about the relation *desirous* has with the subject of the sentence. Davies and Dubinsky (2004, 3) indicate the difference between subject control and NP movement with the sentences:

1. Barnett seemed to understand the formula.
2. Barnett tried to understand the formula.

Despite the surface-level similarities of these two sentences Davies and Dubinsky point to one big difference between the matrix verbs: in the first sentence the subject is only semantically linked to the lower clause verb whereas in the second sentence the subject is linked to both the matrix verb and the lower verb. In other words, in the second sentence the subject, Barnett, is given "two roles in the sentence, one as experiencer of *understand* and one as agent of *try*" (ibid., 4). In the first example however, the subject only has one thematic role, experiencer of *understand*, as it is not given a role by the raising verb *seem*. Davies and Dubinsky refer to the construction in the first sentence as Raising but for this thesis the term NP movement will be adopted. The second sentence includes a Subject control construction.

It is worth examining if *desirous* is a subject control predicate or NP movement predicate, as it will reveal whether *desirous* assigns a thematic role to the subject or not. To test which group the predicate belongs to Davies and Dubinsky provide several tests. The ones demonstrated here are based on the fact that they only generate grammatical sentences with NP movement predicates.

The first test involves use of the weather *it*:

3. *It is desirous to rain in a lot November.

As can be seen, this test did not provide us with a grammatical sentence. To be on the safe side, in order to establish that *desirous* really is a subject control construction, let us try another test. The second test involves the existential *there*:

4. *There is desirous to be a man under the table.

As neither of these provided us grammatical sentences, it can be deduced that *desirous* is a subject control predicate and therefore does assign a thematic role to the subject and is linked to the subject of the sentence. Carnie (2002, 262) gives as an example of a NP movement predicate the adjective *likely*, which generates acceptable sentences in both tests:

5. It is likely to rain a lot in November.

6. There is likely to be a man under the table.

5. *Desirous* in dictionaries

To have an idea of what complementation patterns are used with *desirous*, it is beneficial to see what has previously been stated about the adjective *desirous*. The *Oxford English Dictionary* is, because of its established position as a reliable source, a good place to start. *Desirous* is defined in the *OED* as 'having or characterized by desire' (s.v. desirous) and it is mentioned to have entered the English language through Old French, in which the form was desireus. On the *OED* website, the frequency with which a word is currently used, is demonstrated with a band system. There are eight bands in total, Band 1 having the words with the lowest frequency and Band 8 the words with the highest frequency. *Desirous* is in Band 5, which is described as follows: "Most words which would be seen as distinctively educated, while not being abstruse, technical, or jargon, are found in this band." The senses for *desirous* still valid today are given in Table 1.

Table 1. The *OED* senses for *desirous* with illustrations

Sense	Examples	Complements
1.Having desire or longing; characterized by or full of desire: wishful; desiring	1. The lessor was desirous of pulling the house down and building a new one. (1891, *Law Reports Weekly Notes* 78/2) 2. Being desirous to learn something of its[the glacier's] general features. (1860 Tyndall, *Glaciers of Alps*) 3. He averted his, as if desirous that his emotion should not be read upon his countenance. (1828 Scott, *Fair Maid of Perth*) 4. From dance to sweet repast they turn Desirous. (1667 Milton, *Paradise Lost*)	1. *of* + *-Ing* 2. *to* infinitive 3. *that* clause 4. zero

†2. Exciting desire; desirable; pleasant, delectable	1. Wine inspires us, And fires us..Women and Wine should life employ. Is there ought else on Earth desirous? (1728 Gay, *Beggar's Opera*)	1. zero

According to the *Oxford English Dictionary* only one out of five senses is still valid for *desirous* but as one other of them was still used in the 18th century I have also included that sense in the list. For that one valid sense the *OED* distinguishes four different complementation patterns.

The patterns put forth by Poutsma in his manuscript differ slightly from those in the *OED*. He divides the *of* pattern into two subcategories: *of* and *of + -ing*. The first one includes an NP after the *of* even though Poutsma does not mention it. The other difference to the *OED* patterns is that Poutsma does not mention zero complement. In his manuscript Poutsma proposes the following complementation patterns for *desirous* with examples:

1. with *of*: "Every man is desirous of praise"

2. with *of* + gerund: "He was desirous of doing the honour of the place to me" (Thackeray, Snobs)

3. with *to* + infinitive: "He was not desirous to be seen under the wing of Baron Levy" (Lytton, My Novel)

4. with subordinate statement: "He averted his face, as if desirous that his emotion should not be read upon his countenance" (Scott, Fair Maid)

Poutsma (MS) goes on to say that "usage is, presumably, equally divided between the construction with *of* + gerund and that with *to* + infinitive (LIV, 5)." In my analysis I am going divide my data into five different patterns based on the *OED* and Poutsma's manuscript entries; *of + -ing* (gerund), *of* + NP, *to* infinitive, *that* clause and zero complement.

It is also worth mentioning, though because of its brevity the entry will not be further examined here, that The *Oxford Advanced Learner's Dictionary* states that *desirous* does not occur before a noun. Now that the complementation patterns of *desirous* in dictionaries have been examined, we can move on to investigate two principles/tendencies that may influence which of these complementation patterns is used.

6. The complexity principle and horror aequi

As was mentioned in the introduction, previous research has found extrasemantic factors that may affect the complementation of the predicate. Two of these factors are presented here: the complexity principle and the horror aequi tendency. The complexity principle "states that more explicit grammatical alternatives tend to be preferred in cognitively more complex environments" (Rohdenburg, 1996, 149). This is to make the sentence more easily understandable to the reader as it makes recognizing the constituent structure easier (ibid.). To illuminate the matter, Rohdenburg, whose work on the topic was inspired by the work of John Hawkins, gives the following examples (1996, 150):

> 1. She put the fire out.
> 2. She put out the fire.

The sentences are felt to be synonymous but Rohdenburg argues that there is a difference in usage. If the object expression (the fire) for example was more complex, the latter sentence would be favoured as it does not separate the constituent "put out" and therefore makes understanding the sentence quicker.

As examples of factors bearing on complexity Rohdenburg mentions "discontinuous constructions of various kinds, passive constructions and the length of the subjects, objects and subordinate clauses." (ibid., 149) As an example of the simplest cases of variation he gives the following sentences:

> 3. I helped him to write the paper.
> 4. I helped him write the paper.

The *to* in example three is an "optional grammatical signal" (ibid., 151) and including it makes the sentence more explicit and therefore easier to understand. As another example Rohdenburg

gives "rivalry between two function words" (ibid., 151). This he demonstrates with the sentence:

5. She was prevailed on/upon to write another letter.

Here using the preposition *upon* is the more explicit alternative, so according to the theory, we would expect to find this in a cognitively more complex environment, rather than the alternative *on*. In the analysis part the complexity factors investigated are insertions and extractions. Here insertion simply refers to a situation where an element has been added between *desirous* and the complement, making the sentence more complex. Extractions are somewhat more complex and are therefore discussed in their own section.

A requirement for the complexity principle is that there are options to choose from and that we can distinguish between the more explicit and the less explicit ones (ibid.). According to Rohdenburg this is rarely a problem as "the more explicit variant is generally represented by the bulkier element or construction" (1996, 152). There is also a tendency for the more explicit options to be seen as more formal (ibid.). Rohdenburg has assessed the explicitness of the three sentential complements that occur with *desirous* and according to him "the to-infinitive, which no doubt is less explicit than the finite complement, represents a more explicit sentential structure than the gerundial complement" (ibid., 149—150). In the analysis section of this thesis, this categorization will serve as the basis of comparison: it is assumed that the most complexity factors will be found in tokens that have *that* clause (a finite complement) as the complementation pattern and the least complexity factors will be found in tokens featuring an *of + -ing* complement.

Another extrasemantic factor that may have an impact on which complementation pattern is used is the horror aequi tendency. The theory of horror aequi was also first made famous by Günter Rohdenburg. He himself describes the phenomenon as a principle that

"involves the widespread (and presumably universal) tendency to avoid the use of formally (near-) identical and (near-) adjacent (non-coordinate) elements or structures" (2003, 236). As an example of horror aequi Rohdenburg gives the following sentence:

> 6. However, we had no remedy, but to wait **and see** what the Issue of Things might present; … (Daniel Defoe, *Robinson Crusoe*, 1719)

Rohdenburg claims based on his research that "the use of the linker *and see* is motivated to a large extent by a desire to avoid a succession of two marked infinitives" (2003, 238), in other words to avoid the sequence "but to wait to see what". The reason why this tendency is discussed here is that it can be a factor motivating the use of an untypical complement with a predicate. If in the analysis part a pattern, that has not been established in the dictionaries consulted, is found it might be due to horror aequi.

7. Extractions

Linked to the complexity principle is the theory of extractions, as they serve as complexity factors. Extraction refers to the situation where a constituent has been moved out of its regular place. This means that even though the surface structure appears different the underlying deep structure is still the same. Believing that there has been movement and that the deep structure is still the same allows us to keep the same subcategorization frames instead of having to make new ones. Vosberg defines extractions as "deviations from the canonical sentence structure" (2003, 201). He also introduces what he calls an extraction principle which states that when both *to* infinitive and *-ing* form are possible the former is favoured when there is an extraction. This echoes what was mentioned in the complexity principle.

Huang refers to extractions as transformations and distinguishes three types of them. These three types will be taken into consideration when the data is examined and are therefore worth introducing here. The first one is the wh-question, illustrated with the following example by Huang:

1. What is John buying?

Huang points out that *buy* is a transitive verb that appears to be missing an object from its object position. However, because of the wh-word in the beginning, the sentence remains grammatical. As the wh-word and object cannot appear in the sentence at the same time, Huang suggests that the "wh-word is first generated in the base as a constituent within S" (124). If the question is indirect, the wh-word moves to the beginning of the embedded clause. Movement is expected to have taken place even when it has been vacuous i.e. the wh-word is located where the "original" word would be as well. This concerns the questioning of the subject NP (ibid.). A wh-word can also cross sentence boundaries. As an example Huang gives the following sentence:

2. What did John think that I like?

This assumption that the deep structure remains the same allows us to use our already existing c-selection for example, instead of having to come up with new ones.

Another type of transformation or extraction is topicalization which means that the order found in a normal declarative sentence is broken by moving the topic to a position where it occurs before the comment about that topic. An example by Huang (ibid.) goes as follows:

3. John's articles, I will never read.

The third type is relativization. Relative clauses "provide additional information about the noun they modify" (130) so they do not serve as complements but as adjuncts. The process of relativization includes the movement of a relative pronoun to the beginning of S' that is embedded under an NP. This is demonstrated with the sentence:

4. The man who you saw yesterday is my brother.

Who has been moved from its deep structure position as the object of saw to the beginning of the S' (ibid.). These three types of extractions or transformations will be taken into consideration in the analysis and it will be interesting to see what complementation pattern is used in tokens featuring extractions. In the next section the varieties of English the tokens represent are introduced.

8. Varieties of English examined

Before briefly introducing some of the characteristics of the different varieties examined in greater detail in the present thesis as regards the uses of complements with *desirous*, it is worthwhile to discuss World Englishes in general. In addition to presenting a few important points from the histories of these varieties of English and commenting on their current status in the country, I will also report individual observations made in previous studies on the varieties concerning complementation if they can be tested in the analysis of this data.

English language originated in the British Isles. From there it first spread to the Americas and Australia (van Gelderen) and "the first permanent, English-speaking settlers" (ibid, 252) arrived in 1607 in North America. It did not take long before parts of Asia were colonized as well: in 1615 "The most important trading company in the English-speaking world" (ibid. 252), the British East India Company, arrived in the area that is now India, Pakistan and Bangladesh. A significant difference between the varieties that are examined here is that USA became independent quite a bit earlier than India or Pakistan: the former obtained independence in 1776, whereas the latter two did so in 1947.

Different models have been developed to illustrate the spread of English around the world. The model presented here is called The Three Circles of English and it was developed by Braj B. Kachru. In *The Other Tongue: English across Cultures* (1992) Kachru describes the model as "three concentric circles" (356) in which "The Inner Circle refers to the traditional cultural and linguistic bases of English". The Outer Circle on the other hand "represents the institutionalized non-native varieties (ESL) in the regions that have passed through extended periods of colonization". The last circle, referred to as the Expanding Circle covers "the regions where the *performance* varieties of the language are used essentially in EFL contexts" (ibid.). Kachru places USA and Britain in the Inner Circle and India and Pakistan in the Outer Circle.

8.1 British English

Elly van Gelderen explores the history of the English language in her book *A History of the English Language* (2014). She states as the official beginning of the English language the year 449 "when the Germanic tribes and their languages reach the British Isles" (2014, 2). After that the language was influenced by other languages, for example French and Latin. This can be seen for instance in the number of loanwords; van Gelderen gives an estimation that half the vocabulary of English might consist of French and Latin loanwords. In fact, in the section were the dictionary entries for *desirous* were discussed, it was mentioned that *desirous* is a loanword from Old French.

Pam Peters notes that the status of British English as an international standard, status which it gained through colonization, has been challenged by American English. According to Peters, British English and American English have "effectively shared the role throughout the 20th century" (2017, 116). Edgar W. Schneider agrees and observes that, whereas "British English and RP used to be regarded as the linguistic norm and target of education" in most Outer-Circle varieties due to history, now "an increasing impact of American English on practically all varieties of English around the globe can be observed" (2006, 67).

8.2 American English

Unlike the United Kingdom, India and Pakistan, the United States of America is not a member of the Commonwealth, so this is one connection the other varieties share but not American English. Edgar W. Schneider states in his article "English in North America" published in *The Handbook of World Englishes* that "American English is an "Inner-Circle" variety (Kachru, 1985) and one of two major "reference accents" of global English" (2006, 58). He notes that despite this being the situation now, American English has undergone the "same process of linguistic and cultural appropriation" as other postcolonial varieties (2006, 58). Elly van

Gelderen mentions that as the United States attained independence from Britain, "an independent language" was also needed (2014, 251).

In the article "Standard American English", Richard W. Bailey examines the history of American English. According to him, American English was widely recognized as a distinct English in the end of 18th century. It was then viewed by the British and the Americans "to have an unusual "purity"" (2017, 9) by which they meant that it had not been "spoiled" by foreign words and idioms. In their opinion, "languages were "pure" insofar as they contained words historically connected to a people" (ibid., 13). British English was not as pure as American English because it had adopted French expressions for example. Later however, British speakers started fearing "the effect of American English on their own usage" (ibid., 9). Bailey concludes by stating that though it is not certain how, "American English will continue to be influential on a worldwide scale" (ibid., 28).

8.3 Pakistani English

Pakistan is a part of the Commonwealth. On the official website of the Commonwealth some keys moments in the history of the area are listed. For this thesis important points in the history of Pakistan are the fact that Pakistan was created in 1947 as UK's Indian Empire was divided into India and Pakistan, out of the need to have an independent Muslim state as "it became clear that Hindu and Muslim interests could not be reconciled" (ibid.). Later mass immigration took place as many Muslims moved from India to Pakistan and many Hindus and Sikhs moved from Pakistan to India, which led to Pakistan becoming "an almost entirely Muslim society" (ibid.).

Mubina Talaat and Behzad Anwar state in their article "The Impact of Urdu-English Code-Switching on Pakistani English", that even though colonialism no longer prevails "the English language still continues to remain an integral part of culture, literature and history of postcolonial societies" (2010, 95). According to the writers English is highly valued in

Pakistan, but it is also changing due to contact with Urdu, the national language of Pakistan. Talaat and Behzad note that lexical items from Urdu have had a significant role in forming Pakistani English. They add that the "vast majority of Urdu lexemes in Pakistani English consists of nouns and adjectives" (ibid., 98). It will therefore be interesting to see if there will be any head nouns in Urdu in the pattern *of + NP*.

In her article " The Evolution of Pakistani English (PakE) as a Legitimate Variety of English" Humaira Irfan Khan discusses the syntax of Pakistani English. Interesting in terms of this thesis, is her referring to an observation made by Baumgardner that "the adjectives in PakE are frequently followed by a to-infinitive instead of a preposition and participle clause as in BrE" (2012, 94). This can be examined in the analysis section, as *desirous* is an adjective that has both those complementation patterns as an option.

8.4 Indian English

As was mentioned in the section on Pakistani English, the UK's Indian Empire was divided into India and Pakistan in 1947, with many of the Sikhs and Hindus opting to live in India and many of the Muslims choosing Pakistan. Pingali Sailaja provides information on the current status of English in India in her book *Indian English* (2009). According to Sailaja, "although the official language of India is first Hindi, English is given equal if not more importance" (ibid., 5). She also lists the fields in which English is mostly used "education, administration, law, mass media, science and technology" (ibid., 5). Sailaja points out that English is particularly important in these areas because the knowledge needed to operate in these fields is only available in English due to them adhering to Western standards. Sailaja notes that the choice which language to use is often affected by the topic and for example "Relationships and emotions are likely to be discussed in one's own language, especially by those who consider English to be a second language" (ibid., 6).

van Gelderen mentions that Indian English "is very similar (at least for an outsider) to Pakistani or Bangladesh English" (2014, 253) and along with Sri Lankan English she refers to these Englishes as South Asian English. Unfortunately, she does not state how exactly these Englishes are similar in terms of complementation, but in the analysis section we can investigate whether they favour the same complementation pattern for example.

9. Methodology and data

As was mentioned before, the data consists of five different sets of tokens: Indian English, Pakistani English, American English, British English and historical British English. The sets vary in size from 151 tokens (Pakistani English) to 217 tokens (historical British English). Before moving on to the analysis, the two corpora from which the data came (GloWbE and CLMET3.1) are briefly introduced. After that there is a description of how exactly the data was retrieved and analysed.

It is necessary to examine the data from both a quantitative and qualitative point of view. Roberta Facchinetti explains this by calling quantitative analysis "the starting point for further qualitative analysis and, in turn, qualitative being the spur for further quantitative investigation" (2015, 4). It would not be enough to just count the frequency with which the different complementation patterns occur in the data sets, it is important to also examine whether there was a specific reason why a particular complementation pattern was used. In this thesis the possible factors affecting complementation examined are the complexity principle and the horror aequi tendency. Both synchronic and diachronic approach are applied in the analysis as the data sets from GloWbE will represent the different varieties of English at a same point in time (the corpus was compiled in December 2012), whereas the data set from CLMET3.1 will represent British English from an earlier time period.

9.1 The corpora

In the following sections the two corpora the data came from will be briefly introduced. First however, a look at the frequency with which *desirous* appears in the different corpora will give an idea of how often the word is used in different varieties. In the table below the normalized frequencies are presented. The results have been rounded to the nearest two decimal places.

Table 2. Frequency of *desirous* in the different varieties.

Variety	Frequency of *desirous* per million words
Indian English (GloWbE)	1.91
Pakistani English (GloWbE)	2.94
American English (GloWbE)	1.01
British English (GloWbE)	0.46
British English (CLMET3.1)	31.58

As we can see, there is noticeable difference in the frequencies. The most distinct difference is found between the two corpora: in all the data sets that come from GloWbE the normalized frequency is under three whereas in the data set from CLMET3.1 the number is over 31. Apart from British English, the numbers from GloWbE correspond with what was stated in the *OED* as words in Band 5 occur in 1– 9,9 words per million. The Band system represents current use, but if the frequency of *desirous* was as high now as it is in CLMET3.1, it would likely belong in Band 6 (10–99 words per million). The next table illustrates the amount of words in each variety

Table 3. The total number of words in each variety

Variety	Total number of words in corpus
Indian English (GloWbE)	94 430 888
Pakistani English (GloWbE)	51 367 152
American English (GloWbE)	386 809 355

British English (GloWbE)	387 615 074
British English (CLMET)	34 386 225

This table shows that there is a significant difference in the sizes of the subcorpora in GloWbE. The corpora on American English and British English both contain over 380 million words, whereas the subcorpora on Indian English and Pakistani English both consist of less than 100 million words. CLMET3.1 contains just below 35 million words, making it the smallest corpora or subcorpora in the group. In the following section GloWbE and CLMET3.1 are introduced in greater detail.

9.1.1 Corpus of Global Web-based English

The Corpus of Global Web-based English, from here on referred to as GloWbE, gives the following information about its size and structure: it consists of "1,9 billion words from 1,8 million web pages on 340 000 websites in 20 different English-speaking countries. The web pages were collected in December 2012". Besides its size, this corpus was chosen because it allows the user to make comparisons between different varieties of English, which is crucial for this thesis. The data sets for Indian English, Pakistani English, American English and British English were retrieved from this corpus.

9.1.2 Corpus of Late Modern English Texts

The Corpus of Late Modern English Texts (CLMET) contains approximately 35 million of words of British English from the time span of 1710-1920. The corpus is divided into three 70-year periods. The version used in this thesis 3.1 but it only differs from version 3.0 in the sense that it has been linguistically improved, the text base is the same in both. One considerable difference between CLMET3.1 and GloWbE is their form. GloWbE can be found on a website

and it can be accessed by everyone (though the access is limited). To gain access to CLMET3.1 the person must contact Hendrik de Smet who then sends the corpus as a data file.

9.2 Compiling the data sets

The four data sets from GloWbE were rather easy to retrieve. The search string was simply "desirous" as the word examined is an adjective and not a verb. The same search string was used in CLMET3.1. As there were not too many tokens in Indian English, Pakistani English and British English (all were under 200), no tokens had to be left out in these three varieties. American English however had 391 tokens with the word *desirous*. The number was somewhat high compared to the other data sets and was therefore narrowed down. This was achieved by using the "Find a sample" function where the number of tokens could be set to 200.

Compiling the data set for historical British English required more work. After receiving the corpus from Hendrik de Smet, a concordancing program called AntConc was used to form the data set. The number of tokens that contained the word *desirous* was 1086. To narrow the number to a more manageable amount that would also be closer to the size of the other data sets, only every fifth token was included in the data. This was achieved by transferring the tokens from AntConc to Excel, where the other tokens could be removed from the data. This procedure left 217 tokens. The narrowing could not be done by just taking the first 200 tokens from the list because then the data would not have been random enough. Furthermore, then there would have only been tokens from the first 70-year period as the results are sorted based on which of the three time periods they were from.

As the corpora vary in size, for example the total number of words of American English in GloWbE is around 386 million whereas the CLMET3.1 only has 35 million words, the numbers of the tokens and the different complementation patterns cannot be accurately compared just as they are, in so called raw frequencies. In their book *Corpus linguistics:*

Investigating Language Structure and Use Douglas Biber et al. provide a way to account for such differences in the sizes of the sources. This method is called normalization. Biber et al. instruct that in norming the different frequency counts, "the raw frequency count should be divided by the number of words in the text, and then multiplied by whatever basis is chosen for norming" (1998, 263). Here that basis will be per million words, as all the corpora consist of several million words. The following formula will be used to find out the occurrence of the complement per million words:

(number of tokens that have a specific complementation pattern / total number of words in the corpus) x 1,000,000 = normalized count of frequency of the complementation pattern per million words.

9.3 Analysing the data sets

A reoccurring issue in all the data sets from GloWbE was that there were duplicates. This is noted on the corpus webpage and they mention that they regularly run scripts to log these duplicates in the database. However, there were still several duplicates found in all the data sets, which then had to be omitted from the analysis. This made the final number of tokens that were analysed smaller. The number grew smaller still as the duplicates that have already been logged in the corpus are still counted in the number of tokens. For example, according to GloWbE there were 180 tokens with the word *desirous* in the Indian English section. However, 13 duplicates in total had already been discovered, which meant that the actual number of tokens was 167. Tokens that were duplicates were also not the only tokens that had to be omitted. Although it was stated in the *Oxford Advanced Learners' Dictionary* that *desirous* does not occur before a noun, in every data set, except for the one that came from CLMET3.1, there were tokens where *desirous* was a part of a noun phrase. Those naturally had to be removed from the data as *desirous* does not have a complement there that could be studied. There were

also a few cases where the token was so fragmented that it was not possible to determine the complement. In the table below the original numbers of tokens are shown alongside the numbers of tokens that were analysed.

Table 4. How the number of tokens changed before the analysis

The data set	Original number of tokens	Number of tokens that were analysed
Indian English (GloWbE)	180	159
Pakistani English (GloWbE)	151	129
American English (GloWbE)	200	189
British English (GloWbE)	177	153
British English (CLMET)	217	216

Another factor that had to be addressed was the unclear nature of some of the tokens. This mostly concerned the tokens retrieved from GloWbE. As they are taken from websites, there are occasional problems with the clarity, for example quite often a token included additional characters. A slight difference in the characters used or in their placement was probably the reason behind many of the duplicates. Here is an example from Indian English:

> 1. one who, being fully satisfied by milk, is desirous of killing the cow is, in the grossest ignorance.
> 2. one who, being fully satisfied by milk, is desirous of killing the cow, is in the grossest ignorance.

The tokens come from different websites but the only difference between them is the placement of the third comma.

10. The analysis

In the following sections I will analyse the tokens from the different varieties of English based on what complementation pattern the adjective *desirous* has. The five patterns expected to be found were established in the theory part and they are: *of* + *-ing*, *to* infinitive, *that* clause, *of* + NP and zero complement. There were a few tokens in which the complementation pattern was not one of the established five complementation patterns. Those tokens are discussed at the end of every section and the patterns in them are referred to as new patterns, though that is not claim that they would not have existed before, it is simply done to distinguish those patterns from the five established complementation patterns. At the beginning of each section I will briefly mention which tokens were omitted from the analysis and why. I will also provide illustrations of each pattern found in the data. The two complexity factors taken into consideration in the analysis are insertions and extractions. These factors were present in tokens where the complementation pattern was non-sentential as well, but as there are no more or less explicit alternatives that can be compared in the non-sentential complements, they will not be discussed in the analysis.

10.1 Indian English

As mentioned earlier, from the 180 tokens this data was supposed to consist of, 13 had already been removed by GloWbE as they were duplicates of other tokens. Eight additional tokens were removed, two because they had *desirous* as part of a noun phrase:

> 1. The desirous foreign nationals will submit their complete bio-data with regard to their academic qualifications […] (GloWbE-IN, http://www.iitg.ernet.in)

> 2. …that can't be quenched by something that can't be put on a credit card, can't be delivared by hand or can't be felt by a desirous gaze. (GloWbE-IN, http://www.countercurrents.org)

Three other tokens were not intelligible:

3. … to analogize services and interest rates and be desirous of ever more accessible. (GloWbE-IN, http://www.homatherapyindia.com)

4. DEVAM means give us. EDE means desirous of – I desire, praise. (GloWbE-IN, http://agniveer.com)

5. …Sonakshi Sinha plays Yasmeen, a starlet desirous by eighties star Mandakini who was purported moll of Dawood. (GloWbE-IN, http://timesofnews.co)

It could be argued that the third example simply contains a slight mistake and that the author had meant to write the noun *access* instead of the adjective *accessible*. As the sentence ends in a comma after accessible, accessible is not a part of a noun phrase here. The general decision was made however in the analysis of all the tokens, that additional characters and additional or missing articles could be overlooked if the token was otherwise intelligible, but if understanding the meaning of the token would require altering the words in the token said token would be counted as unclear. In the fourth example it cannot be seen what the actual complement of *desirous* is.

The last three of the eight additional removed tokens were left out, because they were duplicates of other tokens that the program had for some reason not yet discovered. This left 159 tokens for the analysis. Table 5 presents the frequencies with which the different complementation patterns appeared in the data:

Table 5. The complements of *desirous* in Indian English

Complement	Raw frequency	Frequency per million words (ca.)
Of + *-ing*	87	1.28
To infinitive	26	0.38
That clause	4	0.06
Of + NP	38	0.56

Zero complement	3	0.04
Other	1	0.01
Total	159	

10.1.1 *Of + -ing*

This was by far the most common complementation pattern found in the data for Indian English. 87 tokens out of 159 tokens had this pattern, so it occurred in more than half the tokens. Here are some examples:

> 1. Sports activities too come into prominence and those desirous of getting into competitive games will get selected by able trainers […] (GloWbE-IN, http://www.jagjituppal.com)
>
> 2. To provide finance to occupants desirous of acquiring freehold rights of the land […] (GloWbE-IN, http://www.jkbank.net)
>
> 3. For a tourist desirous of exploring Buddhism in this island country […] (GloWbE-IN, http://www.buddhist-tourism.com)
>
> 4. Incidentally, Sarasa amma was very desirous of getting a Padmasri award.
>
> (GloWbE-IN, http://www.narthaki.com)

It was stated in the theory part that the *-ing* form might be taking over at the expense of the *to* infinitive and the numbers here do not contradict that claim. Also following the "rules" set in the theory part there were no extractions or insertions with the complement pattern *of + -ing*. It was said that when any of these complexity factors are found a more explicit complement is favoured so as to not complicate the sentence further. The *of + -ing* pattern is considered in the theory to be a more implicit alternative.

10.1.2 *To* infinitive

This was the third most common pattern found in the data. It appeared in 26 tokens. Here are

four examples of the pattern in use in Indian English:

> 1. …that the natives are desirous to be taught English, and are not desirous to be taught Sanskrit or Arabic […] (GloWbE-IN, http://www.swaraj.org)
>
> 2. …they were desirous to run risk of ruin for themselves and their children and their city […] (GloWbE-IN, http://evans-experientialism.freewebspace.com)
>
> 3. …Parliament gave new facilities to persons who were desirous to proceed to India as missionaries. (GloWbE-IN, http://www.columbia.edu)
>
> 4. … O Sanjaya, after assembling in the place of pilgrimage at Kuruksetra, what did my sons and the sons of Pandu do, being desirous to fight? (GloWbE-IN, http://www.asitis.com)
>
> There were two tokens that included a complexity factor. One had an insertion:
>
> 5. …but felt desirous only to get away from the world, and to cease from them […] (GloWbE-IN, http://anglicanhistory.org)

Here the word *only* has been inserted between *desirous* and its *to* infinitive complement. This

follows the complexity principle and based on that theory an argument could be made that the

fact that the sentence contains an insertion could be the reason why this complement was chosen

instead *of* + *-ing* as "but felt desirous only of getting away from the world" would also have

been an option. *To* infinitive is a more explicit alternative than *of* + *-ing*.

> In the other one an extraction had taken place:
>
> 6. …for making a choice on these kinds of perfect issues most people are really
>
> desirous to understand about. (GloWbE-IN, http://www.c00lstuff.com)

This extraction is an example of topicalization, the topic has been moved to an earlier position

so that it appears before a comment about it.

10.1.3 *That* clause

Four tokens had *that* clause as the complementation pattern. This was clearly more rarely used

than the other two sentential complements. Below all the four tokens are listed:

> 1. We being likewise desirous that the labours of the Holy Apostle St. Thomas […] (GloWbE-IN, http://www.east-indians.com)
>
> 2. …and is desirous that the man who is punished, and he who sees him punished, may be deterred from doing wrong again. (GloWbE-IN, http://evans-experientialism.freewebspace.com)
>
> 3. …and is desirous that you should go on clinging to him and makes you more and more helpless and makes you more and more dependent […] (GloWbE-IN, http://www.oshoquotes.net)
>
> 4. …how extremely desirous I was that he should be satisfied on every point […] (GloWbE-IN, http://www.cliffsnotes.com)

In all four cases the complementizer *that* has been retained, which makes the tokens more

explicit. Even though this is the most explicit one of the sentential complements, no extractions

or insertions taking place between *desirous* and the complement were found.

10.1.4 *Of* + NP

Of + NP was the second most frequently used complementation pattern in this data. It appeared

in 38 tokens. Here are some examples from the data:

> 1. Broadly, the Western powers of UN Security Council support the rebels and are desirous of a regime change […] (GloWbE-IN, http://m.indiavision.com)
>
> 2. …the association represented the interests of the producers of the ring who were desirous of the registration of Geographical Indication. (GloWbE-IN, http://spicyipindia.blogspot.com)
>
> 3. At the sight of Krishna, Kalayavana began to follow him, desirous of a fight. (GloWbE-IN, http://www.dharmakshetra.com)
>
> 4. This Life Path is perhaps the one that is the most concerned with and desirous of status, as an accompaniment to material success. (GloWbE-IN, http://www.aryabhatt.com)

40 head nouns were found in this data set. This is two more than there were tokens with this

complementation pattern, as two tokens included two head nouns:

5. Being desirous of sense gratification and opulent life, they say that there is nothing more than this. (GloWbE-IN, http://vedabase.net)

6. Until a person has all these six virtues, he does not become a Mumukshu (one desirous of moksha or liberation). (GloWbE-IN, http://celebrating-silence-of-life.blogspot.com)

Both the noun *gratification* and *life,* as well as *moksha* and *liberation*, were included in the analysis of the head nouns found in the noun phrases. Majority of the nouns were abstract in nature, and nouns such as *future*, *salvation* and *marriage* were found in the data. Three nouns occurring in the noun phrases could be classified as concrete: *food*, *Manipur* (a state in India) and *facility* (here referring to a storage facility). Four nouns were found in multiple tokens: *knowledge* appeared in two tokens, as well as *it* and *change*, whereas *liberation* was the head noun in four tokens. There were no head nouns borrowed from other languages in the data. The noun *moksha* found in example six is found in the *Oxford English Dictionary* with the definition of "The final release of the soul from a cycle of incarnation; the bliss attained by this liberation".

10.1.5 Zero complement

Zero complement was found in three tokens. Those tokens were as follows:

1. …but because their egos clash with them, because they are sexually desirous, because they are unlimitedly unwise, these children are leaving their homes. (GloWbE-IN, http://fateh.sikhnet.com)

2. He is too impatient and is too desirous, expectant; and when things don't go his way then he wants to finish himself. (GloWbE-IN, http://www.oshoteachings.com)

3. The above-mentioned three kinds of boons beginning with moksa are not ordinary; they are most desirous, and anyone would immediately accept them […] (GloWbE-IN, http://www.harekrsna.com)

As there is no complement here, one interpretation of these tokens would be that the subjects are generally desirous in their nature. The OED definition for *desirous* quoted in the theory part was "having or characterized by desire". Perhaps in cases where *desirous* has some other

complement it represents "having desire" for something and with a zero complement the meaning is closer to "characterized by desire".

10.1.6 Other patterns

There was one token in the data that had a different complement from the five anticipated patterns:

> 1. …he was most desirous for his niece that her study of letters should ever go forward […] (GloWbE-IN, http://evans-experientialism.freewebspace.com)

Here the complementation pattern could be defined as *for* + NP + *that* clause. Although there was only this one innovative pattern in Indian English, new patterns, especially with the preposition *for*, were found in several tokens in other varieties.

10.2 Pakistani English

The data for Pakistani English first consisted of 151 tokens, but 129 tokens remained for the final analysis. Three tokens had been removed by GloWbE as they were duplicates of other tokens. One token had to be left out of the analysis as it was unintelligible:

> 1.NFL Jerseys outlet is buy. # uggs onlineery desirous of satisfying, Will you go away with me (GloWbE-PK, http://jdviqcths.guplog.com)

Nine additional tokens were left out of the analysis as they were also duplicates of other tokens. In this data as well, the rule stated in the *Oxford Advanced Learners' Dictionary*, the rule about the word *desirous* not occurring before a noun was broken and six tokens were found that featured *desirous* as a part of a noun phrase:

> 2. …deity from Asgard and Thor (Chris Hemsworth)'s bitter and desirous little brother who wants to "free the world from freedom" […] (GloWbE-PK, http://dawn.com)

3. …about' cover' (hijab); the instructions about refraining from ogling and desirous looks; […] (GloWbE-PK, http://www.coiradio.com)

4. …simultaneously a -- desirous -- atmosphere of threat and danger is imposed, evoking a reflection on power structures. (GloWbE-PK, http://www.greynoise.org)

5. … in His infinite mercy and justice, did not deprive any people of this most desirous blessing. (GloWbE-PK, http://www.naseeb.com)

6. …through spiritual exertion that overcomes and effaces egoistic (nafsi) frivolities and subdues desirous motives; […] (GloWbE-PK, http://almiskeenah.com)

7. In fact the government was saving its desirous candidates who are going to retire […] (GloWbE-PK, http://rawalpindi-education.blogspot.com)

There were also three cases where desirous had been turned into a noun through

a process called conversion or category shift:

8. …for them to be waving flags of other than Pakistan's and providing the desirous among us the alternative winners […] (GloWbE-PK, http://aiourdubooks.com)

9. Certainly he will not disappoint them since he is the hope for the desirous and the peace for the scared. (GloWbE-PK, http://www.al-islam.org)

10. …desire fervently Your proximity among the fervently desirous, move near to You with the nearness of the sincere? (GloWbE-PK, http://www.al-islam.org)

In these tokens there is no complement to examine. In the following table the frequencies with

which the different complementation pattern appeared in the data are shown

Table 6. The complements of *desirous* in Pakistani English

Complement	Raw frequency	Frequency per million words (ca.)
Of + *-ing*	54	1.42
To infinitive	17	0.45
That clause	5	0.13
Of + NP	47	1.24
Zero complement	1	0.03

Other	5	0.13
Total	129	

10.2.1 *Of + -Ing*

This pattern was the most frequently used one in the data with 54 tokens featuring this complement:

> 1. He termed Indian Prime Minister Dr Manmohan Singh a " genuine person " and said he too was desirous of resolving all issues with Pakistan, including the core issue of Kashmir. (GloWbE-PK, http://tribune.com.pk)
>
> 2. Hadhrat Ali ra was desirous of participating in the battle and did not wish to stay behind. (GloWbE-PK, http://www.alislam.org)
>
> 3. Every member who is desirous of being candidate at the annual election for any office […] (GloWbE-PK, http://www.sindhhighcourtbar.org)
>
> 4. Quick on the uptake other filmmakers desirous of cashing in on the evacuated coveted Eid slot next year, quickly began to plan a release. (GloWbE-PK, http://awamtv.com)

In this data, the "rule" about avoiding adding factors that would increase the complexity of a sentence was followed in almost every token. There were no extractions and only one insertion:

> 5. …made up of ambitous opportunists rather than anyone desirous of actually changing society for the better. (GloWbE-PK, http://blogs.dunyanews.tv)

Here the adverb *actually* has been added between *desirous* and its complement.

10.2.2 *To* infinitive

The *to* infinitive was the second most used sentential complement in the data, but only the third most used complementation pattern when comparing it with all the patterns. There were 17 tokens that featured this pattern:

> 1. We told them that Chief Minister Omar Abdullah appears to be desirous to get the AFSPA revoked but he has his own compulsions […] (GloWbE-PK, http://kashmirwatch.com)

2. He said in fact, the people of Fata were desirous to have equal opportunities for their development and progress and the government was doing its best to come up to their expectations. (GloWbE-PK, http://frc.com.pk)

3. Professionals of various cadres have been invited to deliver awareness lectures to students, desirous to seek council in the field of their interests. (GloWbE-PK, http://www.hazaranation.com)

4. This means that when the heart is desirous to go ahead with the matter regarding which Istikharah is being made […] (GloWbE-PK, http://www.zawaj.com)

The complexity principle would allow for more complexity factors to appear here, as the *to* infinitive pattern is more explicit than the *of + -ing* pattern. However, there was only one token with this complementation pattern, that featured a complexity factor:

5. settling on this kind of quality useful guides millions of individuals are really desirous to know about. (GloWbE-PK, http://www.antijoblessgroup.com)

The complexity factor here is an extraction. As was discussed in the theory section, these kinds of extractions are called topicalization, as the topic is mentioned before a comment on the topic.

10.2.3 *That* clause

This was the rarest sentential complement pattern found in the data, it only appeared in five tokens:

1. Everyone of the tribe was desirous that he should stay with him. (GloWbE-PK, http://www.alislam.org)

2. …while both she and her relatives were desirous that the Prophet should take her for a wife, what hindered the Prophet from marrying her? (GloWbE-PK, http://www.guidedones.com)

3. Every individual of the tribe was desirous that they be the one to receive this honour. (GloWbE-PK, http://www.reviewofreligions.org)

4. He who is desirous that his means of sustenance should be expanded for him or his age may be lengthened, should join the tie of relationship. (GloWbE-PK, http://www.tanzeem.org)

5. The MQM is desirous that miscreants should be discouraged and confrontation between parliament and judiciary should come to an end. (GloWbE-PK, http://lahoreworld.com)

With *that* clauses, there is the option of omitting the complementizer *that*. In the tokens shown above, the *that* has been retained even though there are no insertions or extractions, which means that from that point of view there was no need to keep the complement as explicit as possible.

10.2.4 *Of* + NP

This pattern consisting of the preposition *of* and a noun phrase was the second most used complementation pattern in the data on Pakistani English. It came close to being the most used pattern, as is it was found in 47 tokens and the most frequently used pattern was found in 54 tokens. Below are examples of the pattern in use:

> 1. Abbas Dayiar has cogently summarised the predicament that all those desirous of peace in Afghanistan, and Pakistan, find themselves in. (GloWbE-PK, http://dailytimes.com.pk)
>
> 2. As for the suggestion that Imam Ali (as) was desirous of Khilafat, why shloud he not be when it was his legal right? (GloWbE-PK, http://en.shiapen.com)
>
> 3. And if you are desirous of marriage in some noble family, you name it, and we shall arrange it for you. (GloWbE-PK, http://www.al-islam.org)
>
> 4. So he who amongst you is able to see that and is desirous of water should drink out of that which he sees as fire. (GloWbE-PK, http://www.tanzeem.org)

Taking into consideration the four tokens that had two head nouns altogether there were 51 head nouns in this data set. Seven were concrete, *world*, *progeny*, *persons*, *him*, *things*, *water* and *others*. The rest were abstract nouns, such as *union*, *death* and *respect*. The nouns *Khilafat*, *jihad* and *falah* may at first glance appear to be words not found in the English language, but the first two, *Khilafat* ' The spiritual headship of Islam, residing in the person of the Turkish Sultan' and *jihad* 'A war or crusade for or against some doctrine, opinion, or principle; war to the death' are found in the *Oxford English Dictionary*, which is also where the aforementioned definitions were retrieved from. The meaning of the noun *falah*, on the other hand, was somewhat more challenging to find. In the end, as several Google searches pointed to different websites providing information on Islamic terminology and they all had a relatively similar

definition of *falah*, it was deduced that *falah* means success in Arabic and in Islamic it is linked to following the rules of Islam but can only truly be achieved in the afterlife. All these three nouns were derived from Arabic, so there were no head nouns from Urdu in the data.

10.2.5 Zero complement

One token had the zero complement complementation pattern:

> 1. You saw the army of Sulaiman and felt desirous, but you do not realize that thousands of such armies have no value compared to the word Subhan- Allah. (GloWbE-PK, http://www.islameasy.org)

In this case it could be argued that it can be construed from the rest of the token what the writer is expressing as the object of this person's desire, the army of Sulaiman, but as there is no complement after *desirous* this could also be interpreted so that person felt desirous in general.

10.2.6 Other patterns

Five tokens featured a complementation pattern that was not mentioned in the dictionaries. Three tokens had the pattern *for* + NP:

> 1. …stained with blood, under the toes of the hoofs and feet, desirous for a drink of water, unable to see his family and his children, while I am secure from that all. (GloWbE-PK, http://www.islameasy.org)
>
> 2. how many a servant enters into evening and upon morning yearling for the world and desirous for it, to the extent that he endangers his life and his properties out of craving after it. (GloWbE-PK, http://www.coiradio.com)
>
> 3. The candidates desirous for admission on sport basis, will not be allowed to represent, or play for, or seek employment in any Government! (GloWbE-PK, http://www.gcu.edu.pk)

One token had the pattern *about* + NP:

> 4. Unfortunately the health industry as of late is more desirous about profits as an alternative of health. (GloWbE-PK, http://improveeyesightstories.com)

The last of these new patterns had the form *about* + *-ing*:

> 5. …the system may giving in the past may desirous about getting to know an employee. (GloWbE-PK, http://www.media.futuredeveloper.net)

In the first three examples, it seems that the preposition *of* in the pattern *of* + NP has simply been replaced with the preposition *for*. In the fourth example the same could be argued, except that the preposition *of* has been supplanted with the preposition *about*. The last example contains a few "mistakes", which make understanding it challenging. One interpretation could be that the writer wanted to say that "the system may, given the past, be desirous about getting to know an employee", but this requires altering the original token heavily. The token was however kept in the analysis because the meaning of the complement is quite clear.

10.3 American English

As mentioned, the data for American English was the only data set from GloWbE that needed to be narrowed down, as including all the 391 tokens would have made this data set twice the size of the other data sets. From the random sample of 200 provided by GloWbE, 11 tokens had to be left out of the analysis. Six were discarded because they were duplicates of other tokens. Three were excluded because they had *desirous* as a part of a noun phrase:

> 1. …they need to showcase old songs or music that reminds them of their youth or, at least, a more desirous time in their former years. (GloWbE-US, http://ufocon.blogspot.com)
>
> 2. The Greeks seemed concerned for the self only insomuch as an untamed, desirous self would have no right to rule over others […] (GloWbE-US, http://www.amazon.com)
>
> 3. The critique of capitalism is not that of exploitative, surplus-value-pumping class domination, but of all-pervasive, desirous, gain-seeking across all classes. (GloWbE-US, http://www.arte-fact.org)

> Two tokens were left out because they were unclear:

> 4. …means to correct your long term goals to turn some-more desirous if you're we do quite well. (GloWbE-US, http://www.leanbodylook.com)
>
> 5. …the gates to America are still the most desirous. It would be nice to sense that the President would share the same view (GloWbE-US, http://voices.washingtonpost.com)

The token in example 4 was taken from a website advertising medicine for weight loss. Because the fragment found in GloWbE was somewhat hard to understand, the original website was visited. The website still exists, but the text has been altered so that it does not include the word *desirous* anymore. Example 5 was also looked into further as it claims that an inanimate object is desirous. It came to the corpus from a comment made on an article about Obama instead of coming from prose or other piece of creative writing for example, so it is quite likely that the writer meant to write *desirable* instead of *desirous*. As it was mentioned before, if understanding what is said in the token requires altering the words in the token, the token is left out of the analysis. In table 7 the results of the analysis on American English can be seen

Table 7. The complements of *desirous* in American English.

Complement	Raw frequency	Frequency per million words (ca.)
Of + *-ing*	59	0.23
To infinitive	60	0.24
That clause	5	0.02
Of + NP	56	0.22
Zero complement	4	0.02
Other	5	0.02
Total	189	

10.3.1 *Of + -ing*

This was the second most frequently used pattern in the data and the most used sentential complement. 59 tokens had this as their complementation pattern. Below a few examples are listed:

> 1. …take a firmer approach in dealing with the SOC and other groups in the future that are desirous of organizing large gatherings. (GloWbE-US, http://articles.latimes.com)

> 2. Again, the preamble of the Convention says that the High Contracting Parties are desirous of effecting a settlement in accordance " with modem international law " […] (GloWbE-US, http://www.worldcourts.com)

> 3. …this experience the psalmist had of protection from the Rock in former times made him desirous of being led to it now. (GloWbE-US, http://bible.cc)

> 4. Now compare that to some of the NewsFilter defenders and those who claim that I, being a NewsFilter protester, must necessarily be desirous of censoring to a large degree. (GloWbE-US, http://metatalk.metafilter.com)

> There were three tokens that featured one of the complexity factors examined

here. One token contained an insertion:

> 5. …he was desirous, not of hearing Gorgia display his rhetoric, but of interrogating him concerning the nature of his art. (GloWbE-US, http://www.ancienttexts.org)

Here an element has been inserted between *desirous* and its compliment, which makes the environment more complex. In two tokens, part of the complement had been extracted from its original place to occur earlier in the token:

> 6. Instruct me, then, concerning their origin; inform me where they are, what sort of body, what mind they have, and what is their course of life; for these I am desirous of knowing. (GloWbE-US, http://thriceholy.net)

> 7. …the import of which they themselves were so desirous of understanding. (GloWbE-US, http://bible.cc)

According to the theory, it is more likely that extractions occur with more explicit complementation patterns when there is more than one sentential pattern to choose from. It is

therefore interesting to find extractions here, as this is the least explicit pattern. In both examples the type of the extraction is topicalization.

10.3.2 *To* infinitive

This was the complementation pattern in 60 tokens, which means that it was the most frequently used pattern in this data on American English. This was the only variety in which the number of tokens with *to* infinitive complement was higher than the number of tokens with the *of +* *-ing* complementation pattern, albeit the difference was very small. Here are some examples of the pattern in use in this data:

> 1. The United States of America and her Majesty the Queen of the United Kingdom of Great Britain and Ireland, being desirous to render more effectual the means […] (GloWbE-US, http://avalon.law.yale.edu)
>
> 2. …the admiring thousands who could crowd into Victoria Hall, while thousands, equally desirous to hear, failed to get tickets of admission. (GloWbE-US, http://digital.library.upenn.edu)
>
> 3. He valued the good will of saints, and was desirous to keep up his communion with them. (GloWbE-US, http://www.biblestudytools.com)
>
> 4. It seemed to me that he was desirous to edify me with a specimen of his authority; at any rate the cruelty was horrible. (GloWbE-US, http://docsouth.unc.edu)
>
> In five tokens an insertion was found:
>
> 5. I was desirous especially to learn from them about these matters, namely why the Nile comes down increasing in volume from the summer solstice onwards (GloWbE-US, http://ebooks.adelaide.edu.au)
>
> 6. "If you are desirous" said Merlin, "to honour the burying-place […] (GloWbE-US, http://www.lib.rochester.edu)
>
> 7. …there is nothing men are more desirous of than to have their hearts' lusts […] (GloWbE-US, http://bible.cc)
>
> 8. "If you are so desirous" said he, "to see those little girls, it will be an easy matter to satisfy your wishes. (GloWbE-US, http://wdtprs.com)
>
> 9. Being desirous, however, to proceed regularly rather than radically, these African Methodists sought ordination and consecration through some branch of the Christian Church. (GloWbE-US, http://docsouth.unc.edu)
>
> In five tokens, an extraction had taken place:

10. …varieties of information millions of individuals are really desirous to discover. (GloWbE-US, http://www.economonitor.com)

11. Nowe if the word, which thou art desirous to finde, begin with (a) then looke in the beginning of this table […] (GloWbE-US, http://www.nybooks.com)

12. I saw her, too, several times in her home; meeting, at her Sunday-afternoon receptions, many persons I was desirous to know. (GloWbE-US, http://digital.library.upenn.edu)

13. …kinds of cool information millions of individuals are really desirous to discover. (GloWbE-US, http://theperfectchocolatechipcookie.com)

14. The things that are here referred to , ??????? eis ha- unto which) are those which the prophets were so desirous to understand […] (GloWbE-US, http://bible.cc)

In examples 11 and 14 relativization is the extraction type. At first glance example 11 appeared

to be written some time ago based on the different kinds of verb forms. However, as the token

turned out to be derived from an article "If Shakespeare had been able to Google" the surprising

forms were explained by stylistic choices made by the author. In the remaining three examples

the extractions are topicalizations. Example 14 was not excluded from the analysis, even though

there are some additional characters in the middle of the token that are unintelligible, because

the meaning is still clear. The number of complexity factors found in tokens with this

complementation pattern, ten in total, is not surprising because this is the more explicit

sentential complement than *of + -ing*. *That* clause would of course be an even more explicit

alternative, but it has shown to be a quite rarely used complementation pattern in this data.

10.3.3 *That* clause

In only five tokens *desirous* had a *that* clause complement, making it the rarest sentential

complement:

1. The woman agrees to aid the contractor --- in this particular instance; she is desirous that there should be no unnecessary delays. (GloWbE-US, http://www.exmormon.org)

2. …and why he was so desirous they should know it; one is, the consolation of their hearts. (GloWbE-US, http://bible.cc)

3. …he was very desirous that they should have a true and right understanding of them […] (GloWbE-US, http://bible.cc)

4. …the bill in its present form will be construed as including only those whose labor or service is manual in character, and being very desirous that the bill become a law before the adjournment […] (GloWbE-US, http://supreme.justia.com)

5. I think the media has been very desirous that a black quarterback do well. (GloWbE-US, http://www.snopes.com)

In the second example, the complementizer *that* has been omitted. This makes the sentence slightly more complex, so it would have been surprising if the token had also included an insertion or extraction. None of the other four tokens have insertions or extractions either, even though the *that* has not been omitted.

10.3.4 *Of* + NP

This pattern occurred in 56 tokens, making it the third most used pattern in this data. The following examples illustrate the pattern in use:

1. But, Biden errs in that even Hamas at the very least of the terrorist groups is very desirous of an Obama Presidency, inasmuch as Russia. (GloWbE-US, http://abcnews.go.com)

2. …it seems as though he's desirous of a larger role out from behind Sid and Geno and is willing to bet on himself in the open market next year. (GloWbE-US, http://www.secondcityhockey.com)

3. …unless the parties overseen by such forces are desirous of peace, perhaps the council can assert itself successfully only when the great powers are convinced that their interests are at stake. (GloWbE-US, http://www.answers.com)

4. Certainly, e-commerce sites desirous of a competitive advantage won't want to wait until new rich snippets start appearing before adding new markup to their pages. (GloWbE-US, http://searchengineland.com)

As in the analyses on the other varieties, the head nouns were examined. Eight tokens had two head nouns, making the total number of head nouns in this data 64. In twelve tokens the head noun was concrete, such as *water*, *children*, *king* and *money*. The rest of the nouns were abstract in nature and this group included nouns such as *mercy*, *procreation*, *domination* and *standards*.

The nouns *welfare*, *you*, *peace*, *company*, *honor*, *self-improvement* and *vain-glory* appeared

twice in the data. In addition the nouns *things*, *it* and *liberty* were all found in three tokens.

10.3.5 Zero complement

Four tokens had zero complement as the complementation pattern:

> 1. To your dog, there is only moving from one moment to the next, desirous until death, negative experiences unavoidable and blindly accepted. (GloWbE-US, http://nobadmemes.blogspot.com)
>
> 2. And so I am desirous; but – Lucerne is so very captivating! (GloWbE-US, http://digital.library.upenn.edu)
>
> 3. Thus, if always without desire, one can observe indescribable marvels; If always desirous, one sees merest traces. (GloWbE-US, http://www.bopsecrets.org)
>
> 4. …Constantly be desirous, Whereby to observe where it ends. (GloWbE-US, http://www.bopsecrets.org)

The same point can be made here as in the other zero complement cases: *desirous* without a

complement can be argued to be more related to the "characterized by desire" part of the

definition in the *OED*.

10.3.6 Other patterns

Five tokens included new patterns that had not been mentioned in the dictionaries consulted:

> 1. I was repulsed, yet drawn in closer with each word,each scene of anguish and desperation made me desirous for another. (GloWbE-US, http://goinswriter.com)
>
> 2. I am not indifferent to your fate, and am intensely desirous of both of you making it to heaven. (GloWbE-US, http://barnhardt.biz)
>
> 3. We live in a 2X Obama state. And it is desirous for twelve or sixteen, not just four, more years in Washington. (GloWbE-US, http://pjmedia.com)
>
> 4. …for I was very desirous for them to recommend me to God, and I likewise endeavoured to do so myself. (GloWbE-US, http://digital.library.upenn.edu)
>
> 5. He did not expect to live, as he has done, to see it patronized, where he was
>
> most desirous of its being patronised […] (GloWbE-US, http://constitution.org)

In the first and third example, the pattern appears to be *for* + NP. In the second and fifth example, the pattern seems to be *of* + NP + *-ing*. The fourth example has the pattern *for* + NP + *to* infinitive.

10.4 British English in GloWbE

In the data on British English, the original number of tokens that included the word *desirous* was 177. However, as has been the case with all the data sets from GloWbE, some tokens had to be excluded from the analysis. Seven tokens were removed because they were duplicates of other tokens, one of which had already been removed by GloWbE. Three tokens were too unclear to be kept in the analysis:

> 1. …Subodh Gupta's "Kuwait to Delhi," 2006 that was desirous by a Indian laborers who transport behind and onward between their homeland and their work in a Middle East. (GloWbE-GB, http://www.rowlandsmodernart.com)
>
> 2. His or most recently released workout, Y.A new B.T., is certainly radical one-on-one twelve one week home lessons plan based on actions desirous about this special profits. (GloWbE-GB, http://forums.1337gaming.co.uk)
>
> 3. …an intense one-on-one fourteen week end seductive learning strategy needed for people desirous about most of their outcomes. (GloWbE-GB, http://forums.1337gaming.co.uk)

The website the first token came from no longer exists, but as it is a work of art that is being discussed here, it is possible that the writer meant to write "inspired by" instead of "desirous by". The second and third example come from the same website and that website also no longer exists, so it was impossible to see whether the tokens would have been intelligible in their original context. If they had been kept in the analysis, these two tokens would have featured a new pattern, *about* + NP. One token was left out as the word *desirous* was being examined as a word and there was no complement to investigate:

> 4. The writing itself needed tightening; pretty words ('desirous'?), and linguistic flourishes (GloWbE-GB, http://forbookssake.net)

There were also 11 cases in which *desirous* was part of a noun phrase:

> 5. What emerges most strongly though is Eagleton's desirous curiosity, an unabated inquisitiveness that allows him to reinvigorate tired formulations. (GloWbE-GB, http://www.timeshighereducation.co.uk)

> 6. But what they do not realise is that there had not been anything wrong with the union itself as this had been a desirous aspiration of all Somalis. (GloWbE-GB, http://blogs.fco.gov.uk)

> 7. …it is as if Hamilton tracks the desirous eye in its saccadic jumps across associated forms. (GloWbE-GB, http://newleftreview.org)

> 8. …it also mimes the distracted attention of the desirous viewer-consumer. (GloWbE-GB, http://newleftreview.org)

> 9. …knows of a single charm to which his heart can send forth one desirous or responding movement […] (GloWbE-GB, http://www.theologynetwork.org)

> 10. The idea of substantive marketing is to fly valuable content high enough that desirous potential customers can discover and then inspect the information on their own, and only if they so choose. (GloWbE-GB, http://moustaki.org)

> 11. Mu'awiya was the most desirous person in making use of the critical situations of his enemies. (GloWbE-GB, http://www.najaf.org)

> 12. …collecting Delphic oracles for King Leonidas, from the extremely desirous Pythoness of Delphi. (GloWbE-GB, http://libertarianalliance.wordpress.com)

> 13. …went a long way in creating economic opportunities, reducing poverty and creating the many desirous benefits we take for granted today. (GloWbE-GB, http://pinpointpolitics.co.uk)

> 14. …can't be delivared by hand or can't be felt by a desirous gaze. (GloWbE-GB, http://www.thetruthseeker.co.uk)

> 15. …some of the mba courses which can not be pursued by all desirous students are mba in information systems management, mba infrastructure management, and mba energy trading etc. […] (GloWbE-GB, http://oomph.muirhoward.com)

As was mentioned earlier, using *desirous* as a premodifier goes against what was stated in *The Oxford Advanced Learner's Dictionary*. There were also two cases in which *desirous* had been converted into a noun:

> 16. …Your anger with Your boons and assistance, O one who is the ultimate end of the desirous. (GloWbE-GB, http://www.duas.org)

17. …lead me to Your all encompassing pleasure, by Your love, O the hope of the desirous. (GloWbE-GB, http://www.duas.org)

After the above mentioned omissions had been made, 153 tokens remained for the analysis. In the table below the frequency with which the different complementation patterns appeared in the data is shown

Table 8. The complements of *desirous* in British English in GloWbE.

Complement	Raw frequency	Frequency per million words (ca.)
Of + *-ing*	58	0.23
To infinitive	44	0.17
That clause	3	0.01
Of + NP	38	0.15
Zero complement	3	0.01
Other	7	0.03
Total	153	

10.4.1 *Of* + *-ing*

This pattern was once again the most frequently used one, it appeared in 58 tokens. Below are four examples of tokens that featured this pattern:

1. The oath is: " We declare that we will take part in the Commonwealth Games of (year) in the spirit of true sportsmanship, recognising the rules which govern them and desirous of participating in them for the honour of our Commonwealth and for the glory of sport ". (GloWbE-GB, http://www.thecgf.com)

2. A part of the bourgeoisie is desirous of redressing social grievances, in order to secure the continued existence of bourgeois society. (GloWbE-GB, http://sqapo.com)

3. I can give a month or six weeks' intensive course for those desirous of being charge hands and of taking other positions on the managerial side […] (GloWbE-GB, http://hansard.millbanksystems.com)

4. The Parish Council, after a lapse of over 90 years are desirous of having their own' Official Memorial', despite a petition with nearly 300 signatures against it. (GloWbE-GB, http://www.thisisnottingham.co.uk)

In three tokens an insertion occurred between *desirous* and the complement, making the token more complex:

5. I was very desirous once of sailing on the sea But when I got on the ocean swell I wasn't feeling partic'lar well (GloWbE-GB, http://monologues.co.uk)

6. Gentlemen of good will are desirous, as I am, of creating the conditions which will make possible the building of a better Britain. (GloWbE-GB, http://hansard.millbanksystems.com)

7. …closest possible collaboration in the development of the Arab State and Palestine, and being desirous further of confirming the good understanding which exists between them […] (GloWbE-GB, http://www.peaceforourtime.org.uk)

In two tokens part of the complement had been extracted from its place:

8. it would mean the wholesale displacement of female by male # labour over large branches of industry, and this, we imagine, is not precisely what the advocates of # female suffrage are desirous of effecting. (GloWbE-GB, http://www.spartacus.schoolnet.co.uk)

9. Darwin asked me to take a long walk with him in the Fens, to search for some natural objects he was desirous of having. (GloWbE-GB, http://darwin-online.org.uk)

Both of examples represent topicalization, the topic has been moved to occur earlier in the token. Once again, finding complexity factors in these tokens that feature the most implicit complementation pattern is surprising based on the complexity principle theory.

10.4.2 *To* infinitive

As it has been in almost every data set, the *to* infinitive was the second most frequently used sentential complement. In this data it was found in 44 tokens, here are a few examples:

1. If those statesmen who are so desirous to form relations with Rome, can find comfort in this very peculiar mode of keeping faith, they are abundantly welcome to it. (GloWbE-GB, http://www.freepres.org)

2. Even junkies who will be desirous to improve are not able to successfully engage their cures every time they nonetheless endure the actual coercion to

search for and make use of drug treatments. (GloWbE-GB, http://www.postgraduatetoolbox.net)

3. We are desirous to have a candidate. (GloWbE-GB, http://www.faceofmalawi.com)

4. Be warned however, if you see this film then you will likely leave the cinema desirous to let everyone you love (or even just barely know) how much they mean to you. (GloWbE-GB, http://www.nouse.co.uk)

In only one token an insertion had been added between *desirous* and the complement, which is interesting considering the fact that there were three insertions in the tokens where the more implicit complement *of* + *-ing* had been chosen:

5. …the Roman general, being desirous also to shew his wit, as the historian says, tells him, that perhaps the reason, why he had none of his friends with him, was because he had murdered them all […] (GloWbE-GB, http://www.davidhume.org)

In five tokens an extraction, in which a part of the complement had been moved closer to the beginning of the sentence, had taken place:

6. making a choice on such brilliant useful guides millions of individuals are really desirous to be aware of. (GloWbE-GB, http://www.oskarlin.com)

7. this sort of fabulous issues millions of individuals are really desirous to understand about. (GloWbE-GB, http://www.postgraduatetoolbox.net)

8. and the bill which they were desirous to proceed with contained clauses which would secure to the city of London as efficient a force of that description as it was possible to have. (GloWbE-GB, http://hansard.millbanksystems.com)

9. making a decision on variety of extraordinary useful guides millions of individuals are really desirous to understand about. (GloWbE-GB, http://mediocremum.com)

10. Your XML sitemap is the best place to start as this should contain all the pages on your site that are desirous to index. (GloWbE-GB, http://www.fourthsource.com)

In example eight the extraction type is relativization, the other four cases represent topicalization. In example ten there is probably one "you" missing, as in "this should contain all the pages on your site that you are desirous to index". It is impossible not to notice that examples six, seven and nine appear quite similar in form. They are not duplicates and were

therefore not left out of the analysis, but there seems to be a "pattern" which has been used to build these sentences. A few similar tokens were found in other varieties as well, but as they were not duplicates either and as all these tokens have come from different websites, they were left in the analysis.

10.4.3 *That* clause

The least frequently used sentential complement was once again *that* clause. It was the chosen complementation pattern in three tokens:

> 1. I am desirous that they should have the opportunity of recording their votes. (GloWbE-GB, http://hansard.millbanksystems.com)
>
> 2. But if he dreaded exposure of his tenderness, he was equally desirous that all men should recognise his justice […] (GloWbE-GB, http://www.cleavebooks.co.uk)
>
> 3. She is desirous that there would come an extension of the Lord's mercy to them and that their future prospects would be bright and blessed v9. (GloWbE-GB, http://ernestanderson.wordpress.com)

In all three cases the complementizer *that* has been retained and none of the examples contain insertions between *desirous* and the *that* complement or extractions. This complementation pattern is the most explicit one of sentential complementation patterns, and therefore according to the theory the use of insertions and extractions would have been quite natural.

10.4.4 *Of* + NP

The pattern *of* + noun phrase was found in 38 tokens, here are four examples of the pattern in use:

> 1. The replacement of an army of ill paid on the job foot slogging trainees with a few expensive graduates, too posh to knock on doors but all desirous of a moral crusade and a byline; is what has driven the decline. (GloWbE-GB, http://www.4liberty.org.uk)
>
> 2. Not because they are ignorant nor desirous of sophistry but because they are insincere […] (GloWbE-GB, http://www.theinquirer.net)

3. …to join the Hoi polloi of Europe and surrender its (debatably) superior financial position, while desirous of the advantages of the Union itself. (GloWbE-GB, http://www.guardian.co.uk)

4. At least I won't have to find house-room for these gifts, because he's also desirous of "a garden observatory " in which to use them. (GloWbE-GB, http://youngbyname.me)

As can already be seen from the first example, this data also included tokens with two head nouns. Altogether there were three such cases, making the number of head nouns examined 41. Eight of these could be characterised as concrete: *money*, *belongings*, *food*, *women*, *flesh*, *world*, *things* and *observatory*. The remaining nouns are abstract nouns like *wealth*, *assurance*, *sophistry* and *openness*. The nouns *sex* and *things* were found in two tokens.

10.4.5 Zero complement

In this data, there were three cases of zero complement:

1. One evening when she was feeling particularly desirous, and he was, as usual, watching television, she took a shower […] (GloWbE-GB, http://www.manwalksintoajoke.com)

2. …a triple cargo of triremes, passing shadow, silver dishes, salvers, unlike any known in the orient, defined, desirous, triple-headed, and all alike; but still a rural scene, a sweet especial rural scene. (GloWbE-GB, http://dkozubei.com)

3. How expectant and desirous am I when people, while steeped in negligence, do not (seek to) return (to Me). (GloWbE-GB, http://zaytun.org)

As it has been suggested in the previous sections on zero complement, here as well one explanation for the fact that there is no complement could be that the subject are not desirous of something specific but are "characterised by desire" as it was stated in the *OED*.

10.4.6 Other patterns

Seven tokens featured patterns that were not mentioned in the dictionaries consulted

1. Be desirous for the One who is absolute in the embellishment of His praise, and is absolute in the tarnishment of His vilification. (GloWbE-GB, http://sunnahonline.com)

2. It is incumbent upon the sensible person that he is not desirous, except for one of three things […] (GloWbE-GB, http://salaficentre.com)

3. They reply: then they would have been even more desirous, eager and keen for it. (GloWbE-GB, http://forums.islamicawakening.com)

4. …that when the servant is steeped in forgetfulness and sin Allah is very desirous and expectant for his return to Him. (GloWbE-GB, http://zaytun.org)

5. Why, suddenly, are we as a culture so seemingly desirous, if not downright thirsty, for an infusion of musicals at the cinema? (GloWbE-GB, http://whatculture.com)

6. The Japanese and the Taiwanese and the Koreans are very desirous of us having the top stars, whether it's Lady Gaga or whoever. (GloWbE-GB, http://www.tcs.cam.ac.uk)

7. Nonetheless, internet marketers desirous regarding employing NBC about Thanksgiving Evening (GloWbE-GB, http://chronicles.mikericcioni.com)

In the second example an insertion has been added between *desirous* and the complement. In the third example the choice of complement may have been motivated by the word *keen*. In examples one to five the pattern appears to be *for* + NP which is very similar to the pattern *of* + NP. The pattern in example six could be described as *of* + NP + *-ing* and the pattern in the last example is *regarding* + *-ing*.

10.5 British English in CLMET3.1

As was mentioned earlier, this data was narrowed down from over 1000 tokens to a set of little over 200 tokens. This was the only data set that did not come from GloWbE and perhaps due to the different methods these two corpora have been assembled, there was quite a difference in the number of tokens that had to be excluded from the analysis. Only one token had to be left out from the data retrieved from CLMET3.1. It had to be removed because it was a duplicate of another token:

1. …started from her seat, and seemed desirous to avoid him) ' do n't […] (Lennox 1762, *Sophia*)

As has been the case with almost all duplicates found in the different data sets, here as well there was only slight difference in the characters used: in the other token, there is no """" before

"do n't". After narrowing the number of tokens and then removing this one duplicate, there were 216 tokens left for the analysis. The results of the analysis are shown in the table below

Table 9. The complements of *desirous* in British English in CLMET3.1.

Complement	Raw frequency	Frequency per million words (ca.)
Of + *-ing*	99	2.88
To infinitive	83	2.41
That clause	12	0.35
Of + NP	19	0.55
Zero complement	1	0.03
Other	2	0.06
Total	216	

10.5.1 *Of* + *-ing*

This was the most frequently used complementation pattern in the data as it was found in 99 tokens. Here are examples of the patterns in use in this data set:

> 1. Her desolate Father was desirous of attending the Funeral, but, on my Knees, I dissuaded him from it […] (Brooke 1765-70, *The fool of quality*)
>
> 2. …but his obsolete right could only be used as an instrument of sedition: the nation was desirous of restoring the simplicity of the constitution […] (Gibbon 1776, *The decline and fall of the Roman Empire*)
>
> 3. I am at the same time desirous of coming to some decision on the affair in question […] (Austen 1796-1817, *Letters to her sister*)
>
> 4. …desirous of seeing Everard in a nobler light than hitherto, she endeavoured to regard his scruple against formal wedlock as worthy of all respect. (Gissing 1893, *The Odd Women*)

Three insertions, that occurred between *desirous* and the complement, were found in this data:

5. So steady, so uniform in your conduct : so desirous, as you always said, of sliding through life to the end of it unnoted […] (Richardson 1741, *Letters written to and for particular friends*)

6. Since the loss of poor Lady Suffolk, I am more desirous than ever of having you in my neighbourhood, as I have not a rational acquaintance left. (Garrick 1774, *A Christmas tale*)

7. He was desirous, therefore, of doing something in the course of the present session […] (Clarkson 1839, *The History of the Rise, Progress and Accomplishment of the Abolition of the African Slave-Trade, by the British Parliament*)

There were also five extractions in total in tokens with this complementation

pattern:

8. That this bill, as it now stands, will produce a large revenue to the government, but no reformation in the people, is asserted by those that oppose, and undoubtedly believed by those who defend it; but as this is not the purpose which I am most desirous of promoting, I can not […] (Johnson 1740-41, *Parliamentary debates*)

9. …edging in for the land, having the Advantage of a fresh Gale at North, which I was desirous of making the most of, and by that means […] (Cook 1768-71, *Captain Cook's journal during the first voyage round the world*)

10. …he actually put in practice what at one of these meetings he was desirous of recommending to others. (Clarkson 1839, *The History of the Rise, Progress and Accomplishment of the Abolition of the African Slave-Trade, by the British Parliament*)

11. …as if to counteract this prejudice in the mind of one whose confidence he might be desirous of obtaining, he recommended to him the study of Paley 's Moral Philosophy. (Cary 1846, *Lives of English Poets*)

12. This vacancy Cullen and Smith were desirous of seeing filled up by the translation of Smith from the Logic to the Moral Philosophy chair […] (Rae 1895, *Life of Adam Smith*)

The first two examples are cases of relativization and the last three represent topicalization. As has been stated already, according to the complexity principle it is surprising to find insertions and extractions here as there are more explicit alternatives available.

10.5.2 *To* infinitive

This complementation pattern was also frequently used in this data, it was found in 83 tokens.

Below four examples are given of the pattern in use:

1. Yet, once more am I desirous to try what the Force of a Letter will do with one who has not suffer'd mere Words to have any Effect upon him. (Richardson 1741, *Letters written to and for particular friends*)

2. …and though desirous to preserve the peace, able and ready to defend themselves against the efforts of all aggressors. (Johnson 1740-41, *Parliamentary debates*)

3. He received me, with an air of dignity and respect, but clouded with a reserve, which made it disagreeable, and seemed desirous to confine his conversation to general questions […] (Johnstone 1774, *The history of Arsaces, Prince of Betlis*)

4. Strange faces of pale men, with dark glaring eyes, peered into the inner darkness, and seemed desirous to ascertain if her father was at home. (Gaskell 1848, *Mary Barton*)

There were five insertions between *desirous* and the complement in tokens that

featured this complementation pattern:

5. …you are desirous, I believe, to terrify me out of the little senses I have left. (Fielding 1751, *Amelia*)

6. Desirous, however, to shorten the period of Delvile 's uncertainty, she would not wait till the time she had appointed to see his mother […] (Burney 1782, *Cecilia*)

7. …he is very desirous, therefore, to know what are your intentions, for your continuing to be called Miss Beverley, as if still single, leaves him quite in the dark […] (Burney 1782, *Cecilia*)

8. To this the captain consented, having no confidence in Kurile Alexei as an interpreter, and being desirous himself to gain some knowledge of Japanese. (1852, Chambers's Edinburgh journal, n∞418-462)

9. Assuming the propriety of discarding all reference to the etymology of words, when engaged in spelling them, and desirous, as a philological reformer, to establish a truly British language […] (1852, Chambers's Edinburgh journal, n∞418-462)

There were also seven tokens with extractions:

10. All my fear is, that, as he knows I am in disgrace with a family whose esteem he is desirous to cultivate; and he has obligations […] (Richardson 1748, *Clarissa*)

11. He ascribed the measures which Mr Blifil was desirous to take to Christian motives […] (Fielding 1749, *The history of Tom Jones, a foundling*)

12. …many solicitations respecting the agreeable quadrupeds which he was desirous to send to the baronet, at a moderate price […] (Cottle 1847, *Reminiscenses of Samuel Taylor Coleridge and Robert Southey*)

13. …had brought him a Persian history of Nadir Shah in manuscript, which he was desirous to have translated from that language into the French. (Cary 1846, *Lives of English Poets*)

14. …no small share of his final reconversion was attributable to that zeal and powerful genius, and to his great desire that others should become sharers in his owns requirements, which he was so desirous to communicate. (Gillman 1838, *The Life of Samuel Taylor Coleridge*)

15. …a distant relation of the deceased Colonel 's, lived about fifty miles from York, and could, in all probability, better than any one, afford Walter those farther particulars of which he was so desirous to be informed. (Bulwer-Lytton 1832, *Eugene Aram*)

16. …the consequence of assembling the army, which, by the motion now under our consideration, some of your lordships seem desirous to disband, an inclination of which I can not discover from whence it can arise. (Johnson 1740-41, *Parliamentary debates*)

The first example is a case of topicalization, the rest can be characterized as relativizations. Once again, complexity factors found in tokens with the *to* infinitive complementation pattern follow the complexity principle, and they do outnumber similar tokens found with the *of + -ing* pattern.

10.5.3 *That* clause

This complementation pattern was once again the least frequently used sentential complement in the data, but there were still 12 tokens in the data in which this pattern had been chosen. Below are examples of the data in use:

1. …occasioned by the earnest request of alderman Yeats of Bristol , who having a son at the same school , was desirous that Mr. Oldham should be his companion […] (Cibber 1753, *The lives of the poets of Great Britain and Ireland*)

2. I am desirous that my Lord Fitz-Owen should be sent for , and that he may hear his brothers confession […] (Reeve 1777, *The old English baron*)

3. …those parents who from vanity or whatever other motive are desirous that their offspring should be devoted to some liberal profession […] (Godwin 1831, *Thoughts on Man*)

4. He was desirous that Maltravers should learn nothing till the vows had been spoken, and the indissoluble chain forged. (Bulwer-Lytton 1838, *Alice*)

The complementizer *that* had been omitted in three tokens:

5. Well , well , says she ; as he seems very desirous you should not stay, I hope it is from a good motive […] (Pope 1733-34, *An essay on man*)

6. Which however, he seems desirous his Reader should receive as a Part of the Saying of his ancient Sage […] (Brown 1751, *Essays on the Characteristics*)

7. …his grandson's happiness was undoubtedly his principal object; and he was desirous the match might be concluded before his own death […] (Walpole 1735-69, *Letters*)

Example six is interesting as the complementizer *that* has been omitted even though an extraction in the form of relativization seems to have taken place, making the token more complex. In one token an element had been inserted between *desirous* and the complement:

8. I was very desirous, for your sake, as well as for my own, that you should have it to say that we did not correspond […] (Richardson 1748, *Clarissa*)

Complexity factors occurring in tokens with this complementation pattern are to be expected according to the complexity principle, especially since the complementizer *that* has not been omitted in this token.

10.5.4 *Of* + NP

This complementation pattern was found in 19 tokens. Below four examples of this pattern in use are given:

1. … he must needs say , he was the more desirous of this alliance […] (Richardson 1748, Clarissa)

2. …had exchanged some trifles with a people of an enormous size, who, nevertheless, appeared to be good natured, and desirous of peace. (David 1773-74, *An historical account of all the voyages round the world, performed by English navigators*)

3. But the bride objected with great vehemence to such precipitation, being desirous of her mother's presence at the ceremony […] (Smollett 1751*, The adventures of Peregrine Pickle*)

4. I knew him first, many years ago, when he was desirous of my acquaintance; but he was too poetical for me […] (Scott 1825-32, *The journal of Sir Walter Scott*)

In contrast to the other data sets, there were no tokens in this data with two head nouns in the complement. Therefore the number of head nouns examined was 19. In this data set as well, the head nouns were mostly abstract, concrete nouns were found in only four tokens. The abstract head nouns were nouns such as *peace*, *truth*, *completion* and *support* and the concrete nouns were *flesh*, *them*, *whiff* and *things.* Only one noun occurred more than once in this data, the noun *opportunity*, which was found in two tokens.

10.5.5 Zero complement

In one token the complementation pattern was zero complement:

> 1. She seeing me resolute, and lighting from my Horse; Well Sir, seeing you are so desirous (said she) I'll go and bring it to you. (Chetwood 1726, *The voyages and adventures of captain Robert Boyle*)

Here the explanation that the person is generally desirous in nature does not apply as what the person is desirous of has been revealed earlier in the text (to see a child whose wellbeing the person is worried about).

10.5.6 Other patterns

Two tokens featured a pattern that had not been mentioned in the dictionaries consulted for the theory part:

> 1. Since we have left Ulietea Tupia hath been very desirous for us to steer to the Westward, and tells us if we will go that way we shall be with plenty of Islands […] (Cook 1768-71, *Captain Cook's journal during the first voyage round the world*)
>
> 2. Also to get well rid of a sort of hectic in the blood, which the woman's beauty cast on that reflecting tide: a fever-sign, where the fever has become quite emotionless and is merely desirous for the stain of it to be washed out. (Meredith 1895, *The Amazing Marriage*)

In both of these tokens the pattern used appears to be *for* + NP + *to* infinitive.

11. Discussion

In the previous section, the tokens of each data set were analyzed, and the findings reported. Here the results of those analyses are discussed, comparing the results of the different data sets. In order to be able to do this in a consistent manner, this discussion section is divided into parts where the individual complementation patterns are discussed. The order in which the patterns are discussed will be the same as it was in the previous section: first the sentential patterns are discussed, starting from the most implicit one and moving to the most explicit one. Then the results of the non-sentential patterns are discussed and lastly the new patterns will be compared across data sets. To facilitate drawing comparisons between different data sets, the percentages were added to the tables. The percentages were rounded to the nearest decimal.

11.1 *Of + -ing* in different varieties

In the following table the frequencies of the *of + -ing* complementation pattern in the data sets is demonstrated

Table 10. Frequencies of the pattern *of + -ing*

Data set	Raw frequency	Percentage of tokens (ca.)
Indian English (GloWbE)	87	54.7
Pakistani English (GloWbE)	54	41.9
American English (GloWbE)	59	31.2
British English (GloWbE)	58	37.9
British English (CLMET3.1)	99	45.8

This was the most frequently used pattern in all other data sets except for American English and in that data set the difference to the most frequently used complementation pattern (*to* infinitive, found in 60 tokens) was only one token. As we can see from the table, the percentages

vary between 31,2 % in American English and 54,7 % in Indian English. It was stated in the theory section that this pattern is more implicit than the other sentential complementation patterns available as complements for *desirous* and therefore it was assumed that those other patterns would be favoured in more complex environments. A few insertions and extractions were however found in tokens that featured this complementation pattern. To what degree the complexity principle was followed in general in this data is discussed later in this section.

11.2 *To* + infinitive in different varieties

The table below illustrates the frequency of the *to* infinitive complementation pattern in the data sets

Table 11. Frequencies of the pattern *to* + infinitive

Data set	Raw frequency	Percentage of tokens (ca.)
Indian English (GloWbE)	26	16.4
Pakistani English (GloWbE)	17	13.2
American English (GloWbE)	60	31.7
British English (GloWbE)	44	28.8
British English (CLMET3.1)	83	38.4

This was the most frequently used pattern in American English, the second most common pattern in British English, in both the data sets from GloWbE and from CLMET3.1, and the third most used complementation pattern in Indian English and Pakistani English. In the case of this pattern the percentages ranged between 13,2 % in Pakistani English and 38,4 % in British English from CLMET3.1. This pattern was the one that according to the complexity principle should have been favoured, as well as *that* clauses, in environments featuring extractions or insertions.

11.3 *That* clause in different varieties

The following table shows the frequency of the *that* clause complementation pattern in the different data sets

Table 12. Frequencies of the pattern *that* clause

Data set	Raw frequency	Percentage of tokens (ca.)
Indian English (GloWbE)	4	2.5
Pakistani English (GloWbE)	5	3.9
American English (GloWbE)	5	2.6
British English (GloWbE)	3	2.0
British English (CLMET3.1)	12	5.6

This pattern was clearly the least frequently used one out of the three sentential complements. It was in shared fourth place with the new patterns in Pakistani English and in American English. It was also the fourth most common pattern in British English from CLMET3.1 and in Indian English. In British English from GloWbE it was the fifth most common pattern, having been overtaken by new patterns.

11.4 *Of* + NP in different varieties

The table below serves to depict the frequency of the *of* + NP complementation pattern in the different data sets

Table 13. Frequencies of the pattern *of* + NP

Data set	Raw frequency	Percentage of tokens (ca.)
Indian English (GloWbE)	38	23.9
Pakistani English (GloWbE)	47	36.4

American English (GloWbE)	56	29.6
British English (GloWbE)	38	24.8
British English (CLMET3.1)	19	8.8

This was the second most common complementation pattern in Indian English and Pakistani English. In the other three varieties it was in third place. Looking at the table above and the column on percentages, British English from CLMET3.1 somewhat stands out from rest. In the other varieties the percentages is well above 20, even over 30 in Pakistani English, whereas in British English from CLMET3.1 the percentage is only 8,8, so below 10 %.

Some head nouns appeared in several data sets. 20 different head nouns were found in two different varieties, for example the nouns *marriage* (Indian English and Pakistani English), *money* (British English from GloWbE and American English) and *support* (British English from GloWbE and CLMET3.1). Four nouns were featured as head nouns in three varieties: *change* (Indian English, British English and Pakistani English), *it* (Indian English, American English and Pakistani English), *advantages* (British English, Pakistani English and American English) and *world* (British English, Pakistani English and American English). Three nouns appeared in four varieties: *life* (Indian English, British English, Pakistani English and American English), *peace* (Pakistani English, American English, British English from CLMET3.1 and from GloWbE) and *things* (Pakistani English, American English, British English from CLMET3.1 and from GloWbE). No noun appeared as a head noun in all five data sets.

11.5 Zero complement in different varieties

The last complementation pattern established in the theory section was zero complement. In the following table the frequency with which the pattern appeared in the data sets is illustrated

Table 14. Frequencies of the pattern zero complement

Data set	Raw frequency	Percentage of tokens (ca.)
Indian English (GloWbE)	3	1.9
Pakistani English (GloWbE)	1	0.8
American English(GloWbE)	4	2.1
British English (GloWbE)	3	2.0
British English (CLMET3.1)	1	0.5

This was the fifth most frequently used pattern in Indian English, Pakistani English, American English and in British English from GloWbE (shared fifth place with *that* clause complements). In British English from CLMET3.1 this was the least frequently used pattern and was therefore in sixth place. Looking at the percentages it can be noted that this pattern never appeared in more than 2,1 % of the tokens, which is significantly lower than the frequencies of the other non-sentential complementation pattern, *of* + NP.

11.6 The other patterns in different varieties

The table below presents the frequencies of the other complementation patterns found in the data:

Table 15. Frequencies of the new patterns

Data set	Raw frequency	Percentage of tokens (ca.)
Indian English (GloWbE)	1	0.6
Pakistani English (GloWbE)	5	3.9
American English (GloWbE)	5	2.6
British English (GloWbE)	7	4.6
British English (CLMET3.1)	2	0.9

This "pattern" was the least frequently used one in Indian English and in British English from GloWbE, although in the latter it shared the last place with *that* clause pattern. In Pakistani English, American English and British English from CLMET3.1 new patterns were more frequently used than the zero complement pattern and in Pakistani English and American English new patterns were used as often as the *that* clause complementation pattern.

As can be seen from the table above, there were 20 tokens in total that featured a new complementation pattern. Interestingly, new patterns in every variety included the preposition *for*. The pattern *for* + NP was the most frequently used one of the new patterns, it appeared altogether in 10 tokens and in three varieties (Pakistani English, American English and British English from GloWbE). The patterns *of* + NP + *-ing* and *for* + NP + *to* infinitive both appeared in three tokens. The remaining four patterns appeared only in one token each and therefore it is quite likely that they were mistakes rather than actual new patterns. Those four patterns are: *for* + NP + *that* clause, *about* + NP, *about* + *-ing* and *regarding* + *-ing*.

In the theory section a tendency called horror aequi, the tendency to avoid using similar structures or elements in close succession, was introduced as it could be a motivator for new complementation patterns. In altogether four cases, horror aequi could be argued to have influenced the choice of complement. Those four cases are:

> 1. …stained with blood, under the toes of the hoofs and feet, desirous for a drink of water, unable to see his family and his children, while I am secure from that all. (GloWbE-PK, http://www.islameasy.org)
>
> 2. Unfortunately the health industry as of late is more desirous about profits as an alternative of health. (GloWbE-PK, http://improveeyesightstories.com)
>
> 3. It is incumbent upon the sensible person that he is not desirous, except for one of three things […] (GloWbE-GB, http://salaficentre.com)
>
> 4. Why, suddenly, are we as a culture so seemingly desirous, if not downright thirsty, for an infusion of musicals at the cinema? (GloWbE-GB, http://whatculture.com)

In all these cases the pattern *of* + NP could have been used but that would have meant having at least two adjacent structures with the preposition *of*. The first two examples come from the Pakistani English data set and the last two were found in the British English data set from GloWbE.

11.7 Other remarks

In the theory section the complexity principle was introduced. In the analysis of the data the accuracy of the principle was examined concerning insertions occurring between *desirous* and the complement, and extractions. According to the theory, in tokens where one of these two complexity factors is present, a more explicit complement should be favoured. As *that* clause as a complementation pattern turned out to be rather rare in the data, this developed into a comparison between the patterns *of* + *-ing* and *to* infinitive. As there really are no alternatives to the non-sentential patterns *of* + NP and zero complement, they were excluded from this part of the analysis, although the two complexity factors were present in tokens with the complementation patter *of* + NP as well. Extractions and insertions were rare in Indian English and Pakistani English. In Indian English one extraction and one insertion were found and they both occurred with the *to* infinitive pattern, meaning that they followed the principle. Pakistani English also had one insertion and one extraction. The former was found surprisingly in an *of* + *-ing* complement but the latter was a part of a *to* infinitive complement.

These complexity factors were more prominent in the other three data sets. The tables below show that the complexity principle was mostly followed but not always. Percentages, again rounded to the nearest decimal, are provided in parenthesis to aid in comparing the results.

Table 16. Complexity factors in American English

Complement	Insertions	Extractions
Of + *-ing*	1 (14.3%)	2 (28.6%)
To infinitive	6 (85.7%)	5 (71.4%)

In the data on American English the complexity principle was mostly obeyed, out of the seven cases of insertions all but one were found in tokens with the more explicit *to* infinitive complement. The situation was quite similar concerning extractions, out of the seven tokens that featured an extraction five were found in the more explicit complements and two in the more implicit alternative.

Table 17. Complexity factors in British English from GloWbE

Complement	Insertions	Extractions
Of + *-ing*	3 (75%)	2 (28.6%)
To infinitive	1 (25%)	5 (71.4%)

Here the situation is identical to American English in regard to extractions: in five tokens the complementation pattern was *to* infinitive and in two *of* + *-ing*. Observing the insertions however, we can see that complexity principle has not been adhered to as three of four insertions appeared in the more implicit alternative. In one of these three cases a possible explanation for why the more implicit pattern was chosen could the reification mentioned by Bolinger in the theory part. When examining the token

> 1. I was very desirous once of sailing on the sea But when I got on the ocean swell
> I wasn't feeling partic'lar well (GloWbE-GB, http://monologues.co.uk)

it could be argued that the *of* + *-ing* complement has been chosen because the action denoted by the token is in the past and the *to* infinitive was mentioned to be more imaginative and refer

to possible events. The *-ing* form on the other hand can be used to refer to something that has actually happened.

Table 18. Complexity factors in British English from CLMET3.1

Complement	Insertions	Extractions
Of + *-ing*	3 (37.5%)	5 (41.7%)
To infinitive	5 (62.5%)	7 (58.3%)

In this data set the complexity principle was not as clearly followed as in American English for example. This can be seen from the percentages: in the case of insertions, over a third of them occurred in the more implicit complement. The percentage is even higher in extractions, over 40 % of them appeared in tokens with the *of* + *-ing* complement pattern.

A peculiarity in the data, though it does not affect complementation, is briefly mentioned here. In the section on *desirous* in dictionaries it was mentioned that *desirous* "does not occur before a noun", e.g. it is not used attributively, as is stated in the *Oxford Advanced Learner's Dictionary*. It is therefore interesting that tokens, in which *desirous* was part of a noun phrase, appeared in all data sets except in British English from CLMET3.1. The amounts ranged from the two instances in the data on Indian English to 11 in British English from GloWbE.

The reliability of this study must also be discussed. There are naturally factors that may have distorted the results in some way. Some of them may be due to the writer, I may have analysed a complement in a different way someone else would have or not noticed a duplicate, a complexity factor or horror aequi at work. To minimize the effect of these kinds of mistakes, the data was analysed twice. Factors unrelated to the writer may also have had a negative impact on the results. As was mentioned earlier, the Corpus of Global Web-Based

English is comprised of 1,8 million web pages from 20 different English-speaking countries, which made it the appropriate corpus for this study. However, due to the nature of the corpus, being comprised of web pages, it is impossible to be absolutely certain that a token was actually written by a person representing that variety of English. For example, religion seemed to be a popular theme in the data, especially Islam and Christianity. In some token, the writer could just have been quoting already existing religious texts, which means that they themselves have not produced the sentence.

In the theory part the notion that the *-ing* form might be taking over at the expense of the *to* infinitive was mentioned. Comparing the results of the data set from CLMET3.1 with those from GloWbE, it is hard to see anything definite. The British English data set from CLMET3.1 did have the highest percentage of *to* infinitive complements (38.4%) but it did also have the second highest percentage of *of* + *-ing* complements. There is a significantly higher amount of *of* + *-ing* complements in Indian English and Pakistani English than *to* infinitive complements but on the other hand in the data set on American English there were more *to* infinitive complements than *of* + *-ing* complements. Also, the remark made by Khan that adjectives in Pakistani English would favour *to* infinitive instead "a preposition and participle clause as in BrE" (2012, 94) was not supported by this data as the complementation pattern *of* + *-ing* appeared in 41,9% of the tokens and *to* infinitive in 13.2% of the tokens in Pakistani English.

van Gelderen mentioned that Indian English and Pakistani English are similar. Though she did not state how exactly, these two varieties did appear closer to one another in some respects than to the other varieties. In both data sets the percentage of *to* infinitive complements was well below 20 %, whereas in other varieties it was at least almost 30 %. They were also similar in the sense that they did not feature many extractions or insertions.

12. Conclusion

In the introduction, three research questions were set. The first one concerned the five already established complementation patterns for *desirous* and whether they were present in all the data sets. They were but there were significant differences in the frequencies with which they appeared: the frequency of the *of* + *-ing* complement was never under 30 %, whereas the frequency with which zero complement was chosen was never over 3 %. In general, it could be said that three of the five established patterns, *of* + *-ing*, *to* infinitive and *of* + NP, were quite in a league of their own, as they always made up at least 91 % of the tokens.

The second research question concerned the complexity principle and the horror aequi tendency and whether they can be seen having an impact on which complementation pattern was chosen. The complexity principle was mostly followed, but the degree to which it was followed varied. Horror aequi may have influenced the use of a new pattern in some cases, as the preposition *of* was replaced with another preposition in four cases where another structure with the preposition *of* was near.

The final research question set for this study involved possible new patterns. As has already been mentioned, there were indeed new complementation patterns in all the data sets. The ones that only occurred once may have to be interpreted as mistakes but there were also patterns that appeared several times. The most prolific one was *for* + NP, which was found in 10 tokens. The patterns *of* + NP + *-ing* and *for* + NP + *to* infinitive were both present in three tokens. It is also worth noting, that the percentage of new patterns was higher than that of zero complement in all data sets except for Indian English.

It would be interesting to see whether similar kinds of results would appear in the complementation of more frequently used adjectives or verbs in these varieties. As was stated earlier based on the *OED* entry, *desirous* can be seen as a "distinctly educated" word. A

somewhat surprising "finding" was the degree with which the rule about *desirous* not occurring as a part of a noun phrase was violated. As the rule was broken in every data set, and in many sets several times, it would be interesting to examine this further.

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