

**The Complementation Patterns of the Adjective *Anxious***  
**from the 18<sup>th</sup> to the 20<sup>th</sup> Century**

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## Tiivistelmä

Tässä pro gradu -tutkielmassa tarkistetaan adjektiivin *anxious* komplementaatiota ja merkityksiä brittienglannissa 1710-luvulta 1990-luvulle. Tavoite on selvittää, mitä komplementteja adjektiivi *anxious* valitsee, ja tutkia niiden erilaisien kuvioiden merkityksiä. Lisäksi tutkitaan diakroonista vaihtelua adjektiivin komplementaatioissa ja sen mahdollisia syitä viime vuosisatojen aikana.

Pro gradun tutkimuksellinen lähtökohta on korpuslingvistiikka. Teoreettinen viitekehys ottaa huomioon erilaisia kielitieteellisiä lähestymistapoja, esim. valenssiteoria ja *Government and Binding* -teoria. Myös komplementaatiota ja kielivaihtelua koskevia teorioita ja hypoteeseja esitellään. Lisäksi tarkastellaan *anxious*-adjektiiviin liittyviä semanttisia ja kieliopillisia ominaisuuksia erilaisissa peruskielioppi- ja sanakirjoissa, mm. *A Comprehensive Grammar of the English Language* ja *The Oxford English Dictionary*.

Toisessa osassa analysoidaan yhteensä 680 komplementaatiotapausta. Aineisto on kerätty kahdesta korpuksista, CLMETEV ja BNC. Koska CLMETEV:ssä on koottu kielellistä materiaalia 1710-luvulta lähtien, se antaa mahdollisuuden myös komplementaatiomuutosten diakrooniseen vertailuun. Analyysissä huomioidaan kieliopillisia, varsinkin syntaktisia ominaisuuksia, jotka yhdistetään teoriaosassa mainittuihin tekijöihin.

Tutkimuksen päätavoitteen kannalta tärkein havainto on se, että adjektiivin yleisin komplementti, *to*-infinitiivi, väheni tutkimuskohteena olleella ajanjaksolla. Sen sijaan adjektiivin käyttö ilman komplementtia lisääntyi, ja sitä käytetään nykyajan englannissa enemmän kun koskaan ennen.

Lisäksi voidaan osoittaa, että *The Great Complement Shift* -ilmiö ei vaikuta *anxious*-adjektiiviin. Sen sijaan voidaan havaita *Complexity*-periaatteen aiheuttamia vaikutuksia, mm. *that*-sivulauseen käyttöä *to*-infinitiivin komplementin tilalla silloin, kun sivulauseella on oma subjekti. Myös monimutkaisuutta lisääviä tekijöitä (*complexity factors*) oli havaittavissa eksplisiittisemmissä komplementeissa.

Asiasanat:

adjektiivi, *anxious*, komplementaatio, korpuslingvistiikka

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## 1. Introduction

The following examples, taken from the *British National Corpus*, represent a few instances of complementation which can be found with the adjective *anxious*:

- (1) She was *anxious* that Swire Sugden should not be allowed to spread himself around like a malignant tumour.
- (2) Rose was *anxious*, feeling that he had lived in the stone house with too much responsibility for too long.
- (3) We were like western liberals tiptoeing round Stalin's Russia, *anxious* to find it good, afraid to find fault.

These sentences exemplify a few of the complements the adjective *anxious* can appear with: a *that*-clause in (1), without a complement in (2) and with a *to*-infinitive in (3). Together with the adjective these constructions form *patterns of complementation*. The meanings of *anxious* are not synonymous in the examples. In (1) it could be replaced by *be concerned with*, in (2) it has the meaning of *being worried* and (3) can be interpreted as *desirous*. One purpose of this thesis is to explore possible interdependencies between the meaning of *anxious* and the complements it is used with. This aim will be pursued by consulting several dictionaries and grammars as well as by analysing authentic data from the Corpus of Late Modern English Texts (extended version) and the British National Corpus.

A second interest of this thesis concerns the diachronic aspect of language variation. The corpus data under investigation, written British English covering a period of approximately 280 years, from the early 18<sup>th</sup> century to the late 20<sup>th</sup> century, permits hope for the detection of changes.

The research questions I want to investigate are the following:

1. What kind of complements does the adjective *anxious* select?
2. What senses are related to the complementation patterns of *anxious*?

3. In what way do the complementation patterns of *anxious* change in the time span from the early 18<sup>th</sup> century to the late 20<sup>th</sup> century?
4. To what extent do the changes in complementation interact with the theories outlined in the theory part of this thesis like the Great Complement Shift, the Complexity Principle or the *horror aequi* effect?

Why should such research be conducted? The reasons are numerous. The investigation of a word's complementation contributes to the clarification of the structures of the English language. This in turn is of interest to a variety of groups, from the learner of English as a foreign language, via general linguists looking for universal common features of language, through to cognitive scientists concerned with neural linguistics. Obviously, the studying of a single word's syntactic and semantic properties alone does not reveal any reliable facts about how language is processed in the brain or what principles are effective in the change of language, but "as a small cog in the machine" of corpus studies a thesis like the one at hand may contribute a piece to the large puzzle of scientific language exploration.

The thesis is divided into two main parts. The first part will be devoted to theoretical premises regarding complementation and the investigation of already existing information on *anxious* in the literature. Several dictionaries will be consulted to look at the meaning of *anxious* and to provide an overview of its complementation patterns. Further, the findings from various grammars will be presented with respect to grammatical structures relevant for *anxious*. In addition, factors having an influence on variation in complementation will be introduced.

The second part will be concerned with the analysis of the primary data from the corpora with respect to the above research questions. Finally, the findings of both theory and analysis will be presented in a concluding description of the complementation of *anxious* in recent centuries.

## 2. Corpus studies

The creation of electronic language corpora, briefly described as “large and principled collections of natural texts” (Biber 2010, 159), started in the 1960s and has led to a dramatic increase of linguistic data searchable with tools of computer technology. This allows a wider, more diverse and more systematic approach than ever before. In fact, Biber (*ibid.*, 159) sees corpus studies as “resulting in research findings that have much greater generalizability and validity than would otherwise be feasible.”

In 1968, Leech pointed out the problems related to the bias in the use of analyst introspection as data source for linguistic description. Leech’s critique is pointed at Chomsky’s metatheory of transformational-generative grammar and his intention to develop a theory of linguistic *competence* independent of linguistic *performance*. The preference of the linguist’s intuition to the detriment of corpus material and linguistically untrained native speaker informants is regarded as restricting “the requirement of completeness and generality of description” (Leech 1968, 90) of linguistic theory. Leech further brings to notice that to exclude corpus data (*performance* in Chomsky’s terms) as a “tool of empirical confirmation” (*ibid.*, 94) from linguistic analysis is to ignore the scientific principle of testing the reliability of a hypothesis. Leech’s advocacy of corpus data in the 1960’s thus anticipated Biber (2010, 160), who almost fifty years later remarks that “[c]orpus linguistic research offers strong support for the view that language variation is systematic and can be described using empirical, quantitative methods”.

### 2.1. Working with corpus data

Even though according to Leech corpus studies are preferable to introspection as a source for empirical data evaluation, some important points have to be kept in mind to avoid certain “trapdoors” when

working with corpora. In order to support the highest possible degree of validity the search string has to be as adequate as possible, ruling out invalid tokens (a pursuit known as “precision”(Ball 1994, 295)), and it should retrieve all relevant tokens (a measure termed “recall” (ibid.)). Any irrelevant tokens will be deleted by the analyst during the analysing process, but as long as researchers do not scrutinize the complete corpus in search for their tokens of interest there is no way to be sure they found every item of relevance. This does not pose a problem to the current study as plenty of tokens are available, but it is worth noting when working with a rare construction or lexical item.

As noted by Biber et al. (1998, 263), an important issue to be aware of when comparing corpus data is the different size of the corpora. The subsections of the CLMET, for example, vary in the overall number of words. Thus, if one wants to compare relative frequency of the findings in different corpora, the *raw frequency*, i.e. the number of occurrences of a certain word form or pattern, has to be considered in relation to the number of words the individual section consists of. This can be done by dividing the number of raw frequencies by the total number of words the corpus section comprises, resulting in the *normalized frequency*. For a more comprehensive figure the result can be multiplied by a number which approaches the size of the corpus section. In case of the corpora used in this thesis, multiplication by million seems appropriate, leading to the following scheme for counting the normalised frequency (NF):

Number of complement instances

Total number of words in subsection  $\times$  1,000,000.

Next to these issues of empirical data retrieval, researchers have to pay attention to the nature of the material the corpora consist of. In a study like the one at hand, which is concerned with the complementation of a lexical item on a predominantly linguistic level, sources should preferably be composed of a varied spectrum of authors, as variation in language users typically increases the variety of patterns, too.

## 2.2. Approaches in corpus studies

Corpus studies can be divided in two main approaches: the *corpus-based approach* and the *corpus-driven approach*. The goal of the corpus-based approach is “to discover the systematic patterns of use that govern the linguistic features recognized by standard linguistic theory” (Biber 2010, 163). As such, it attempts to relate linguistic variation to functional aspects and in this way is linked to sociolinguistics, discourse analysis and functional linguistics (ibid., 160-161).

The corpus-driven approach looks for previously unknown linguistic features by searching for coinciding patterns. For this purpose pre-existing grammatical concepts might be partly or entirely disregarded (ibid., 162). Without any predefined grammatical categories other than for example *word form*, a corpus can be searched for new structures. One example are so called “lexical bundles”, i.e. recurring, highly frequent sequences of words which, however, “do not represent a complete structural unit” (ibid.170). Corpus-driven research, therefore, can be seen as a tool to retrieve previously unnoticed patterns and unknown constructs. It can thus reveal unexpected boundaries between grammar and pragmatics.

As somewhat in between these two concepts lies *pattern grammar*:

They [pattern grammar studies] are corpus-based in that they assume the existence (and definition) of basic part-of-speech categories and some syntactic constructions, but they are corpus-driven in that they focus primarily on the construct of the grammatical pattern [...] (Biber 2010, 175).

Two basic presumptions of pattern grammar are, firstly, that “[...] the different senses of words will tend to be distinguished by different patterns, and secondly, that particular patterns will tend to be associated with lexical items that have particular meanings” (Hunston and Francis 2000, 83).

Within pattern grammar, research can be *pattern-based* or *head-based*. In the pattern-based approach the researcher looks for a pre-defined pattern in the corpus material.

The *head-based* approach is the one followed in the current thesis. In the head-based approach, a lexical item, the *head*, is observed with respect to its complementation patterns.

As for what is regarded as a pattern, Hunston (2002, 169) states that they are

[...] a sequence of grammar words, word types or clause types which co-occur with a given lexical item. An item may be said to control or 'have' a pattern if the pattern occurs frequently and is dependent on the item in question.

Biber (2010, 178) comments on the significance of *frequency* as a factor for pattern identification that even though some word combinations occur more frequent than others, they are not considered patterns because they do not form a unit of meaning, i.e. no particular meaning can be associated with them.

### **2.3. Benefits for foreign language learners**

Hunston (2002) describes the benefits of applying patterns to language teaching. Two main profits can be subsumed under the terms *accuracy* and *fluency* (ibid.,173-174). If the learners' awareness of patterns is trained, they can be made more sensitive to the correct usage in different registers and they are able to produce *sequencec* of words, which as a consequence renders speech production more fluent. A key word here is *pattern flow* which describes the situation in which one pattern triggers another, thus producing longer sequences of idiomatic expressions (ibid.175).

### **2.4. Corpora used in this thesis**

The corpora from which the data was retrieved are The Corpus of Late Middle English Texts (Extended Version) (CLMETEV hereafter) and the British National Corpus (BNC hereafter).

According to its website, the CLMETEV is the expanded version of the original CLMET, both compiled by Hendrik De Smet. The CLMETEV consists of approximately 15 million words. As sources for the corpora serve data bases of literary texts, which are freely available from the Internet (e.g. texts from the *Project Gutenberg*, the *Oxford Text Archive* and the *Victorian Women Writer's project*).The sources were published in the time period between 1710 to1920. They are divided into

three sub-periods of 70 years each: 1710–1780, 1780–1850 and 1850–1920. The size of the subsections is presented in the following table, adopted from the CLMETEV website:

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

*Table 1 Sub-periods of the CLMETEV*

A concise overview of the principles followed in data collection is presented on the website of the CLMET.

As pointed out by De Smet (2005, 78), the corpus has some disadvantages related to its sometimes inaccurate representation of sources and the biased composition of its authors. This however, does not pose a problem for the kind of research undertaken in the current thesis. The text selection might be restricting the diversity of patterns to some extent, but at least the problem is acknowledged and the borders of the research are conceded; no claims on a completely exhaustive account of the patterns of *anxious* are made.

According to the *Reference Guide for the British National Corpus* (Burnard 2007), the BNC is a synchronic corpus, including material from 1960 to 1993. It is considerably larger than the CLMETEV, comprising roughly 100 million words, ten per cent of which consists of spoken English. As a whole, the BNC offers a significantly broader spectre of texts types than the CLMETEV, but to keep the samples comparable the search was restricted to the Imaginative Prose section of the BNC, which consists of 16,496,420 words in 476 texts. Written sources are restricted to 45,000 words per author. The BNC is a tagged corpus which allows defining the word class in the search string, but as the

retrieval of tokens of the wrong grammatical class is not a likely distortion to occur with *anxious* this feature was not made use of.

### 3. On Complementation

I will now turn to the concept of complementation in more detail, as it constitutes the central subject of this analysis. Even though the main research area concerns the complementation of an adjective, I shall first elaborate on complementation in general, as other word types, especially verbs, also take complements. In fact, in its beginnings *valency theory*, which will be the topic of the next subsection, concentrated on the verb alone, but it broadened its scope to include also other word classes like nouns and adjectives (Piitulainen 2000, 31). The outlined principles are thus valid for adjectives in copula constructions (as in *He is anxious to go*), too. Where it is possible, verbs and adjectives will be conflated to the term *predicate*.

#### 3.1. Valency theory

Valency theory has traditionally enjoyed a higher rank in German linguistic tradition than amongst English grammarians, but interest in valency theory has steadily increased in research on English grammar, and valency dictionaries are nowadays also available for English. According to Herbst (1999, section 1.1), valency theory is of interest to the study of complementation because it

[...] takes an approach towards the analysis of sentences that focuses on the role that certain words play in sentences with respect to the necessity of occurrence of certain other elements. This largely, though not completely, coincides with what is often called complementation.

In her book *Syntax des Deutschen* (2000, 28-31) Marja-Leena Piitulainen provides a concise overview of valency theory. In valency theory, the finite verb is regarded as the central element of the sentence to which all other elements stand in direct or indirect subordinate relation. One can say they are *dependents* of the verb. The verb can be seen as opening up empty slots around it. These slots have to be filled by elements of a certain type, the *complements*. One concern in the valency approach is to distinguish the elements which have to occur necessarily with the verb in order to form a grammatical

sentence from those which are not dependent on the verb. These latter elements are called *adjuncts*.

Regarding adjuncts Herbst (1999, section 2.1.1) notes that they

differ from complements in that, firstly, their occurrence in a sentence is not dependent on the governing word (or predicator) of the sentence and, secondly, they are not determined in form by the predicator.

However, this differentiation is not a clear-cut issue and will be discussed in more detail in sections 3.2 and 3.3 in this thesis.

Valency theory regards the subject as an obligatory dependent of the predicate on the basis that it cannot be omitted in active declarative sentences (Herbst 1999, section 2.4.2). It might, however, not be realized, for example in imperatives. Huddleston and Pullum (2002, 236) state that “all canonical clauses contain a subject, and the interpretation of subjectless non-canonical clauses always involves an ‘understood subject’ in some sense [...]”. The subject, however, has a special position as *external* complement, i.e. it is located outside the VP and its presence is obligatory in all canonical clauses. The presence of the object as an *internal* complement of a clause depends on the meaning of the verb, which may or may not permit objects (ibid., 53).

Another aspect included in the valency of a verb is *morphosyntactic selection*. It designates the power of the verb to dictate the form of the complement it takes. This property is very important in languages like German because of the significance of case inflections, but morphosyntactic selection also concerns English, for example in cases where the direct object is a personal pronoun as in *He likes her* vs. *\*He likes she*.

*Semantic selection* in turn refers to the compatibility of the semantic properties of the verb and its dependents (Piitulainen 2000, 28-31). Semantic selection accounts for restrictions that rule out combinations like *The car stole a morning frost in the 18<sup>th</sup> century* even though they are grammatical. They also allow the recipient to make rational interpretations of sentences with otherwise the same structure as *Frank drank coffee with his colleagues* and *Frank drank coffee with sugar*.

After this general introduction of complementation and its connection to valency theory I will focus on certain problematic aspects in the identification of complements.

### 3.2. Obligatory complements and adjuncts

Complements can be divided into two groups, *obligatory* and *optional complements*. As already stated above, obligatory complements are indispensable for the grammaticality of the sentence which can easily be tested by omitting them. Obviously, the only element which can be omitted in a sentence like *My foot hurt for two days* is the time adverbial *for two days*, which is thus identified as *adjunct*.

Adjuncts can typically be removed from the sentence without affecting its grammaticality. They are independent from the verb in their form and express “relatively constant kinds of meaning, such as manner, spatial or temporal location, duration, condition, and so on” (Huddleston and Pullum 2002, 665). However, adjuncts cannot be identified according to formal categories like e.g. adverbial phrases because they, too, can function as complements. Compare:

(1) He lives *in Oban*.

(2) They went for a walk *in Oban*.

In (1) the PP *in Oban* serves as obligatory complement because it cannot be omitted. In (2) it is an adverbial with adjunct status “which can be said to complete the meaning of the central predication as a whole” (Somers 1984, 508). This is in agreement with Quirk et al.’s (1985, 65) definition of complementation as “the function of a part of a phrase or clause which follows a word, and completes the specification of a meaning relationship which that word implies”. The complement is thus seen as referring only to its head, not to the whole sentence.



In addition, the presence or absence of complements can have the effect of changing the meaning of the head. In the case of *to be conscious of* + *NP* and *to be conscious* without (or *zero*) complement, each sense has its own *subcategorization frame*<sup>2</sup> (Haegeman 1991, 39):

*conscious*<sub>1</sub>: Adj, [---- PP]

*conscious*<sub>2</sub>: Adj, [----]

These frames show that *conscious* has two senses, depending on what type of complement it takes. The subcategorization frame does not include the subject. It only considers complements that are inside the verb phrase (*ibid.*, 37).

### 3.4. Syntactic tests for the identification of complements

Herbst (1983, 24) has developed a syntactic test for adjectives to distinguish optional complements from adjuncts. He defines optional complements as those elements which can be asked for with *who*, *whom* or *what*. Questions formed with other interrogative pronouns do not refer to optional complements. The question may differ from the declarative sentence solely in word order, the added interrogative pronoun and, possibly, a preposition which refers to the interrogative pronoun. The method is illustrated in examples (5a) and (5b):

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<sup>2</sup>Quirk et al. treat these phenomena as “cases of conversion” (1985, 722) in which the predicate changes secondary word class, e.g. from *intransitive* to *transitive* (*ibid.*, 1564 ff.), a process which can involve a change in meaning.

(5a) Traffic is very slow at 5 o'clock.

When is traffic very slow?

– At 5 o'clock.

\*At what is traffic very slow? – At 5 o'clock.

(5b) Trevor is very slow at rowing.

At what is Trevor very slow? – At rowing.

This also applies to *to*-infinitives, *-ing* clauses and finite subordinate clauses; note the added preposition in the question in (6b):

(6a) She was willing to be honest. – What was she willing to be/do? – To be honest.

(6b) She was careful crossing the road. – What was she careful about? – Crossing the road.

(6c) She was not certain whether/if/that/where/when he had booked the ferry. – What was she not certain about? – Whether/if/that/where/when he had booked the ferry.

What this test shows is that adjuncts cannot be asked for by *who/what* questions but need adverbial question forms. However, Herbst (1999, section 2.3.4) points out a weak spot of the test. It concerns purpose-phrases and purpose clauses (7a-b) and *with*-phrases expressing accompaniment (7c):

(7a) In March 1930 Wood was in London for the opening of Cochrane's Review.  
What was he in London for?

(7b) To achieve a more emotional relationship with his subject, Lanyon chose specific sites in Cornwall.  
What did he choose specific sites in Cornwall for?

(7c) Ben Nicholson and Barbara Hepworth had invited the two most promising younger artists, John Wells and Peter Lanyon, to exhibit with them.  
Who were they invited to exhibit with?

The elements which can be asked for by *who* and *what* have to be considered adjuncts because they are freely addable and not licensed by the predicate.

Herbst (1983, 31-34) presents two lists of forms in which adjective complements can occur. The first list designates complements in subject position. The subject is considered an obligatory complement by Herbst, but the present study will concentrate on internal complements only.

Other complement positions can be filled by:

1. prepositional phrases (He is good at mathematics)

2. *to*-infinitives (She is keen to go)
3. *-ing* clauses (She is careful crossing the road)
4. finite clauses (She was certain that he had booked the ferry)

### 3.5. Argument structure and thematic roles

Another way to describe the complementation of a predicate is based on argument structure in logic.

Arguments are *referring expressions* which “serve to pick out an entity, a person, a thing from those things we are talking about” (Haegeman 1991, 35). They can be seen as corresponding to complements and are further described as “the participants minimally involved in the activity or state expressed by the predicate” (*ibid.*, 36). The predicate is seen as defining “some relation between the referring expressions” (*ibid.*, 35). Argument structure always includes the subject. If an argument is optional it is put in parentheses. Thus, the argument structure of the verb *buy* can be noted as:

*Buy*: verb;    1                    (2)                    3  
    NP                    NP                    NP

The first position indicates the subject, the second the indirect object which can be left unmentioned<sup>3</sup> and the third position denotes the direct object. According to this frame, it is possible to generate a sentence like *Frank bought Rosie a puppy* The activity could also be expressed as *Rosie bought a puppy from Frank*, in which case the structure would be noted as

*Buy*: verb;    1                    2                    (3)  
    NP                    NP                    PP  
    *Rosie puppy Frank*

According to this description, however, it is also possible to form a sentence like *Puppies buy Frank from Rosie*. To avoid this kind of semantically unacceptable sentences, the power of the predicate to

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<sup>3</sup>Haegeman (1991, 39) notes that “unlike verbal arguments, the arguments of adjectives can often be left implicit”. However, this might involve a change in meaning. Quirk et al. (1985, 504) mention that “the adjective has a different or at any rate much greater semantic weight when it is without complementation, serving more of an auxiliary role when complementation is present.” They actually give an example involving *anxious*: *They are anxious.* - *They are anxious to see you.*

determine the relations between the arguments has to be taken into account: The predicate assigns the arguments certain roles such as agent, experiencer, etc., which have certain properties (e.g. the prototypical agent is animate and acts volitionally). They are referred to as *semantic roles*, *thematic roles* or *theta roles*.

Starting with Charles Fillmore's Case Grammar in 1968, linguists have attempted to identify and define semantic roles by describing on an abstract level the characteristic roles predicates ascribe to their dependents. Fillmore (1968, 24) saw cases (or roles) as

a set of universal, presumably innate, concepts which identify certain types of judgements human beings are capable of making about events that are going on around them, judgements about such matters as who did it, who it happened to and what got changed.

Role assignment thus mirrors the way humans perceive the world, and the predicate has an important role in incorporating these concepts. Fillmore's cases have since been shaped and specified, but so far no consensus regarding semantic roles have been achieved and perhaps never will be.

There is nevertheless a small set of roles which is often referred to in the literature, comprising roles like agent, experiencer, benefactor, goal, source, theme etc. (cf. e.g. Huddleston and Pullum 2002, 230-233). Of those, experiencer, defined as "the one who feels or perceives" and stimulus defined as "what arouses the feeling" (ibid., 232-232) can be considered relevant for *anxious* "on first sight", but a more detailed analysis may reveal further roles that can be assigned by *anxious*.

Carnie (2002, 169) distinguishes between theta roles and thematic relations: "Theta roles are bundles of thematic relations that cluster on one argument". Thematic relations in turn are "particular semantic terms that are used to describe the role that the argument plays with respect to the predicate" (ibid., 168). An argument can combine several thematic relations in one theta role, e.g. in *Kim bought the car from Pat*, *Kim* is both agent and goal and *Pat* is both agent and source (Huddleston and Pullum 2002, 230). It is important to note that even though theta roles can consist of several thematic relations, each argument is assigned only one role (the most relevant or the one distinguishing it from further

roles in the sentence (Carnie 2002, 169)). This condition is expressed in the *Theta criterion* (Haegeman 1991, 46):

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

This criterion ensures that sentences like *\*Maigret killed the burglar the cellar* are considered ill-formed because the verb *kill* assigns only two theta roles, which are occupied by the subject NP and the object NP. In order to make the sentence grammatical, a preposition must be inserted, which assigns the thematic role of location to the NP *the cellar*, thus yielding *Maigret killed the burglar in the cellar* (ibid., 44). The most important issue, therefore, is not a general definition of semantic roles but awareness of the number of roles a predicate can and must assign. Haegeman points in the same direction when she writes that often it is enough to “list the number of arguments, identifying their roles by numbers rather than by role labels” (1991, 41).

An outright adverse attitude towards a rigid and restricted set of semantic roles can be found e.g. in Sag and Pollard (1991, 67), who write:

That is, contrary to assumptions often made on the basis of the work of Fillmore 1967 and Gruber 1965, we are skeptical about any claim that a small inventory of semantically meaningful roles can be established for the entirety of the vocabulary of English (or any other natural language).

Sag and Pollard develop appropriate “ad hoc” roles according to characteristic features inherent to the predicates they examine. They work out “semantic regularities” (1991, 67) inherent to these predicates instead of using pre-existing roles. Next to sharing semantic features, these predicates often appear in similar syntactic constructions. The relation between the syntactic and semantic characteristics of certain groups of matrix predicates will be discussed in the following sections.

### 3.6. On Control

At this point it will be useful to introduce the concept of *control*. Control appears in “constructions where a verb has a non-finite internal complement”, i.e. catenative constructions<sup>4</sup> (Huddleston and Pullum 2002, 1177). Predicates involving control can be classified in meaning groups whose members share certain essential semantic features. Control is thus not an arbitrary feature amongst predicates but is related to the meaning inherent to predicates.

There are two types of control, object control and subject control. An example for subject control is represented in *Leo was eager to open the letter*. This sentence is interpreted in a way that the subject *Leo* is the one who is eager and the one who (possibly) opens the letter. It is thus assumed that the subject of the matrix predicate is identical, or *coreferential*, with the subject of the verb in the lower clause which is not overtly expressed. Huddleston and Pullum (2002, 1193) note that

[m]ost non-finite clauses have no subject, but the interpretation requires that we find an ‘understood subject’: characteristically, the VP represents a semantic predicate and we need to find the argument that it is predicated of.

The assumption of an understood subject is underpinned by the theta criterion. As observed above, the subject *Leo* is the argument of two predicates (i.e. two theta roles), so in order to avoid violating the theta criterion an additional argument is needed. This additional argument, a non-realized understood subject, is typically referred to as PRO (Carnie 2002, 255). In the sentence structure it takes the place of the subject of the lower clause, in front of the infinitive: *Leo<sub>i</sub> was eager [PRO<sub>i</sub>] to open the letter*. In subject control constructions it is mandatory to leave the understood subject unexpressed, as not following this rule would generate sentences like *\*Luis was eager for Luis to open the letter* (when Luis designates the same individual). But because a sentence like *Luis was eager for Richard to open the letter* is a possible construction, it was suggested (cf. Postal, 1970) that a rule of subject deletion in

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<sup>4</sup> Huddleston and Pullum (2002, 1215) note that “the concept of catenative can be applied to adjectives as well as to verbs.”

subjectless sentential complements applies in those cases where the subject of the matrix clause is coreferential with the subject of the subordinate clause. This rule is commonly referred to as EQUI.

In *object control* constructions PRO is controlled by the object of the matrix clause. The action denoted by the non-finite verb is directed towards the understood subject of the lower clause, but the difference to subject control is that PRO has its point of reference in the object of the matrix clause as in *Jean persuaded Robert to leave* (Carnie 2002, 267).

However, PRO is not always needed in catenative constructions. Whether PRO is present depends on the ability of the matrix verb to assign semantic roles. In addition to control predicates there are predicates in matrix position which do not assign a theta role to their subject (Riemsdijk and Williams 1987, 114). This class of verbs is called *raising verbs* because the subject NP of the lower clause has been raised out of its original position to function as the syntactic subject of the higher clause. Therefore, this operation is also called NP movement. There is proof for this claim provided by e.g. Soames and Perlmutter, based on reflexivization (1979, 82-83), but the difference can also be explained by considering the assignment of thematic roles. Carnie (2002, 262) states that

the most reliable way to distinguish raising constructions from control constructions is to work out the theta grid associated with the matrix predicates. If the matrix predicate assigns an external theta role ([...] the one that appears in subject position) then it is not a raising construction.

In a sentence like *The dogs seemed frightened* the semantic point of reference of the matrix verb cannot be said to be the subject as this would leave us with the meaningless construction *The dogs seemed*. The matrix verb refers semantically only to the complement *to be frightened* even though syntactically it predicates *the dogs*. If the sentence is arranged in a way that the subject is moved to the subordinate clause we get the following result:

(8) It seems that the dogs were frightened.

The subject of the higher clause is now the semantically empty *it*, which has no reference and no role assigned to it. This kind of transformation however, is not applicable to control predicates because they assign roles to the argument in subject position. Therefore, a semantically empty subject like expletive *it* or existential *there* cannot occur with control predicates (Riemsdijk and Williams, 1986, 115). There exist a range of linguistic tests to find out whether control or NP Movement is involved. The claim is that a control predicate will produce ill-formed sentences when inserted in NP Movement structures. The test with expletive *it* shows that *anxious* belongs to the group of control predicates:

(9) \*It was *anxious* that the dogs were frightened.

### 3.7. Semantic characteristics of control predicates

As mentioned earlier, control predicates share certain semantic features according to which they can be divided into meaning groups. Rather than being synonyms, they share basic characteristics of meaning. Sag and Pollard (1991, 65) present three different meaning groups of control predicates:

- a) ORDER/PERMIT type [object control]: order, persuade, bid
- b) PROMISE type [subject control]: promise, swear, agree
- c) WANT/EXPECT type [subject control]: want, desire, fancy

Of these three groups the WANT/EXPECT type is of interest to us because *anxious* appears in patterns which semantically fit in this category. Sag and Pollard (1991, 66) describe the shared semantic features of predicates of this group as follows:

[...] the want/expect-type verbs all involve desire, expectation, or similar mental orientation toward a given soa.<sup>5</sup> We will refer to these as ORIENTATION relations, and will characterize their associated roles as EXPERIENCER (the participant who experiences the appropriate orientation) and soa-arg (here the soa towards which the experiencer is oriented).

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<sup>5</sup>soa: STATE OF AFFAIRS (Sag and Pollard, 1991, 66). This is a generic term used to define types of situation involving certain characteristic participants and their relations towards each other. [Footnote added by the present author].

Another scholar who has investigated the semantics of control predicates is Rudanko. His classes of subject control predicates are based on “hierarchies of volition” (1998, 28). The general category is that of “positive volition”. A more precise description of the semantic content is given with the subclass “desideration, with the approximate paraphrase ‘to want’ or ‘to want intensely’” (e.g. long, care, ache). His findings support the suggestion that the semantic type of volitional predicates “are the most frequent triggers of infinitival subject control constructions both in present-day and in nineteenth century British English” (Rudanko 1998, 40). As *anxious* can be placed in this group from a semantic point of view, one might expect a high frequency of infinitival complements in the corpus data.

Furthermore, Rudanko has found support for the observations of Visser (1972, 1090) who detected a shift from *to*-infinitive complements towards the *to -ing* construction in Modern English. Rudanko (1998, 21) predicts that if his considerations concerning the increase of *to-ing* pattern are correct, this shift

is likely to occur in cases where a matrix verb governing the infinitival construction also selects the prepositional *to* + NP complement construction, but it is unlikely to occur where it does not. Further, change is more likely when the meaning of the verb is compatible with the notion of goal orientation”

It remains to be seen in the analysis part of this thesis whether *anxious* is affected by this change, too.

#### 4. Meaning in the structure of infinitival complements

So far we have looked at some shared semantic features of groups of control predicates involving the notions expectation, desire, volition and mental orientation towards a given situation. This chapter will be devoted to the semantic features of the complements these predicates typically take, more precisely, to the meaning inherent to their structure.

As was stated earlier, predicates and complements are subject to semantic selection. This is also true for sentential complements, but the meaning of sentential complements is not only constituted by the semantic content of the words they contain. In addition, they bear meaning in their structure. Two types of complement structures have been thoroughly investigated, the *to*-infinite and the *-ing* clause.

##### 4.1. The semantics of structure

Wood (1956, 11) states that the *to-infinitive* typically implies an agent even if not specifying it, whereas the gerund refers to a more universal sense, a difference in meaning which is illustrated by examples (1) and (2) (adapted from Wood):

- (1) To live in the West End has its disadvantages.
- (2) Living in the West End has its disadvantages.

Even though not specifically mentioned in either sentence, the notion of an agent is stronger in (1). The reader thinks of a person's, probably the author's, experience with his or her life in the West End, whereas the second example focuses on the "act of living" (in the West End). Sentence (1) emphasises the performer, sentence (2) the performance. As further example serves *To travel hopefully is better than to arrive* in which the notion of an agent is so strong that it would be unsuitable to use the impersonal gerund (ibid., 12). From this Wood draws several conclusions:

- 1) In cases where both the gerund and the *to*-infinitive are theoretically possible in terms of grammaticality, they nevertheless might not be used interchangeably without causing a difference in meaning.
- 2) The gerund is used in a more general meaning and therefore has a wider scope of reference in comparison to the *to*-infinitive.

Probably the best known hypothesis concerning the semantics of structures is Dwight Bolinger's claim that "a difference in syntax form always spells a difference in meaning" (Bolinger 1968, 127). In his article *Entailment and the meaning of structures*, Bolinger examines differences in meaning between the *-ing* clause and the *to*-infinitive complement by comparing minimal pairs like:

- (3) I enjoy singing.      \*I enjoy to sing.
- (4) I plan to sing.      \*I plan singing.

He shows that the occurrence of these complements with certain verbs is not arbitrary but entailed by the correspondence between the meaning of verb and complement and calls this semantic connection between complement and the matrix verb *semantic compatibility* (ibid., 127). Bolinger coins the notions of *reification* for *-ing* clauses, while the *to*-infinitive is associated with *hypothesis* or *potentiality* (ibid., 124). In cases where the matrix verb contains notions of "unrealized possibilities" (e.g. *want, wish, hope*) it typically takes a *to*-infinitive complement. Verbs that "apply to actualities" (e.g. *enjoy, visualize*) are normally followed by an *-ing* clause. He claims that this phenomenon can also be held responsible for the increase of *-ing* clause complements in constructions where the *to*-infinitive would be normal. As an example he presents "over-concretized *it*-constructions" to which additional information has been added and which have therefore undergone a shift towards reification (ibid., 125):

- (5) It's nice to rest.      ?It's nice resting.      It's nice resting here.

Another contrast between *to*-infinitive and *-ing* form worth noting is presented by Allerton. He makes the point that on some predicates the *to*-infinitive complement can have the effect of giving

them “the appearance of being downgraded to the status of an auxiliary, making it comparable to *will* or *would*” (Allerton 1988, 17). He exemplifies this effect with the verb *like*:

(6) John likes to wash his socks by hand.

(7) John likes washing his socks by hand.

Example (6) implies that John actually washes his socks (*he does/will wash his socks*), whereas (7) tells something about John’s mental attitude towards washing socks by hand and is semantically closer to the lexical meaning of *like*.

#### 4.2. A cognitive approach

Smith (2009) offers yet another angle from which to look at the meaning of complement structure. He acknowledges the earlier findings regarding the features of *to* and *-ing* but claims that the immanent reasons for their occurrence with certain matrix predicates have not been explained systematically:

It is not made clear, for example, why such notions as “future-oriented”, “hypothetical”, or “specific instance” should all be conveyed by *to* as opposed to some other lexical item, nor is there any attempt to link senses of *to* that still seem to evoke path-like notions to uses of *to* that are more obscure (Smith 2009, 366).

Smith draws on the *source-path-goal image scheme* associated with prepositional *to* in cognitive grammar. From this scheme several semantic notions can be derived when extended to more abstract domains. He starts with rather concrete meanings like “Elly May walked (over) to help with the chores”(Smith 2009, 371) where the path-like sense is still detectable but which also comprise the more abstract aspect of purpose-orientation (a feature he underlines by replacing *to* with *in order to*). An even more abstract notion is that of *holistic constructing* in which an event is perceived as a complete entity: “This sense of *to* is motivated from the source-path-goal imagery because a path’s goal is construed holistically, i.e. as conceptually whole and complete (ibid., 373).” It lies beyond the scope of this thesis to explain this concept in great detail, but to give an impression of the underlying

ideas of the cognitive concept of holism the following example from a footnote in Smith's article will be included here:

A barn seen at a distance, at the end of a spatial path, is viewed entirely as a clearly bounded object (i.e. holistically). But if we stand very close to the barn the holistic construal is not possible, because its boundaries are not visible (Langacker, quoted in Smith 2009, 373).

Thus in *Mary is ready/willing/inclined/excited/happy/hesitant/glad to do the chores* (ibid.375) the process described by the infinitive is “construed as an event in its entirety that is related mentally to a scale of inclination to do things in Mary's mind (ibid.).”

Smith does not deny that *syntactically* the infinitival *to* has turned into a grammaticalized infinitive marker (i.e. it can be distinguished from the preposition by syntactic tests), but the abstract notions associated with the source-path-goal image scheme are nevertheless still present in the infinitive marker. These notions can in turn be held responsible for the choice of complement types, as the semantic content of the matrix verb has to be compatible with the (lexical and structural) semantic content of the complement (ibid., 371). Smith finally concludes

[...] that all senses of infinitival *to* are meaningful because they involve the idea that the subordinate process is conceptually distant in some respect from the state or process designated by the matrix predicates and the participants in the matrix process.(ibid., 375).

Smith thus refers to the iconic relation between grammatical and semantic distance also known as the *distance principle*. The distance principle claims that “[t]he linguistic distance between expressions corresponds to the conceptual distance between them (Haiman 1983, 782).” The *conceptual* distance arises from the source-path-goal image schema related to the *to* (thereby distinguishing it from other prepositions which theoretically could take its place) The processes or states denoted by the *to*-infinitive complement is always in a more or less abstract way perceived as distant from the process or state described by the matrix predicate. *Linguistic* distance obviously arises from the word *to* which separates the matrix predicate and the subordinate verb.

If one accepts these assumptions, it follows that the predicate of a subject control construction is conceptually more closely linked to the matrix clause than for example a *that*-clause because the predicates are typically structurally closer in subject control constructions.

Furthermore, the conceptual relationship between *-ing* clause complement and matrix predicate is supposed to be closer than with a *to*-infinitive because there is no intervening element. Smith's definition of the meaning of *-ing* is points in the same direction. It is based on Langacker's view that "the semantic effect of adding *-ing* to a verb stem is to focus attention on some interior part of a verbal process rather than the process as a whole" (Langacker, quoted in Smith 2009, 376). This meaning therefore abandons the concepts of holism and conceptual distance and turns to the idea of "conceptual overlap between the matrix process and its participants and the complement process marked by *-ing*" (Smith 2009, 377).

Seen in connection with *anxious* the features pointed out by Bolinger, Woods and Smith suggest a high frequency of *to*-infinitives complements with *anxious* as it incorporates notions of potentiality and agentivity and seems compatible with the source-path-goal image scheme.

### 4.3. The Great Complement Shift

As was already shortly mentioned in the introductory section of this chapter, the outlined semantic features ascribed to the *to*-infinitive and the *-ing* clause are connected to the phenomenon known as *The Great Complement Shift*, in analogy to *The Great Vowel Shift* in phonology (Vosberg 2006, 18).

It has been observed by Rohdenburg (2006, 143) and others that sentential complementation has undergone a major change over the last five centuries. One of the main features of this change is the increase of *-ing* clause complements at the expense of *to*-infinitives. Historically, this is related to the development of a "second type of non-finite complement" (Rohdenburg 2006, 143), the gerund, which in the second half of the 17<sup>th</sup> century began to appear next to finite and non-finite complements of

many verb classes. Due to certain semantic properties related to this alternative sentential complement the traditional complements were replaced in certain environments. One example of this replacement was briefly illustrated in the over-concretized *it*-constructions by Bolinger in section 4.1.

It will be interesting to see whether *anxious* is amongst the group of predicates affected by this change in complementation.

## 5. Extra-semantic factors

So far, the choice of complements has been discussed from a semantic point of view, touching mainly on semantic restriction and semantic compatibility. Complementation was presented as depending on an interaction between the meaning of the predicate as the distributor of thematic roles and the semantic features (lexical and structural) of the complements. Next to semantic influences, there are further factors that bear on complementation, having to do with structural and cognitive complexity. They are therefore termed *extra-semantic factors*. In the following I will present some of these aspects which can affect complement selection.

### 5.1. The Complexity Principle

An interesting phenomenon lying in the range of complementation is the *Complexity Principle* by Rohdenburg (1996, 151). He claims that “in the case of more or less explicit grammatical options the more explicit one(s) will tend to be favoured in cognitively more complex environments.” According to Rohdenburg (1996, 173), the Complexity Principle typically applies in the following contexts:

- 1) discontinuous constructions of various kinds (e.g. inserted elements between the predicate and its complement.)
- 2) (the presence of) more or less complex surface objects preceding finite and nonfinite clauses
- 3) heavy subject expressions (including subordinate clauses)
- 4) complex subordinate clauses
- 5) passive constructions

According to Givón (1995, 25), complexity is evidenced by morphological and syntactic markedness: “As a theoretical construct, markedness presupposes the notion of formal complexity, whereby the marked is structurally more complex and the unmarked more simple.” He supplies three concurring criteria for markedness:

**Structural complexity:** the marked structure tends to be more complex (or larger) than the corresponding unmarked one.

**Frequency distribution:** The marked category (figure) tends to be less frequent, thus cognitively more salient, than the corresponding unmarked category (ground).

**Cognitive complexity:** The marked category tends to be cognitively more complex – in terms of mental effort, attention demands or processing time – than the unmarked one.

A complex environment is thus an environment marked by any of these criteria. As such, it can induce the choice of a more explicit grammatical variety<sup>6</sup>.

Examples for more explicit varieties are marked infinitives, optional prepositions or explicit marking of the subordinating function (by mentioning the subcategorizer) (Rohdenburg 1996, 149).

With regards to the explicitness of complements, it may also be useful to look at the categories finite/non-finite. Finite sentential complements are more explicit than non-finite complements. Givón's (2009, 87) remark on finiteness extends this view on clauses and noun phrases

[f]initeness is thus fundamentally an aggregate grammatical feature of clauses. Its converse, non-finiteness, is thus an aggregate grammatical feature of NPs derived – historically or transformationally, depending on one's theoretical perspective – from verbal clauses<sup>7</sup>.

Finiteness can thus be seen as a property of clauses, non-finiteness a property of nouns or noun phrases.

This assumption implies a higher degree of explicitness in case of higher sentential character. Vosberg (2003, 323) presents several arguments for the nominal character of the *-ing* form, e.g. shared “privileges of occurrence” with noun phrases and a higher presence of *to*-infinitives in *not*-negated<sup>8</sup> subordinate clauses.

We can now relate the above to the gradation of nominal features adopted from Vosberg (2006, 36). It starts with finite sentential complements and ends with nouns, thereby hierarchically increasing the degree of characteristic features typical for nouns:

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<sup>6</sup>There is, however, the problematic aspect of semantic and stylistic difference related to more explicit variants which can be associated with (slight) differences in meaning or formality, thus overriding the purely syntactical reasons (Rohdenburg 1996, 173).

<sup>7</sup>Footnote omitted by the author of this thesis.

<sup>8</sup>*Not*-Negation is typically closely linked to strongly verbal structures (Vosberg 2003, 323).

- a. (finite) *that*-clauses
- b. infinitive
- c. *wh*-clause
- d. verbal *-ing* form (including ACC-*ing*)
- e. verbal *-ing* form (including POSS-*ing*)
- f. nominal *-ing* form
- g. noun

According to this hierarchy, the *-ing* clause is more nominal than the *to*-infinitive. The *to*-infinitive may be seen as the more explicit variant and should thus be preferred to the *-ing* clause in complex environments.

## 5.2. The Extraction Principle

The effect of extractions to produce cognitive complexity lies at the bottom of the *Extraction Principle*, defined by Vosberg (2003, 308) as follows:

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

The Complexity Principle is based on the assumption that the aim of successful understanding is achieved by avoiding semantic ambiguity and, in the case of word order, “the speedy recognition of the immediate constituent structure” (Hawkins in Rohdenburg 1996, 173). *Extractions* rearrange sentences in a way which may intervene with these principles. Vosberg (2006, 63) describes extraction as the procedure in which a constituent of a subordinate clause or another unit shifts (is extracted) to another position across clause borders, thereby leaving a *gap* where its place would normally be in the canonical word order. Besides leaving a gap, extractions can evoke the presence of additional elements like auxiliaries and interrogation pronouns and induce changes in the word order (discontinuity). The moved or added element is called *filler*. This syntactic rearrangement produces *filler-gap dependencies*

which “are difficult structures to process, and they are characterized by a heightened processing load and a constant effort to relate the filler to its appropriate gap” (Hawkins 1999, 246).

According to Vosberg (2003, 307), the major and most frequent types of extractions are relative extraction, comparative extraction, topicalization and interrogation. Postal (1994, 159) presents several further types: Pseudo clefting, exclamatory extraction, negative NP extraction and clefting.<sup>9</sup>

### 5.3. The *horror aequi* effect

The Extraction Principle can be subverted by another extra-semantic factor known as *horror aequi* effect, framed by Rohdenburg (2003, 236) as follows:

“[...] the horror aequi principle involves the wide spread (and presumably universal) tendency to avoid the use of formally (near-)identical and (near-)adjacent grammatical elements or structures [...]”

This principle is known also from other linguistic fields, e.g. phonology (Vosberg 2006, 49). In practice, this means that when confronted with the choice between constructions which theoretically could include two similar looking grammatical forms as in *I want to suggest to go to sleep to be refreshed tomorrow*, language users resort to avoidance strategies. These include for example replacing one non-finite sentential complement with a finite complement, using a NP or a PP instead or inserting additional elements to prevent the direct contact of homogenous structures. Especially with respect to the iteration of two *-ing* forms, known as the *Double -ing constraint*, the *horror aequi* effect has long been under investigation.

Vosberg (2006, 49) mentions several reasons for the aversion to stringing together resembling structures:

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<sup>9</sup> The principle comments on complement extractions. However, it is not only complements that can be extracted. Rudanko (2006, 43) presents an example of adjunct extraction:[...] We will work very, very hard to get it back to where we were accustomed to seeing it.[...]. (Rudanko 2006, 43) and suggests expanding the range of the principle by replacing the term *complements* with *constituents*, thus including adjuncts (Rudanko 2008, 34).

- a. difficulties in processing (as a result of difficulties with identifying the understood subject)
- b. difficulties with speech and production (misinterpretation as hesitation phenomena)
- c. the risk of interpreting the construction as coordination (instead of dependent relation).

This effect has thus to be taken into consideration as a possible factor in the variation of complementation patterns.

## 6. *Anxious* in dictionaries

This chapter will be devoted to the sense of *anxious* and the patterns it appears in as presented in several dictionaries. The first dictionary to be consulted is the *Oxford English Dictionary*, followed by the *Longman Dictionary for Contemporary English* (LDCE hereafter). Further sources are Hendrik Poutsma's unpublished manuscripts of the *Dictionary of Constructions of Verbs, Adjectives and Nouns* and *A Valency Dictionary of English* (VDE hereafter) by Herbst et al. As not all of the dictionaries provide explicit descriptions of the patterns related to the senses, I will extract the patterns from the illustrations provided in the entries and label them at my discretion.

At this point, I would like to briefly outline those constructions appearing in the dictionaries, as well as in the data, which were not included in the analysis and give my reasons for their omission. Attributive uses were not considered in this thesis as they do not involve complementation.

Instances of zero complements were counted and added to the tables, but as they are not followed by a complement they are not further discussed. Suffice it to say that all occurrences of attributive use and zero complementation could be associated with the sense *worried* or *troubled*.

Dictionary examples dating from earlier than 1710 were excluded from the analysis because the data from the CLMETEV includes only material from 1710 and later. I nevertheless considered it justifiable to include one illustration from 1706 because of its short temporal distance to the CLMETEV data. The tables in the following sections present only those constructions that are relevant for this thesis.

### 6.1. The *Oxford English Dictionary*

The *Oxford English Dictionary* (OED hereafter) delivers a short comment on the word's etymology. Its Latin origin is *anxi-us*, meaning *troubled in mind*. It is derived from *ang-ěre*, which is translated as *to*

*choke, distress* and was formed by adding the suffix *-ous* to the stem. When looking at the table, one can see that this original meaning has been quite well preserved throughout the years:

	<b>Sense</b>	<b>Illustration</b>	<b>Pattern</b>
1.	a. Troubled or uneasy in mind about some uncertain event; being in painful or disturbing suspense; concerned, solicitous.	They wait, <i>Anxious</i> , and trembling for the Birth of Fate.(Pope, 1714, Rape of Lock (new ed.))	zero complement
	b. Const., <b>of</b> an issue dreaded (obs.);  <b>about</b> a thing or person involved in uncertain issues.  <b>for</b> an issue desired;	<i>Anxious</i> of Neglect, suspecting Change.(G. Granville, 1706, British Enchanters)  It being the worst way in the world to Fame, to be too <i>anxious</i> about it. (R. Steele, 1711, Spectator No. 4. §1)  The counsellors of Charles..were <i>anxious</i> for their own safety. (T. B. Macaulay, 1849, Hist. Eng. I.)	<i>of</i> + NP  <i>about</i> + NP  <i>for</i> + NP
2.	Full of desire and endeavour; solicitous; earnestly desirous ( <i>to effect</i> some purpose).	The gentle Heart <i>Anxious</i> to please. (R. Blair, 1743, Grave 7)  The General seems as <i>anxious</i> as any of us to expedite the fall of the place. (Ld. Nelson in Dispatches & Lett., 1794, (1844) )	<i>to</i> -infinitive  <i>to</i> -infinitive

Table 1 Patterns and senses in the OED online

The *OED* originally mentions three senses for *anxious*, but sense 2a and 2b in the *OED* are not of interest here. Sense 2a (*Fraught with trouble or solicitude, distressing, worrying*) is labelled as obsolete except in cases “where it can be explained as a transferred use of 1, as *anxious* cares, i.e. such as *anxious* people cherish”. Sense 2a also involves the idiomatic expression: *anxious bench* or *anxious seat*, which is defined in the *Merriam Webster dictionary online* as “a seat near the pulpit reserved at some revival meetings for persons esp. concerned about their spiritual condition —called also *mourners' bench*.” Sense 2b in the *OED* refers to the figurative use of this expression for somebody being in a state of anxiety.

## Senses and patterns

Following the *OED*, the senses of *anxious* can basically be divided into two main categories:

Sense 1: *Troubled or uneasy in mind about some uncertain event; being in painful or disturbing suspense; concerned, solicitous.*

Sense 2: *Full of desire and endeavour; solicitous; earnestly desirous (to effect some purpose).*

Whenever *anxious* is followed by a *to*-infinitive, it has sense 2. There is an “overlap” of meaning, in which both senses share the property of *nervous tension*, but it depends on the complement whether the mental state of the experiencer of the *anxious* feeling is more of a troubling or more of an ambitious nature. With the *to*-infinitive complement the emphasis seems to be on the notions *endeavour* and *to effect some purpose*, which imply (the planning of) practical involvement of some sort on behalf of the subject of the higher clause.

Sense 1 is subdivided in (a) and (b). Sense 1b has essentially the same meaning as 1a, but 1a includes only examples with zero complements, whereas 1b is devoted to prepositional complements. According to the *OED* there is a fine-grained meaning attached to the preposition following *anxious*. The construction with *of*, labelled as obsolete, takes the meaning *anxious sof an issue dreaded*, which bears the most negative connotation of the prepositional complements. With the preposition *about* (*a thing or person involved in uncertain issues*) *anxious* tends more to expressing *concern*, whereas when *anxious* is preceded by *for* (*an issue desired*), it seems to lean towards *eagerness*. *Solicitous* is mentioned in the description of both senses. Summing up the findings in the *OED*, it can be stated that *anxious* takes complements of the following forms:

- a) Non-sentential: Prepositional phrases with *of*, *about* and *for*, associated with sense 1, however a fine-grained distinction in meaning is associated with the choice of preposition.
- b) Sentential: *to*-infinitives, occurring solely with sense 2.

## 6.2. The Longman Dictionary of Contemporary English

Like the *OED*, the *LDCE* lists three senses, but sense 2 is associated only with the attributive use and thus not relevant. Sense 1 (*worried about something*) can be seen as similar to sense 1 in the *OED*, but the *LDCE* does not mention the construction *anxious of*, possible reasons for this being the younger date of the examples in the *LDCE* and the fact that this construction was labelled obsolete in the *OED*. The *LDCE* does not make such a fine-grained distinction between the prepositions and their appropriate senses as the *OED*. *For* + NP is the only prepositional complement which can have both senses.

Whereas sense 2 (feeling strongly that you want to do something or want something to happen [= keen]) was reserved for *to*-infinitive complements only in the *OED*, the *LDCE* also allows *that*-clauses which is a complement not mentioned in the *OED*. It can have both senses (examples from the *LDCE*):

Sense 1: She was *anxious* that it might be cancer.

Sense 2: Both sides were *anxious* that the agreement should be signed as quickly as possible.

A second pattern not introduced by the *OED* is *anxious for* + (pro)noun + *to*-infinitive. As this pattern includes a *to*-infinitive, it is associated with sense 2, but the example given in the *LDCE* does not illustrate this very clearly: Why was she so *anxious* for me to stay?

Sense 1 of *anxious* is compared to *nervous* in a reference note:

If you are **nervous**, you cannot relax because you are worried about something that you have to do: *I was nervous about my job interview.*

If you are **anxious**, you are very worried about something that may happen or may have happened, over which you feel you have no control: *When she didn't come home from school her parents began to get anxious.*

The difference seems to concern *potentiality* or *factuality*. *Nervous* is used if the reason for concern is concrete, *anxious* is used for uncertain, imagined and hypothetical situations.

### 6.3. The *Dictionary of Constructions of Verbs, Adjectives and Nouns*

The *Dictionary of Constructions of Verbs, Adjectives and Nouns* is an unpublished manuscript by Hendrik Poutsma. It is included in this thesis because it presents further complements and senses not noted before. Poutsma's examples come from literary sources, but not all of them can be traced back successfully, as his sources are sometimes abbreviated and somewhat cryptic. The senses are given in Dutch by Poutsma; therefore a dictionary was consulted for the translation of the senses.

Sense	Pattern
1. <i>Considerate, careful, caring</i> (vol zorg, kieskeurig)	<i>about</i> + NP
2. <i>worried</i> (ongerust over)	<i>at</i> + NP <i>over</i> + NP
3. <i>distressed, worried; concerend:</i> (bezorgd)	<i>for</i> + NP
4. <i>desire strongly</i> (sterk verlangen):	<i>that</i> -clause <i>to</i> -infinitive <i>for</i> + (pro)noun + <i>to</i> -infinitive <i>for</i> + (pro)noun + <i>-ing</i> clause <i>for</i> + NP

Table 2 Patterns and senses in Poutsma's *Dictionary of Constructions of Verbs Adjectives and Nouns*

Poutsma separates the notions of *care* and *desire* more clearly from the notions of *concern* and being *worried*, but one might argue that the first mentioned naturally contain the latter to some extent and that these differentiations are matters of degree and emphasis of one or the other notion. Especially senses 3 and 4 show considerable overlap.

Three new patterns are introduced:

1) *anxious over* + NP, given with sense 1a of the *OED*:

Some of these Governments are *anxious* over the expenditure in which it (sc. fast and cheap Empire airmail service) may involve them. (Times W., 7/II, 1935, 4/3.)

2) *anxious at* + NP, given with the sense *worried*:

Her husband .. might be *anxious* at her absence. (F.M. Crawford, Sant' Ilario, 83))

3) *anxious for* + (pro)noun + *-ing* clause

He was *anxious* for her seeing as much of the country as possible. (Jane Austen, North. Ab., 146)

Poutsma comments: “About, for and over appear to be used indifferently after *anxious* in the meaning of “troubled or uneasy in mind about some uncertain event; being in painful or disturbing suspense” O.E.D.<sup>10</sup>”. In his examples, however, *about* appears under the sense *considerate, careful, caring*.

As a result of the preliminary nature of the manuscript it is problematic to identify some of the patterns because they are presented in the form of examples only, without clearly providing the sense they are grouped under. This concerns the *that*-clause complement, which I classified according to my interpretation of the example under sense 2:

She made pretence of being *anxious* that I should go to Dover to see that all was working well in the cottage. (Dick., Cop.)

The same problem occurred with the patterns *to*-infinitive, *for* + (pro)noun + *to*-infinitive and *for* + (pro)noun + *-ing* clause. However, in Poutsma’s *Grammar of Late Modern English* from 1904, *anxious* is mentioned twice, in the construction *for* + *prep.acc.* + *inf.* (ibid., 595) and *to* + *inf.* (ibid., 643). The first case is classified under “infinitive clauses whose subject-indicating word is a (pro)noun preceded by the preposition *for*” (ibid., 586). These kind of infinitive clauses are found especially after verbs (or certain nominal predicates) expressing some form of volition (ibid., 595). For adjectives that can be combined with *for* he states that they regularly take an infinitive clause when the object indicates a purpose to be achieved (Poutsma, MS), thus my classification of the constructions with *for* under sense four.

#### 6.4. The *Valency Dictionary of English*

The *Valency Dictionary of English* by Herbst et al. (2004) is a corpus-based dictionary. It provides information on the complementation patterns of verbs, adjectives and nouns of authentic present-day

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<sup>10</sup> The meaning referred to is sense 1a from the OED.

English. Herbst et al. separate the meaning of *anxious* dichotomously into the already familiar senses 1 *to be worried or fear something* and sense 2 *strongly desire (that something should happen)*.

Sense	Pattern
1. <i>worried or fear</i>	<i>about</i> + NP <i>about</i> + <i>-ing</i> clause <i>about</i> + <i>wh</i> -clause <i>at</i> + NP <i>at</i> + <i>-ing</i> clause <i>over</i> + NP <i>for</i> + somebody <i>that</i> -clause
2. <i>strongly desire</i>	<i>that</i> -clause <i>to</i> -infinitive <i>for</i> + NP+ <i>to</i> -infinitive <i>for</i> + NP

Table 3 Patterns and senses in the Valency Dictionary of English

*For* appears under both senses. The difference in the meaning of the pattern depends on the nature of the complement. When used with a human (probably any kind of animate) NP, the pattern expresses *concern*, in the other cases it has sense 2.

There are 2 new patterns not noted elsewhere:

1) *about* + *wh*-clause

The British, by contrast, are *anxious* about how the Delor plans may unfold  
I was rather *anxious* about where to moor.

2) *at* + *-ing* clause:

There was an irony in feeling *anxious at* having helped students to manage competently on their own when this is exactly what they will need to do for the rest of their professional careers.

The pattern *for* + NP + *-ing* clause is not listed.

To summarize all types of complements found in the dictionaries, I will list them here along with the sense. For the sake of “user friendliness” two of the dictionaries are not referred to by their acronyms:

<b>Prepositional complements</b>	<b>Sense 1 (worried or concerned)</b>	<b>Sense 2 (strong desire)</b>	<b>Listed under both senses</b>
<i>for</i> + NP			<i>OED, Longman, Poutsma, VDE</i>
<i>about</i> + NP	<i>OED, Longman, Poutsma, VDE</i>		
<i>over</i> + NP	<i>VDE, Poutsma</i>		
<i>at</i> + NP	<i>Poutsma</i>		
<i>of</i> + NP	<i>OED</i>		
<b>Sentential complements</b>			
<i>that</i> -clause		<i>Poutsma</i>	<i>Longman, VDE</i>
<i>to</i> -infinitive		<i>OED, Longman, Poutsma, VDE</i>	
<i>for</i> + NP + <i>to</i> -infinitive		<i>Longman, Poutsma, VDE</i>	
<i>for</i> + NP + <i>-ing</i> clause		<i>Poutsma</i>	
<i>about</i> + <i>wh</i> -clause	<i>VDE</i>		
<i>about</i> + <i>-ing</i> clause	<i>VDE</i>		
<i>at</i> + <i>-ing</i> clause	<i>VDE</i>		

Table 4 Overview of patterns and senses in the consulted dictionaries

The *to*-infinitive complement, also in the form *for* + NP + *to*-infinitive, takes sense 2 in all of the dictionaries. *That*-clause complements can have both senses, as can the pattern *for* + NP. The remaining prepositional complements, as well as the remaining sentential complements, appear with sense 1.

## 7. *Anxious* in grammars

The purpose of this chapter is to provide information on *anxious* as presented in several grammars. They will be complemented by additional sources. The grammars consulted are the *Longman Grammar of Spoken and Written English* (Biber et al. hereafter), *A Comprehensive Grammar of the English Language* (Quirk et al. hereafter) and *The Cambridge Grammar of the English Language* (Huddleston and Pullum hereafter).

### 7.1. Meaning and structure

Biber et al. is a corpus-based grammar, and the grammatical features it describe are derived from the analysis of a corpus comprising over 40 million words of written and spoken late twentieth century English. In this corpus *anxious* is classified as a control predicate (ibid., 716). Adjective predicates of this group typically “concern the ability, preparedness, or commitment of the subject to carry out the action described in the *to*-clause” (ibid., 719).

In Quirk et al. *anxious* is found in connection with *that*-clauses (1985, 1179-1183). Semantically, *anxious* is explicitly classified with two categories of verbs taking *that*-clauses, *emotive verbs* and *hypothesis verbs*. Superordinate verbs taking *that*-clause complements are divided in *factual* and *suasive*. The latter refers to verbs that “imply intentions to bring about some change in the future, whether or not they are verbally formulated as commands, suggestions, etc.” (ibid.). This meaning is present in *anxious*, too.

## 7.2. A note on supplementary adjective clauses

Quirk et al. (1985, 424) observe that “adjectives can function as the sole realization of a verbless clause [...] or as the head of an adjective phrase realizing the clause”. They present five example sentences, one of them containing *anxious*:

(1) *Anxious for a quick decision, the chairman called for a vote.*

In Quirk et al.’s terminology these are “supplementary adjective clauses”. They are mobile, i.e. they can appear after or before the subject of the superordinate clause. They typically refer to the content of the sentence and their implied subject is usually the subject of the superordinate sentence. They can sometimes be replaced by an adverb without significantly altering the meaning (ibid., 425).

A few constructions of this type were mentioned in the *OED*:

(2) They wait, *Anxious*, and trembling for the Birth of Fate. (Pope, Rape of Lock, 1714)

In (2) *anxious* can be interpreted as an adverb (with the *-ly* ending missing) or as verbless clause with adverbial status, expressing the feelings of the subject in the main clause. It could be replaced by either *anxiously* in the first case or *being anxious* in the second case.

(3) Often *anxious*, and cast down for the case of my oppressed brother.

In (3) the subject is not mentioned even in the main clause, but it can be recovered from the context.

## 7.3. Simple and complex constructions

*Anxious* appears in the construction *anxious + for + NP + to*-infinitive. According to Huddleston and Pullum (2002, 1196), this is a complex catenative construction, i.e. a construction with an additional NP added after the predicate (either with or without the subordinator *for*). They remark on this that raising verbs cannot enter into the complex construction because of their inability to assign a thematic role to the subject.

In constructions like these, *for* can be seen as a *subordinator* or *complementizer*. Normally, non-finite complements do not occur with complementizers, but in the case of *to*-infinitive clauses with an expressed subject *for* is obligatory (Quirk et al. 1985, 1004). When the subject is a pronoun that distinguishes subjective and objective case, it is in the objective case (ibid., 1061).

Dirven (1989, 121) notes that this construction is used with “predicates of longing and desire”. He states that “with these predicates the *for* constituent must be expressed (a) if it is different from the subject of the main verb, and (b) if this entity is not subject to the activity of influencing or causing.” He adds that with *for* the meaning of the *to*-infinitive is even more potential than without because the subject of the matrix clause “exerts no influence on the subject of the complement clause” (ibid., 122).

This potential nature of the infinitive is preserved or even enhanced when the sentence *Wilma was anxious for them to leave* is paraphrased with a *that*-clause construction, *Wilma was anxious that they should leave*, which shows the semantic similarity of these complements.

## 8. Data Analysis

The analysis will be divided in four parts corresponding to the four different sets of data that will be examined. I will start with the earliest examples from the CLMETEV, labelled and referred to as CLMETEV 1 in the following, and proceed in chronological order. The subsequent corpus sections will be referred to as CLMETEV 2 and CLMETEV 3. The BNC corpus will be referred to simply as BNC.

The structure of the individual analyses will be similar in all of the four parts. I will first present a table and a diagram displaying the type and frequency of the patterns found in the data, followed by comments on any salient features and possible changes in the distribution of the complements. Further, the sense of *anxious* in the different patterns as well as the nature of the higher and lower subject will be paid attention to.

In the tables, the patterns are divided into sentential and non-sentential complements, but even though the tokens involving zero complementation are strictly speaking non-sentential, too, I nevertheless separated them from other non-sentential complements. The numerical development of zero complements is of significant interest to the process of complement change, but their syntactic behaviour seems rather constant and they exclusively take sense 1.

Regarding sentential complements, attention will be paid to extra-semantic factors by scrutinising the syntactic environment for insertions, extractions and negation, as they might have an effect on complementation conditioned by the Complexity Principle.

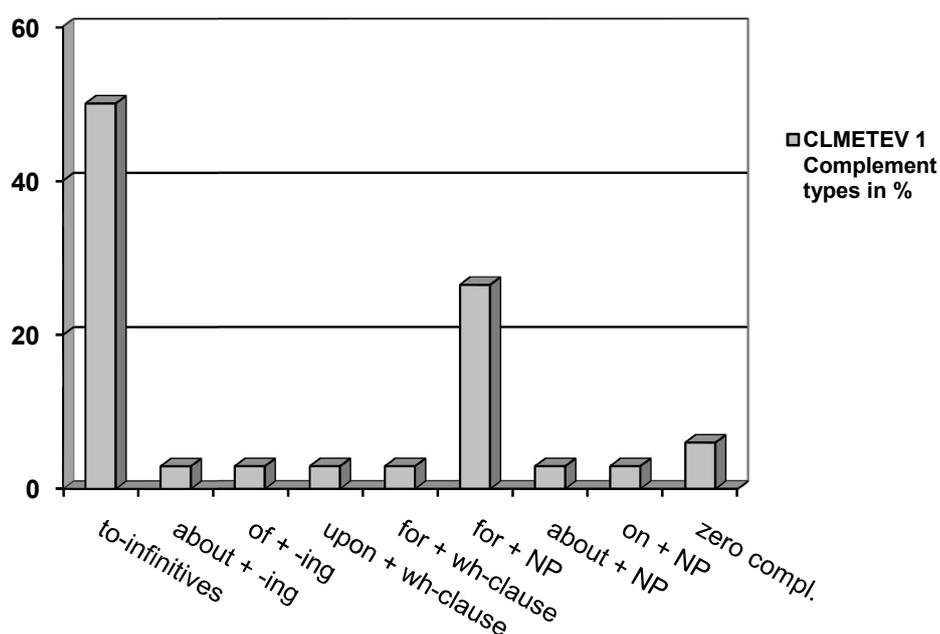
### 8.1. *Anxious* in the CLMETEV 1 (1710 to 1780)

The amount of tokens in the first part of the *CLMETEV* was so small that all instances of *anxious* were analysed. It was reduced even further to less than half of its size due to the sizeable amount (42 tokens or 55%) of attributive uses. So from the already small number of 76 tokens a mere 34 were left.

Complement type	Number of tokens	%	NF / million
<b>sentential</b>			
<i>to</i> -infinitive	17	50,0	5,6
<i>about</i> + <i>ing</i>	1	2,94	0,33
<i>of</i> + <i>ing</i> -clause	1	2,94	0,33
<i>upon</i> + <i>wh</i> -clause	1	2,94	0,33
<i>for</i> + <i>wh</i> -clause	1	2,94	0,33
<b>sentential total:</b>	<b>21</b>	<b>62</b>	<b>6,92</b>
<b>non-sentential</b>			
<i>for</i> + NP	9	26,47	2,96
<i>about</i> + NP	1	2,94	0,33
<i>on</i> + NP	1	2,94	0,33
<b>Non-sentential total:</b>	<b>11</b>	<b>32</b>	<b>3,62</b>
∅	2	6	1,97
<b>Total</b>	<b>34</b>	<b>100</b>	<b>12,51</b>

Table 1 Complements in the CLMETEV 1 (distribution and frequencies)

Figure 1 Distribution of complement patterns CLMETEV 1



There are nine different complement types altogether. As becomes apparent from the table, the *to*-infinitive is by far the most frequent complement, followed by the *for* + NP pattern. Another thing to notice is the absence of *that*-clauses. There was no mention of them in the *OED*, yet all of the other dictionaries listed *that*-clauses as possible complements. As the time frame of this part of the

CLMETEV is from the 18<sup>th</sup> century, it raises the question whether the *that*-clause as a complement of *anxious* was introduced only in the 19<sup>th</sup> century.

The data revealed that modifiers are very common with *anxious*, especially grading and intensifying modifiers like in the following examples:

- (1) I am still blessed in the favor of the most excellent person that ever lived, and am not in the least *anxious* for an explanation of any farther good. (Haywood, 1744, The Fortunate Foundlings)
- (2) The contents of this letter seem to prove that Severus was really *anxious* to restore discipline... (Gibbon, 1776, Decline and Fall of the Roman Empire 1)

### 8.1.1. Sentential complements

#### ***To*-infinitives**

*To*-infinitives account for half of the tokens. In the *OED*, this pattern was associated with the sense *full of desire and endeavour; solicitous; earnestly desirous (to effect some purpose)*. This was confirmed by the data in combination with verbs of action (*do, exchange*), receiving (*get*), succeeding (*succeed, achieve, take advantage of*) or preserving (*save, preserve, restore, recover, maintain*). The semantic role of the understood subject of the lower clause could therefore be interpreted in various ways depending on the verb in the lower clause as agent, beneficiary, experiencer and goal. The higher subject always had the role of the experiencer. The higher and the lower subject were coreferential in all tokens.

Even though the basic meaning of *desiring something* is shared in all tokens, there are nonetheless different shades of meaning attached to *anxious* depending on the verb which follows the *to*-infinitive.

One example is the combination with *to know* + *wh*-clause which carried the notion of *curiosity*. It occurred rather frequently, in four cases (11%):

- (3) ... even then he could construe his Cato, and some other little collections of sentences, which made him very *anxious* to know, what sort of beings the poets were, and very pressing upon his tutor to make him, if possible, (Cibber 1753, The Lives of the Poets 1)

According to Rohdenburg (2002, 96), the linking verb *to know* belongs to set of so called *interpretative verbs* which provide “a relatively specific interpretation of the subordinate clause in question”. Other verbs in this group are for example *to see*, *to hear*, *to discover* or *to ascertain*. He notes that “some of the more general interpretative verbs appear to be undergoing the initial stages of grammaticalization” (ibid.).

Another example for a tendency towards some certain aspect of the meaning of *anxious* appeared with the verb *conceal* in the lower clause. Here the notion of *concern* or even *fear* is more prevalently detectable than with the verbs of the above mentioned groups, a circumstance which is supported by the coordinated use of *dread* as almost a synonym for *anxious* in the subsequent clause:

- (4) What is there too we are more *anxious* to conceal from others than such blunders, infirmities, and meannesses, or more dread to have exposed by ... (Hume, 1751, Enquiry Concerning the Principles of Morals)

The meaning of the *to*-infinitive complement thus seems to influence the meaning of the matrix verb to a considerable extent.

### **Complexity factors**

At this point I would like to introduce a table of complexity factors I will use throughout the complete analysis chapter, not only for *to*-infinitives but also for *that*-clauses. I chose these complement types because they can be compared regarding their meaning which is an essential condition for variation induced by complexity factors. The complexity factors were chosen because they appeared relatively frequently in all of the corpora and also because their effectiveness is well documented in the literature, thus providing a solid base for comparison. They will be discussed further below. Other complexity factors like complex subject expressions tended to be tied to a certain time period.

The tables will show the tendencies of the complexity factors to occur with the two complements types. We might for example see whether any of the complexity factors is restricted to or shows a strong tendency to occur with a certain complement. The tokens can basically show more than one of the features in the table, but it turned out during the analysis that this was the case in only two tokens.

<b>Total: 17</b>	<b>Basic (13) = 76%</b>	<b>SAC (4) = 24%</b>	<b>total</b>	<b>%</b>
no complexity factor	11	3	<b>14</b>	<b>82</b>
complement insertion	1	1	<b>2</b>	<b>12</b>
extraction	1	-	<b>1</b>	<b>6</b>
negation	-	-	-	-

Table 2 Complexity factors with *to*-infinitives CLMETEV 1

The labels in the head row concern the clause types *anxious* appears in. This distinction is made because *anxious* is often used in constructions missing the subject and the copula verb. The basic clause type can be considered more explicit because of the expressed subject and predicate and also because it is the more common variant, therefore a higher frequency of complexity factors might be expected with this clause type.

Example (5) illustrates a *basic* construction and at the same time it represents the first label in the column of the table denoting sentences lacking any kind of the complexity factors:

- (5) ... the poor creature seem'd *anxious* to get a penny; ... (Sterne, 1768, A Sentimental Journey through France and Italy)

The acronym SAC is derived from the term *supplementive adjective clause* introduced in section 7.2. Erdman (1985, 1144) notes that these adjective phrases can be *noun adjectives* or *sentence adjectives* and they add information on their head noun in the same way as restrictive relative clauses or express a variety of adverbial functions. SAC, then, refers to clauses of the following type:

- (6) A prince, *anxious* to maintain his dominions at all times in the state in which he can most easily defend them, ought ... (Smith, 1766, Wealth of Nations)
- (7) Why so *anxious* to inform us of the great company which you have kept; the obliging things which were said to you; ... (Hume, 1751, Enquiry Concerning the Principles of Morals)

Complement insertions denote insertions between adjective and complement. Vosberg (2006, 60-61) notes that inserted material like adverbial phrases and especially objects constitute a cognitively very complex situation which typically favours the more explicit variant of the available options. However, according to Vosberg (2006, 277), the degree of structural and thus cognitive complexity increase with the length and the level of the sentential nature of the insertions. Shorter insertions are thus easier to process than longer ones, which may explain their presence in following examples of the *to*-infinitive complementation:

- (8) I am *anxious*, too, to know how poor Mr. Whithed does, ... (Walpole 1735-48, Letters 1735-1748)
- (9) ... but, in the middle of the court, they were met by Manfred, who, distracted with his own thoughts, and *anxious* once more to behold his daughter, was advancing to the chamber where she lay. (Walpole 1764, The Castle of Otranto)

The next complexity factor, extraction, was already discussed in section 5.2. According to the Extraction principle, *to*-infinitives are preferred to *-ing*-clauses in extraction environments. The share of *-ing* clauses however, was significantly smaller than that of *to*-infinitives, so the occurrence of extractions will be compared amongst *that*-clauses and *to*-infinitives. Vosberg (2006, 278) notes that finite clauses are more difficult to extract of due to their higher complexity. He further suspects that extraction is even less acceptable in finite clauses that are explicitly marked by a complementizer (*ibid.*).

The one case of extraction in the CLMETEV 1 I classified as *relative extraction* (despite the word *too*, which seems a little out of place here). At the same time it includes a comparative construction, rendering this sentence complex, indeed:

- (10) What is there too we are more *anxious* to conceal from others than such blunders, infirmities, and meannesses, or more dread to have exposed by raillery and satire? (Hume, 1751, Enquiry Concerning the Principles of Morals)

Negation of the dependent clause as a complexity factor was explored by Rohdenburg. He was able to show “an extremely strong correlation between the use of negation and the finite clause” (1995, 379). The result is applicable also to the data of the CLMETEV 1, as no instance with a negated *to*-infinitive complement could be found.

In one example the adjective was fronted. Even though this sentence is rather complex, I included it under the category of examples that show no complexity factors, as it does not exhibit any of the complexity factors under investigation.

- (11) Solicitous and *anxious* as I have ever been to form your heart, your mind, and your manners, and to bring you as near perfection as the imperfection of our natures will allow; I have exhausted, in the course of our correspondence, all that my own mind could suggest.....(Chesterfield, 1746-71, Letters to his Son on the Art)

Comparative constructions were problematic because they occurred with different levels of complexity. As a rule, comparative construction involving extraction will be classified under the category of extractions. But not all comparative constructions involved extraction from the lower clause. Sometimes no relevant complexity factors could be detected:

- (12) ... and he is, upon all these accounts, generally much more *anxious* to exchange his goods for money than his money for goods. (Smith 1766, Wealth of Nations)
- (13) ... Clodius Albinus, Pescennius Niger, and Septimius Severus, were still more *anxious* to succeed than to revenge the murdered Pertinax. (Gibbon, 1776, Decline and Fall of the Roman Empire)

*As...as* constructions, and also the *more...than* structures can involve insertions between adjective and complement. In some cases, for example in constructions with two clauses beginning with *the* + a comparative word, they cause a change in the normal word order. However, this is not necessarily a complexity factor. If one has a look at grammars (e.g. Leech and Svartvik 2002, 121-125), these syntactic arrangements are considered to be the normal situation for comparative constructions. Therefore, they were counted as tokens without complexity factors in the table.

**-ing clauses**

There was one instance of *about + ing* which appeared in a comparative construction:

- (14) ... as I have often told you, I am much more *anxious* about your doing well, than about your being well; ... (Chesterfield, 1746-71, Letters to his Son on the art...)

Due to the possessive pronoun in front of the *-ing* clause this form can be considered a POSS-*ing* construction, which closely resembles a NP. This assumption is enhanced by the fact that *anxious* does take NP complements with the preposition *about*. A *to*-infinitive is not possible here because the lower clause contains an expressed subject.

Relating this to what was said about the meaning inherent to the structure of the *-ing* clause and the *to*-infinitive in chapter four, one might also draw on the concept of *overlap* introduced by Smith. The situation is construed as happening at the same time (someone is involved in some activity which somebody else is concerned about).

Finally, Wood's point of *agentivity* might be reflected here, because the focus of attention is on the content of the *-ing* clause rather than on the *performer*.

The second *-ing* clause complement was an *of - ing* construction, which was labelled obsolete in the *OED*.

- (15) ... these Circumstances consider'd, make me very *Anxious* of getting to Sea. The wind continued moderate all night, and at 5 a.m. it fell calm ... (Cook, 1768-71, Captain Cook's Journal)

The context reveals that the author has a strong desire to set sail and continue the journey but at the same time fears for the success of the endeavour. Therefore, *anxious of* which was interpreted as having the meaning *anxious of an issue dreaded* in the *OED* seems a suitable choice here.

**wh-clauses**

Two instances of finite *wh*-clause complements appeared in the data, both introduced by a preposition (*for* and *upon*). Both examples involve a comparative construction. An interesting distinction regarding the sense of *anxious* is made by juxtaposing *curious* and *anxious*. It clearly brings out the component of fear or concern contained in the latter.

- (16) ... on his companions, went fearless in, more curious to know the meaning of this mysterious proceeding, than *anxious* for what might befall him. (Haywood, 1744, *The Fortunate Foundlings*)

The same sense can be found in the second example:

- (17) ... and the youngest enter into the world with more innocency: whosoever leads such a life, needs be less *anxious* upon how short warning it is taken from him." (Cibber, 1753, *The Lives of the Poets* 1)

**8.1.2. Non- sentential complements****For**

The second most frequent complement pattern after the *to*-infinitive was *for* + *NP* with nine instances.

This construction is interesting because it was listed under both senses in all of the consulted dictionaries. One might detect a tendency towards sense 1a from the *OED* when the NP complement is human or at least expresses concern for the welfare (or sometimes only the state or condition) of a human being. This circumstance was also noted in the *VED*.

- (18) ... and her horse stepping into a deep place, exposed both her and the child to great danger. She being more *anxious* for the safety of the child than her own, threw him over a hedge into a field adjoining ... (Cibber, 1753, *The Lives of the Poets*)

With the following NP complements *anxious* could be interpreted in the sense of *worried/concerned*:

*the safety of the child / the preservation of the queen of Hungary / her son / (not for his own) but for public safety / the affliction (it will cause in thee)*

This is opposed to non-human NPs, often denoting entities that are desirable as such, like *an increase of their pay* or *success*, things which usually no one objects to. In these cases *anxious* is used in the sense of *desirous*, here in negated form:

- (19) I am still blessed in the favor of the most excellent person that ever lived, and am not in the least *anxious* for an explanation of any farther good. (Haywood, 1744, The Fortunate Foundlings)

NPs of this type comprised the following: *Your success/ an explanation / the increase of their pay / the conversion of his friend*. The proportion of the two senses is thus almost 60/40 in favour of sense 1.

### ***upon and on***

Rohdenburg (2002, 90) examines the prepositions *on* and *upon* after the verbs *rely* and *call* with regards to the complexity of their environment and finds that the more explicit *upon* is more likely to occur in complex environments. This effect of the Complexity Principle may also have an impact on the choice of the prepositions *on/upon* in my own data:

- (20) ... and the youngest enter into the world with more innocency: whosoever leads such a life, needs be less *anxious* upon how short warning it is taken from him. (Cibber 1753, The Lives of the Poets)
- (21) Perhaps to your second question, *why he desires health*, he may also reply, that *it is necessary for the exercise of his calling*. If you ask, *why he is anxious on that head*, he will answer, *because he desires to get money*. (Hume 1751, Enquiry Concerning the Principles of Morals)

The less explicit preposition *on* is used with a simple NP complement whereas the more explicit *upon* is followed by a finite *wh*-clause. In addition, the construction in (20) as a whole is more complex than (21), as there is an insertion between the copula and *anxious*, the predicate consists of two verbs, *need* and *be*, and the subject is a nominal relative clause. The examples also differ in sense. (20) takes sense 1, but the context of (21) strongly suggests an interpretation in the sense of *desirous*.

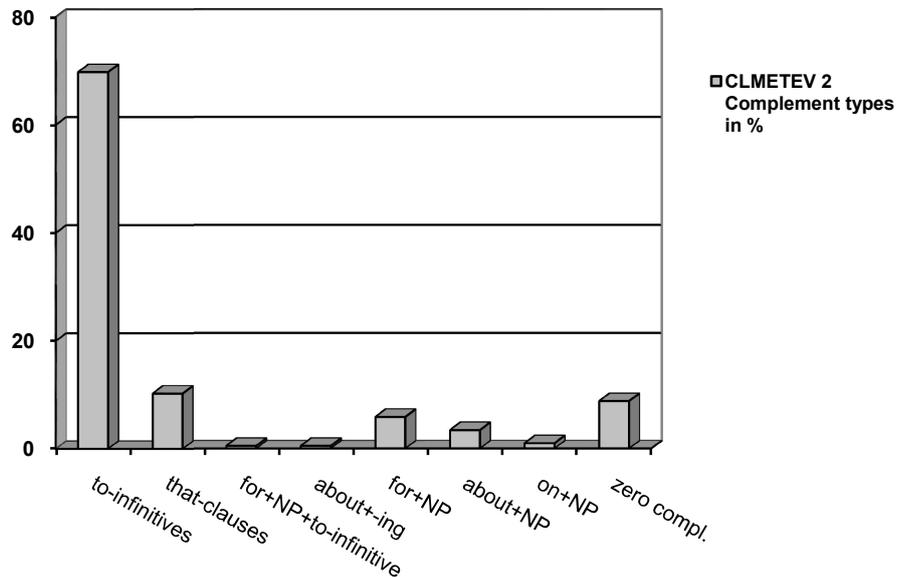
## 8.2. *Anxious* in the CLMETEV 2 (1780 to 1850)

The second sub-period of the CLMETEV contained considerably more instances of *anxious* than the first section, so it was sufficient to make use of only 50 % of the tokens. Accordingly, the normalised frequency (NF/million) was calculated by adopting the figure 2,861,994 (50% of the total subsection word count) as the corpus word count. The total of tokens amounted to 290 of which 83 (28, 6%) were used attributively. The popularity of *anxious* has increased dramatically from 12, 51 per million words in the previous sub-period to over 70 hits per million words. The total number of analysed tokens was 206.

<b>Complement type</b>	<b>Number of tokens</b>	<b>%</b>	<b>NF/million</b>
<b>sentential</b>			
<i>that</i> -clauses	21	10,24	7,45
<i>to</i> -infinitives	143	69,75	50,76
<i>for</i> + NP + <i>to</i> -infinitive	1	0,48	0,35
<i>about</i> + <i>-ing</i> clause	1	0,48	0,35
<b>sentential total</b>	<b>166</b>	<b>80,97</b>	<b>58,91</b>
<b>non-sentential</b>			
<i>for</i> + NP	13	6,31	4,54
<i>about</i> + NP	7	3,41	2,48
<i>on</i> + NP	2	0,97	0,7
<b>non-sentential total:</b>	<b>22</b>	<b>10,68</b>	<b>7,68</b>
<b>Ø complements</b>	<b>18</b>	<b>8,78</b>	<b>6,38</b>
<b>Total</b>	<b>206</b>	<b>100</b>	<b>73,01</b>

Table 3 Complements in the CLMETEV2 (distribution and frequencies)

Figure 2 Distribution of complement patterns CLMETEV 2



The second section of the CLMETEV faced the rather spectacular advent of 10 per cent of *that*-clause complements. The *to*-infinitive did not only preserve its leading rank amongst the complements of *anxious* but its percentage went up by almost 20%. Together, the sentential complements now form over 80% of the complements. The number of patterns has fallen from nine to eight because no instances of *wh*-clauses nor *of* + *-ing* clause were found. Nevertheless, besides the already mentioned *that*-clause, an additional new pattern, *for* + NP + *to*-infinitive, appeared. The prepositional complement patterns remained the same. *For* is again the most frequent preposition, but its share of the complements has fallen from 27% to only 6, 8%. The use without a complement has increased slightly for about two per cent.

### Too

The word *too* appeared in several tokens, with different effects on the sense of the complements.

Compare the following sentences found in the data:

- (22) Let her only determine, without being too *anxious* about present happiness, to acquire the qualities that ennoble a rational being ... (Wollstonecraft, 1792, Vindication of the Rights of Woman)
- (23) "I am too *anxious* to sleep; I think so, at least." "William said he was too thirsty to sleep, sir, but, poor fellow ... (Marryat, 1841, Masterman Ready)

In example (22) *too* has the function of an adverb modifying the adjective without any further effect on the rest of the sentence. Regarding (23) one might ask whether this example involves adjective complementation. Huddleston and Pullum (2002, 837) note that “[*t*]oo in the sense of “excessively” licenses an indirect complement with the form of an infinitival clause or a *for* PP.” The latter form was found in the data, too:

- (24) Mrs. Delvile, too *anxious* for conversation, left the room. (Burney, 1782, Cecilia 1-2)

Based on the reason mentioned above I classified those cases as zero complements.

### 8.2.1. Sentential complements

#### *That*-clauses

Whereas there was no instance of a *that*-clause in the period between 1710 and 1780, they now form almost 10 % of complements in the second sub-part of the CLMETEV. The first token dates from the year 1794, the second from 1811, after which they can be found in every decade.

There was only one example without the complementizer *that*. Rohdenburg (1995, 385) remarks that “the absence of the conjunction and its presence – single or repeated – can be found to correlate with different degrees of complexity”. And indeed the example missing the *that* is simple enough:

- (25) “What was it?” asked Margaret, almost *anxious* her grandfather should be convinced. (Gaskell, 1848, Mary Barton)

In all but one instance the *that*-clauses contained a putative *should*. Instead, the writer used a subjunctive form to express the hypothetical notion.

- (26) ... and at the last village, the worthy Mayor of Versailles comes to meet him, *anxious* that the arrival and locking up were well over. (Carlyle, 1837, *The French Revolution*)

As regards the meaning, *anxious* could be replaced by *eager* in all of the sentences without causing a considerable change in meaning, apart from a reduction of the aspect of *concern*. Even though the *that*-clause pattern in general expresses *eagerness*, *concern* is always present to some degree. This notion is also conveyed by the use of *should* or a subjunctive form in the *that*-clause. Quirk et al. (1985, 234) state that with the use of putative *should* “the speaker entertains, as it were, some ‘putative’ world, recognizing that it may well exist or come to existence”. This includes also some degree of uncertainty, a state which is often perceived as worrying:

- (27) They were most *anxious* that their home should continue ever to be hers, yet they feared that her dislike to a new country might be an insuperable objection to this. (Gaskell, 1848, *Mary Barton*)

### Complexity factors

Total: 21	Basic (13) = 62%	SAC (8) = 38 %	total	%
no complexity factor	8	8	16	76
complement insertion	3	-	3	23,1
extraction	1	-	1	4,7
negation	1	-	1	4,7

Table 4 Complexity factors with *that*-clauses CLMETEV 2

The high percentage (76%) of *that*-clauses without any of the complexity factors under investigation seems surprising, as *that*-clauses are the preferred choice in complex environments. However, in none of the *that*-clauses was the subject of the matrix clause coreferential with the subject of the *that*-clause. As we have seen in the chapter on subject control, in the pattern with the *to*-infinitive the lower subject is always coreferential with the higher subject. Vosberg (2006, 55) argues that constructions where the subjects of the lower clause is not coreferential with the subject of the higher clause are perceived as marked structures and are therefore cognitively more difficult to process. This in turn might explain the

preference of the *that*-clause as the more explicit variant in those cases where the subordinate clause has its own, expressed subject which is not coreferential with the higher subject.

Semantically, the only possibility to express a situation involving two non-coreferential subjects with a *to*-infinitive would be a *for* + NP + *to*-infinitive clause construction. Its sense corresponds to that of *that*-clauses, best described as *eager that something shall take place in the future*. Very often though, a *for* + NP + *to*-infinitive construction would be more troublesome to understand, especially in situations with inserted material between *anxious* and the complement. Compare:

- (28) ... but I am sure you will not object to the office, as I know you to be equally *anxious* with myself, that the minority of Miss Beverley should pass without reproach." (Burney, 1782, Cecilia 1-2)

Rephrased with a *for* + NP + *to*-infinitive it becomes more complicated to identify the references of the parts of the sentence that form units:

- (29) I know you to be equally *anxious* with myself for the minority of Miss Beverly to pass without reproach.

A further difference is that by using a *that*-clause it is possible to give more detailed information in the subordinate clause. Vosberg (2006, 60-61) comments on this that in cases where the subordinate clause is modified by marked tense, modal auxiliaries, adverbial insertions or further subordinate clauses the finite *that*-clause seems to be almost the only choice.

The choice of a *that*-clause might also be motivated by the wish to explicitly express potentiality. Even though Dirven (cf. section 7.3) stated that *for* + NP + *to*-infinitive constructions strongly imply potentiality, a *that*-clause containing putative *should* does so even more clearly. Confirmation for this claim might be found in the fact *should* or a subjunctive verb form was present in all *that*-clauses.

Eight tokens were supplementary adjective clauses; none of them contained a complexity factor. The following example, in which the concept of SAC clauses was slightly expanded to include the

form *being anxious*, is remarkable because of the complexity of the construction and the long distance between *anxious* and its semantic head:

- (30) Perceiving the boat still alongside, and in danger every moment of being swamped, and being extremely *anxious* that the privateer should be instantly taken in charge, because he feared that It would otherwise founder, he exclaimed, "Have I no officer in the ship who can board the prize?" (Southey 1813, Life of Horatio Lord Nelson)

Amongst the basic clause type, insertion between the adjective and the *that*-clause appeared in three tokens. One of them was another non-finite clause:

- (31) I am *anxious* in the event of our travelling together that you should yourself be at ease with me, even as you would with ... (Cottle, 1847, Reminiscences of Samuel Taylor Coleridge and Robert Southey)

There was one case of relativization amongst the *that*-clauses, which is surprising as extractions from finite clauses are considered difficult and the sentence is indeed rather cumbersome to put in the right order:

- (32) My father, who had long since witnessed with some anxiety my aspiring disposition, now began to dread the evil consequences of those lofty notions of patriotism, and that disinterested love of country, which in my earlier years he had taken so much pains to instil into my young mind, and had been so *anxious* that I should imbibe. (Hunt H, 1820-2, Memoirs of Henry Hunt 1)

This is a counterexample to a hypothesis made by Hawkins (in Rohdenburg 2003, 152), which states that finite complements are more difficult to extract out of than non-finite ones and thus occur less frequently. More surprisingly even, this example contained the complementizer, which is contrary to Vosberg's (2006, 181) tentative assumption that in extraction contexts involving finite complements the variants without the subordination marker are more acceptable.

Example (33) might be considered an instance of *horror aequi*. If this sentence was rephrased with a *for* + NP + *to*-infinitive construction, *for* would occur three times, though not in directly adjoining each other. Therefore the choice might have been made for reasons of style:

- (33) He had just compunction enough for having done nothing for his sisters himself, to be exceedingly *anxious* that everybody else should do a great deal; ... (Austen, 1811, Sense and Sensibility)

- (34) He had just compunction enough for having done nothing for his sister himself, to be exceedingly *anxious* for everybody else to do a great deal.

Only one token contained negation:

- (35) ... I ruminated incessantly upon plans of deliverance, but I was *anxious* that my choice should not be precipitately made. (Godwin, 1794, The Adventures of Caleb Williams)

The subjects of the subordinate clauses were persons, objects or abstract notions. The matrix subject was human in all of the tokens.

### ***To*-infinitives**

*To*-infinitives formed almost 70 % (143 tokens) of the data, which is an increase of 20 % compared to the first part of the CLMETEV. One example was missing a part of the *to*-infinitive. This was actually intended by the author as it also appears in the original source. The ellipsis is used in the sense of et cetera (&c.).

- (36) And advertising in the papers that a "Gentlewoman of agreeable manners, and accustomed to the best society, was *anxious* to," &c., she took up her residence with Mr. Bowls in Half Moon Street. (Thackeray, 1847-8, Vanity Fair)

The token was included in the *to*-infinitive count.

<b>total (143)</b>	<b>Basic (111) = 78%</b>	<b>SAC (32) = 22%</b>	<b>total</b>	<b>%</b>
no complexity factor	96	29	<b>125</b>	<b>87,0</b>
complement insertion	9	2	<b>11</b>	<b>7,7</b>
extraction	6	-	<b>6</b>	<b>4,2</b>
negation	1	1	<b>2</b>	<b>1,4</b>

Table 5 Complexity factors with *to*-infinitives CLMETEV 2

With 87 % the percentage of tokens without any complexity factors was 11 % higher than that of *that*-clause.

78% contained an expressed subject and a copula verb as in:

- (37) A female beauty and a male wit, appear to be equally *anxious* to draw the attention of the company to themselves; (Wollstonecraft, 1792, Vindication of the Rights of Woman)

32 tokens (22 %) of the *to*-infinitives occurred as supplementary adjective clauses, either referring to a head noun or a whole clause. They typically were in positions close to the head they referred to, either left or right to it:

- (38) "I have heard something of this, sir, from my friend George," Dobbin said, *anxious* to come to his point. (Thackeray, 1847-8, *Vanity Fair*)
- (39) *Anxious* to retain a service in which she possessed such a blessing, care and attention to her humble office caused her master to prolong her stay ... (Inchbald, 1796, *Nature and Art*)

Insertions between the adjective and the complement occurred in almost eight per cent of the tokens. Nine tokens appeared in the basic clause type, none of them longer than in (41):

- (40) I was *anxious*, of course, to elude as carefully as possible the quarantine detentions which threatened me on my arrival, ... (Kinglake, 1844, *Eothen*)
- (41) My dear Sir,--I am at present *anxious*, as Cawthorn seems to wish it, to have a small edition of the 'Hints from Horace' [1] published immediately ... (Byron, 1810-3, *Letters*, 1810-1813)

The SAC clause type allowed insertion between adjective and complement in two cases:

- (42) Questioning her maidens, who had hitherto- kindly *anxious*, as I have said, to save her the additional agony- refrained from informing her of the state of Glaucus, ... (Bulwer-Lytton, 1834, *The Last Days of Pompeii*)
- (43) *Anxious*, now that he was somewhat calmer, to avoid a rupture with Richmond, Surrey, as soon as he had received ... (Ainsworth, 1843, *Windsor Castle*)

The percentage of negation is surprisingly low in the *to*-infinitives; only two tokens had the particle *not* inserted after the adjective to negate the infinitive.

- (44) He is a worthy man, a little vain of his virtue a la Necker; and more *anxious* not to do wrong, that is to avoid blame, than desirous of doing good (Wollstonecraft, 1796, *Letters on Sweden, Norway and Denmark*).
- (45) ...they think him too easy-tempered, deficient in suspicion: he has stood between Dumouriez and much censure, *anxious* not to exasperate our only General (Carlyle, 1837, *The French Revolution*)

Extractions were present in six cases. All of them occurred in the Basic clause type, thus supporting the supposition that the more explicit clause type will allow more complex constructions. Relative

extraction as in example (46) was present in four tokens. (47) was interpreted as a case of adjunct extraction and (48) represents the sole instance of topicalization:

- (46) ...; but, as one of them was a very near relation of mine, and one whose faults I have always been *anxious* to conceal and palliate, rather than expose and condemn, I put up with the loss without opposing the proof ... (Hunt H, 1820-2, Memoirs Of Henry Hunt 1)
- (47) ..., because he feels himself drawn by some cord of love to all his fellow creatures, for whose follies he is *anxious* to find every extenuation in their nature – in himself. (Wollstonecraft, 1792, Vindication of the Rights of Woman)
- (48) ... until I am convinced that I have no reason to distrust this kind, insinuating friendship you are so *anxious* to push upon me. (Brontë, 1848, The Tenant of Wildfell Hall)

### **For + NP + to-infinitive**

One instance was of the type *for* + NP + *to*-infinitive:

- (49) ... they are much more *anxious* for the hour of school-time to arrive than to end; they therefore make a rapid progress; ... (Owen 1813 - a new view of society)

The strong notion of expectation aroused by the verb *arrive* in the lower clause might be the reason for the choice of the *to*-infinitive with its characteristic feature of future-orientation.

### ***ing*-forms**

Contrary to example (49) expectation is not found in (50). The choice of the *-ing* form could semantically be explained with the fact that the subject is obviously going to be hanged, and, having no family left, does not even care about living any longer. Future orientation can thus be excluded:

- (50) "I leave no family to lament me, and therefore cannot be supposed to be very *anxious* about prolonging my life; but the disgrace of being hanged is dreadful to me." (Southey, 1813, Life of Horatio Lord Nelson)

As in the first part of the CLMETEV sentences of the construction *anxious* + *to*-infinitive + finite *wh*-clause with the predominant meaning of *curious* (*to know*) could be found; five of them with

*to know*, but constructions with the same sense contained also *to hear*, *to see* and *to learn* (2 instances), adding up to nine instances or 6 % of the *to*-infinitives:

- (51) ... though there could not be a doubt of its nature, she was *anxious* to hear; and still more *anxious* to know how Edward would conduct himself (Austen, 1811, *Sense and Sensibility*)
- (52) I was rather *anxious* to see how he would meet me in the morning, and not a little disappointed to behold ... (Brontë, 1848, *The Tenant of Wildfell Hall*)

### 8.2.2. Non-sentential complements

#### For

With 13 tokens, *for* was again the most common preposition in the data, even though its overall percentage has fallen by 20% compared to the previous section. If we have a look at its NP complements, a similar division as before can be discerned. In cases where the nature of the NP concerns either the welfare or the condition of human beings or designates an animate being, a tendency towards *concern* is prevalent.

- (53) The Mutineer deputies vanish, not unpromptly; the Municipal ones, *anxious* beyond right for their own individualities, prefer abiding with Bouille. (Carlyle, 1837, *The French Revolution*)
- (54) But, when George, seemingly *anxious* for my happiness, pressed me to quit my present painful situation, my heart swelled with gratitude... (Wollstonecraft 1798, *Maria*)

Other instances with sense 1 had the following NP complements: *the progress of public improvement / her happiness / happiness / her brother and the nurses / life and brewhouse*.

Even though the last mentioned NP includes the noun *brewhouse*, *anxious* has sense 1, as it appears in coordination with *life* (thus concerning human existence).

When the NP complement was either non-animate or was an abstract noun, *anxious* had the meaning of *wanting something very much*, which is nicely emphasised by the use of *desire* in the following sentence:

- (55) ... was it not its duty to correct abuses? and what abuses were greater than robbery and murder? He was, indeed, *anxious* for the abolition. He desired it, as a commercial man, on account of the commercial character of ... (Clarkson, 1839, The History of the Abolition of the African Slave-trade)

One example included the expression *anxious for a full life*, which would typically be related to sense

1. However, the adjective *full* seemed unusual in this use. Context revealed that this has actually to be counted as an instance of sense 2, as *the full life* refers to a biography, thus an inanimate object.

- (56) ... and given to me by a pupil of his, John May, a Lisbon acquaintance, and a very valuable one. John May is *anxious* for a full life of John Henderson. (Cottle, 1847, Reminiscences of Samuel Taylor Coleridge and Robert Southey)

Further NPs of the same sense included: *your preference / for your next letter/ some opportunity / her visitor's departure*. The split between the senses was again in favour of sense 1 with seven tokens.

There were also instances that looked like *to*-infinitives on first sight, but on closer investigation revealed themselves as *for* + NP constructions. Compare the following three examples. Only the first is a *for* + NP + *to*-infinitive pattern, but the rest are not:

- (57) ... they are much more *anxious* for the hour of school-time to arrive than to end; (Owen, 1813, A New View of Society)
- (58) He felt the reproof, and felt it deeply; seeming *anxious* for some opportunity to make an acknowledgment, or some reparation. (Hogg, 1824, Private Memoirs and Confessions of a Justified Sinner)
- (59) I need not say that we are particularly *anxious* for your next letter to know how you find Mrs Lloyd ... (Austen, 1796-1817, Letters to her Sister)

Even though these constructions look very much the same, they belong to different categories of complementation. The activity expressed by the *to*-infinitive is directed towards its subject in (57), but not in (58) and (59), which is why the latter were grouped in the class of prepositional complements. Huddleston and Pullum (2002, 1259-1260) list *opportunity* in a group of nouns that take non-finite complements, a fact which confirms the decision to treat example (60) as a case of *for* + NP complementation. In example (59) the *wh*-clause was considered an adjunct.

In one token the NP was extracted from the lower clause in a relative extraction:

- (60) ... and for whose happiness she grew daily more *anxious*, as Bingley had now been gone a week and nothing more was heard of his return. (Austen, 1813, *Pride and Prejudice*)

### About

The preposition *about* experienced a slight increase in this period. The NPs it occurred with were the following: *her own affairs*, *present happiness*, *secondary things*, *them*, *her verses*, *the same thing*, *something*. As there are only seven instances, it is difficult to make out any clear semantic groups, but three of seven hits concern a human NP or the welfare of a human being. Contrary to the *for* + NP pattern, the construction with *about* has a constant meaning. The *OED* defined it as “troubled or uneasy in mind about a thing or person involved in uncertain issues”. The data confirmed this interpretation:

- (61) Let her only determine, without being too *anxious* about present happiness, to acquire the qualities that ennoble a rational being, ... (Wollstonecraft, 1792, *Vindication of the Rights of Woman*)
- (62) But being *anxious* and sorrowful about the same thing makes people quicker than anything, I think. She's like a mother to Mary ... (Gaskell, 1848, *Mary Barton*)

An interesting case was a construction with *about*, which was not counted as prepositional complement but rather as zero complement. *About* was interpreted as *around*, i.e. *in somebody's presence*:

- (63) ... I wish you could dismiss that apathy out of that countenance, and look rather more *anxious* about me." (Brontë 1847, *Wuthering Heights*)

Amongst the tokens was also one case of extraction:

- (64) I want to tell Walter's Uncle," said Florence, laying her hand timidly upon the old man's as it rested on the table, to bespeak his attention, “something that I am *anxious* about”. (Dickens, 1848, *Dombey and Son*)

### on

The two tokens with *on* involved sense 1 and resemble the pattern *about* + NP. This can be concluded from the context featuring the words *fear* in (65) and *trouble* in (66):

- (65) Miss H. would not have written such a letter if she had not been all but sure of it, and a little more. I am *anxious* on the subject, from the fear of being in the way if they do not come to give Harriot a conveyance. (Austen, 1796-1817, Letters to her Sister)
- (66) Second thoughts in every thing are best, but, in rhyme, third and fourth don't come amiss. I am very *anxious* on this business, and I do hope that the very trouble I occasion you will plead its own excuse, and that it ... (Byron 1810-3, Letters, 1810-1813)

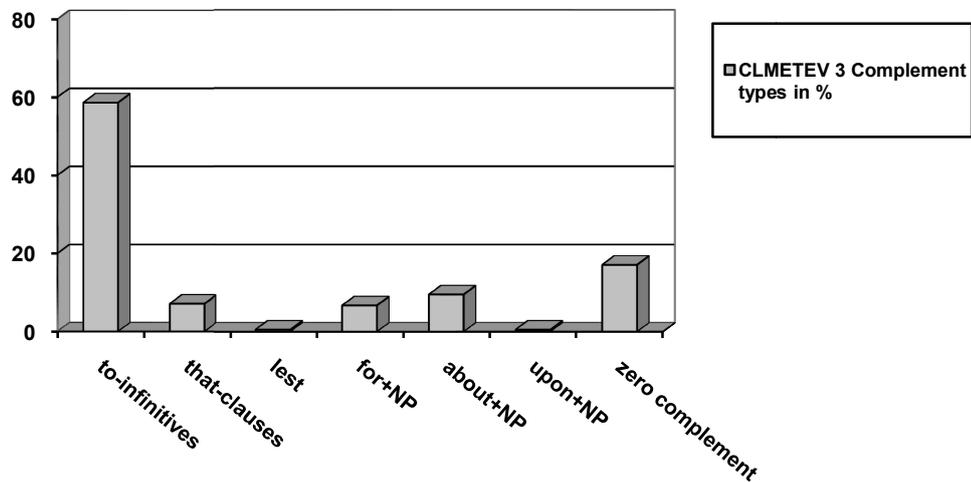
### 8.3. *Anxious* in the 3rd part of the CLMETEV (1850 to 1920)

The third sub-period of the CLMETEV covers the time span from 1850 to 1920. 50 % (299 hits) of the tokens were taken into account and the normalised frequency was calculated with the figure 3,125,782. After separating the attributive uses amounting to 89 (29 %), 210 cases remained for analysis. The NF has increased slightly with a frequency of a little over 76 instances per million words.

Complement type	Number of tokens	%	NF/million
<b>sentential</b>			
<i>that</i> -clauses	15	7,1	4,79
<i>to</i> -infinitives	123	58,6	39,35
lest	1	0,5	0,32
<b>sentential total:</b>	<b>139</b>	<b>66,2</b>	<b>44,46</b>
<b>non-sentential</b>			
<i>for</i> + NP	14	6,7	7,03
<i>about</i> + NP	20	9,5	10,04
<i>upon</i> + NP	1	0,5	0,5
<b>non-sentential total</b>	<b>35</b>	<b>16,7</b>	<b>11,19</b>
<b>Ø</b>	<b>36</b>	<b>17,1</b>	<b>11,51</b>
<b>Total</b>	<b>210</b>	<b>100</b>	<b>76,16</b>

Table 6 Complements in the CLMETEV3 (distribution and frequencies)

Figure 3 Distribution of complement patterns CLMETEV 3



The third sub-period of the CLMETEV faced a decline of sentential complements of about 13 %, whereas non-sentential, including zero complements, increased by about 15 %. The strongest increase was detectable amongst the zero complement patterns, which doubled its percentage rate from eight to 16 %. Within the section of prepositional complements, *about* made an increase by over six per cent and has thus overtaken *for*, which had so far been the dominant preposition. Percentagewise *for* remained quite stable. The search retrieved no tokens with the *for* + NP + *to*-infinitive/ *-ing* clause pattern, instead, one token with *lest* was found. *Upon* was represented with one token.

### 8.3.1. Sentential complements

#### ***That*-clauses**

The presence of *that*-clauses has slightly decreased in this period, from 10% to 7%. The sense of *anxious* tended to sense 2. The most salient change compared to the previous sub-corpus was an increase in negated tokens.

### Complexity factors

<b>total: 15</b>	<b>Basic (12) = 80%</b>	<b>SAC (3) = 20%</b>	<b>total</b>	<b>%</b>
no complexity factor	9	2	<b>11</b>	<b>73</b>
complement insertion	-	-	-	-
extraction	-	-	-	-
negation	3	1	<b>4</b>	<b>27</b>

Table 7 Complexity factors in *that*-clauses CLMETEV 3

73% of the *that*-clauses contained no complexity factor at all. All *that*-clauses contained putative *should* thus showing a similar behaviour to the *that*-clauses in the previous section. Three instances of a missing complementizer were found. Two of those tokens contained no complexity factors whatsoever and are thus in accordance with the Complexity Principle:

- (67) Well, where shall I begin? When I arrived at Waterloo--no, I'll go back before that, because I'm *anxious* you should know everything from the first. (Forster, 1910, *Howards End*)
- (68) Monica learnt, among other things less agreeable, that her husband was generous with money. He was *anxious* she should dress well, though only, as Monica soon discovered, for his own gratification. (Gissing, 1893, *The Odd Woman*)

In the following example, however, one would expect *that* to be present, because negation makes it a more complex construction.

- (69) They were very eager to hear of Ruby's adventures in the Silver Isle, but *anxious* she should not deprive herself of future visits, so they sat quietly beside her. (Radford, 1904, *Sea-thrift*)

The coordinated adjectives here once more show the similarity, but also the difference between *anxious* and *eager*. *Expectation* is contained in both, but only *anxious* expresses *concern*.

As before, the higher and lower clause subjects were not coreferential. It was stated above that it would be difficult in many cases to rephrase *that*-clause constructions with a *for* + NP + *to*-infinitive construction and many examples also in this sub-corpus corroborate this claim, especially when complexity factors are involved:

- (70) She was most *anxious* that the misfortune of her fainting-fit should not lead to the second misfortune of making her mistress ... (Collins, 1859-60 *The Woman in White*)

(71) She was most *anxious* for the first misfortune of her fainting fit not to lead to ...

The higher subject was assigned the role of experiencer and was human in all instances. The predicates in the subordinate clauses varied strongly and no meaning group could be carved out which would be preferably chosen with *that*-clauses.

### ***to*-infinitives**

The frequency of *to*-infinitives shrank from 70% to about 60%. The pattern shows stable features throughout the data regarding meaning. As in the data observed before, the sense of the pattern was that of *eager* or *desirous* (*to effect some purpose*), accompanied by varying degrees of concern. The subject of the matrix clause and the *to*-infinitive complement was coreferential in all tokens, and the matrix subject had the semantic role of an experiencer. The verbs in the subordinate clauses were diverse and no shared semantic features were prevalently present, despite a small group of predicates which occurred several times. These were *please* (2) and *avoid* (3) and the construction with interpretative verbs to introduce a finite *wh*-clause. The latter was present in four instances, two of them were formed with *to know*, and two with *to see*:

(72) ... his lordship (showing me his sweet little birds at the time) was most kindly *anxious* to know what had become of her, where she was to go the day she left Blackwater Park, and so on. (Collins, 1859-60, *The Woman in White*)

(73) The wind was rather high; but I was *anxious* to see, if possible, what was going on, and I went up with the father of the aeronaut. (Bacon, 1902, *The Dominion of the Air*)

Insertions in front position could be found in 6 tokens. The longest insertion was *for the most part*, which is considerably shorter than those found in the CLMETEV 2.

## Complexity factors

<b>total: 123</b>	<b>Basic (97) = 79%</b>	<b>SAC (26) = 21%</b>	<b>total</b>	<b>%</b>
no complexity factor	87	25	<b>112</b>	<b>91</b>
complement insertion	1	1	<b>2</b>	<b>1,6</b>
extraction	5	-	<b>5</b>	<b>4</b>
negation	5	-	<b>5</b>	<b>4</b>

Table 8 Complexity factors with *to*-infinitives CLMETEV 3

Insertions between *anxious* and *to*-infinitive were found in only two tokens. They were very short and appeared in both clause types:

- (74) ...but I am *anxious*, in my own happiness, not to be unjust to others." (Forster, 1910, Howards End)
- (75) The other men heard nothing at all; or declared that they heard nothing, being *anxious* now to abandon the matter, because of the chill in their feet and knees. (Blackmore, 1869, Lorna Done)

Five times (4%) the infinitive was negated, exclusively in the basic clause type. The percentage of negation was thus considerably lower than in *that*-clauses (27%):

- (76) ...they may be *anxious* not to relinquish the very power which other classes are *anxious* to acquire; but in foreign policy there is ... (Bagehot, 1867, The English Constitution)

All five cases of extraction are presented here. They included four relativizations and one instance of topicalization (79):

- (77) These I was *anxious* to shake aside; (Blackmore, 1869, Lorna Done)
- (78) ..., the persons he most wanted to advise him, and the persons whose tempers he was most *anxious* to ascertain. (Bagehot, 1867, The English Constitution)
- (79) Clara was busy with a catalogue, the proof of which she was particularly *anxious* to send to the printer that night. (Rutherford, 1896, Clara Hopgood)
- (80) Nothing has been spared by me to give you the advantages, which, as an English gentleman, I was *anxious* to afford my son, but I am not prepared to see that expense thrown away (Butler, 1903, The Way Of All Flesh)
- (81) ... as having been placed by it in the position which of all others I had been most *anxious* to avoid, and as having saddled me with a very heavy responsibility. (Butler 1903, The Way of All Flesh)

In this corpus section, there were no cases of extraction amongst the *that*-clause complements at all. This may be seen as confirming evidence for the claim that extractions are less acceptable with finite complements, but only a final résumé will shed more light on the matter

### **Lest**

One rather rare subordinator was *lest*. In the *OED* it is defined as 1) “a negative particle of intention or purpose, introducing a clause expressive of something to be prevented or guarded against” and 2) “used after verbs of fearing, or phrases indicating apprehension or danger, to introduce a clause expressing the event that is feared [...] and in English often admitting of being replaced by *that* (without accompanying negative)”. In (82) *anxious lest* could be replaced by *fearing that*. Like a *that*-clause complement, it contains *should*.

- (82) Before the stupor had passed, Mrs. Carthew entered, *anxious lest* the admittance of a messenger of evil to her invalid should have been an error of judgement. (Meredith, 1895, *The Amazing Marriage*)

### **8.3.2. Non-sentential complements**

#### **About**

*About* has taken the lead as the most frequent preposition to link a NP complement. Its use increased by more than six per cent, from seven to 20 tokens. As before, the pattern with *about* has sense 1 in all tokens. Nine NP complements occurred in the form of personal pronouns, constituting 45 % of the tokens. Two instances denoted names, one a group of people (*girls*), two the welfare of a person (*the Prince's health, his future*). This amounts to 14 NPs out of 20. Illustrations seem superfluous here, as syntactically they do not differ in any salient way from the examples in the previous sub-periods. Other NPs were from miscellaneous semantic fields as the following list shows: *the direction / the fate of my luggage / the provision / the result / your trial / the stock in reserve*.

Quite a high percentage, 35 %, were instances containing negation, typically used to create a situation of comforting by denying the need to be *anxious* about something or someone as in the following examples:

- (83) "Dr. Clarke is not *anxious* about him," Mrs. Boyce said in a low voice to Marcella as they moved away. (Ward, 1894, Marcella)
- (84) "But your Preeminence need not be *anxious* about your trial. In a case like yours there can be no necessity of the State that the ordeal of a trial ... (Webster, 1884, Daffodil and the Croäxaxicans)

Two extractions could be found, one of the relativization type; the other I identified as pseudo-clefting.

- (85) The provision I am most *anxious* about is this." He unrolled a large parchment scroll, and read aloud the words "'item, that we will be kind ... (Carroll, 1889, Sylvie and Bruno)
- (86) Any naval officer with experience of command who reads Howard's representations on the subject of the victuals will at once perceive that what the Admiral was *anxious* about was not the quantity on board the ships, but the stock in reserve. (Bridge 1899-1902, Sea-power and other studies)

One token (87) featured a very long subject consisting of several subordinate clauses.

- (87) His impulsiveness and sanguine trustfulness in anyone who smiled pleasantly at him, or indeed was not absolutely unkind to him, made her more *anxious* about him than any other point in his character. (Butler, 1903, The Way of All Flesh)

Another token (88) had a (rather short) insertion between the adjective and the complement:

- (88) She had been made a little *anxious* that morning about Miss Halcombe ... (Collins 1859, The Woman in White)

Added together, the 20 instances of *about* demonstrated rather complex environments, with seven negations, two extractions, one complex subject and one complement insertion, even if some of the tokens combined more than one of those features. In the earlier data, only one case of extraction with *about* and none of the other factors was found, but of course the number of tokens was smaller, thus offering less opportunity for variation.

**For**

Apart from the takeover of *about* as the more common preposition, no changes appeared in the *for* + NP complementation. The pattern still takes both senses, though this time sense 2 (nine of 14 tokens) is the favoured sense.

The group with sense 1 consisted of *the honour of the family / the safety of his own team / her child / Theobald's earthly happiness / me*.

- (89) "You see I have not been well of late, and my kind friends are so *anxious* for me; and I want to see my aunt in Scotland. (Craik, 1850, Olive 1-3)

In the group with sense 2 we find the NPs *the success of the School-house / work / contributions / (a party anxious) for office / souls / deliverance / the salvation of men / a settlement of the points at issue / a communication from Wales*.

- (90) ... getting so woke up to God and His glory, and the interests of His kingdom, that they should be just as *anxious* for souls as other people are for sovereigns. (Booth, 1880, Papers on Aggressive Christianity)

**upon**

The one instance of *upon* might be triggered by the *horror aequi* principle. The expression *anxious about*, which would be possible here, might have been avoided because of the use of *about* in the first subordinate clause. But like in other cases before, the elements in question are rather distant from each other and thus might be considered only a matter of style:

- (91) He knew that she thought about things which were strange to him, and that she was *anxious upon* subjects which never troubled him. (Rutherford, 1893, Catherine Furze)

**8.4. *Anxious* in the BNC (1960 to 1993)**

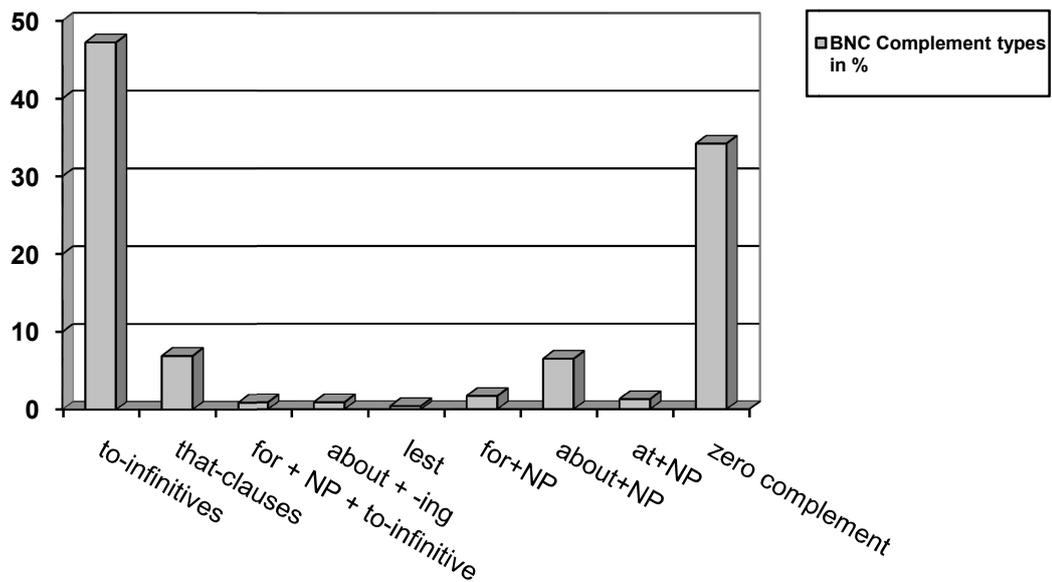
The tokens of recent British English were retrieved from the text domain *Imaginative Prose* of the *BNC*. This section of the *BNC* consists of 16,496,420 word units in 476 texts. The query returned 902 hits in 302 different texts which were thinned to 33 % by random method to 297 hits. The number of

attributive uses was 64 (27%). The figure for counting normalised frequencies was calculated by using 33 % of the total word count of the subcorpus, amounting to 5,443,818,6. One token was used as a name (Mrs. *Anxious*) a second as a noun (the *Anxious*), resulting in 231 tokens suitable for analysis.

Complement type	Number of tokens	%	NF/million
<b>sentential</b>			
<i>that</i> -clauses	16	6,9	2,9
<i>to</i> -infinitives	109	47,2	20,0
<i>for</i> + NP+ <i>to</i> -infinitive	2	0,9	0,4
<i>about</i> + <i>-ing</i> clause	2	0,9	0,4
<i>lest</i>	1	0,4	0,2
<b>sentential total:</b>	<b>130</b>	<b>56,3</b>	<b>23,9</b>
<b>non-sentential</b>			
<i>for</i> + NP	4	1,7	0,7
<i>about</i> + NP	15	6,5	2,8
<i>at</i> + NP	3	1,3	0,5
<b>non-sentential total:</b>	<b>22</b>	<b>9,5</b>	<b>4,0</b>
<b>Ø complement total</b>	<b>79</b>	<b>34,2</b>	<b>14,51</b>
<b>All tokens Total:</b>	<b>231</b>	<b>100</b>	<b>42,41</b>

Table 9 Frequency of complement types BNC

Figure 4 Distribution of complement patterns BNC



A striking change is perceivable in the zero complementation, which has doubled since the time period of the CLMETEV 3, seemingly at the expense of other complement types. Compared with the first part of the CLMETEV it has risen by 28, 2 %. The *to*-infinitive in turn has dropped under the 50% mark for the first time. Sentential complements in general were reduced by almost 11 %. The patterns *for* + NP + *to*-infinitive and *about* + *-ing* clause reappeared. The formerly absent preposition *at* was introduced, whereas *on/upon*, which had so far been present in every section, though typically only in one or two tokens, has vanished from the data. The *for* + NP pattern has proceeded its decline and is only marginally present with under two per cent. Likewise, *about* + NP complements were found less often than before, resulting in a seven per cent regress of non-sentential complements.

#### 8.4.1. Sentential complements

##### *That*-clauses

There were three examples of the construction *so* + *adjective* + *that*-clause which were not counted as *that*-clause complement. These “*so-that*”-clauses contained no *should/would* or subjunctive form, and, more importantly, whereas in *that*-clauses the experiencer is *anxious* for the content of the *that*-clause to happen (or not to happen), this is not the case with *so-that* constructions. Consider example (92).

- (92) He had decided to investigate for himself the question of his mother's land investments in Texas, the holdings her Wall Street advisers seemed so *anxious* she should sell — so *anxious* that Edouard was a little suspicious. (C8S 1125)

In the first instance of *anxious* (which was not included in the sample) a replacement with *for* + NP + *to*-infinitive is possible, but this is not the case in the second instance, at least not without a change in meaning.

- (93) ...the holdings her Wall Street advisers seemed so *anxious* for her to sell – so *anxious* for Edouard to be a little suspicious.

This example nicely illustrates the difference between these constructions. In the first part (to the dash), the replacement with the *to*-infinitive shows that the matrix predicate has some kind of interest in the action expressed in the subordinate clause. But as *that Edouard was a little suspicious* is not the purpose of the matrix predicate, the question arises of how this construction should be classified. I follow Huddleston and Pullum (2002, 734), who state that the *that*-clause in this kind of *so-that* construction is a complement of *so*. These tokens were thus counted as zero complements.

There were nevertheless constructions that looked similar to the one in (92), but the *to*-infinitive replacement-test revealed that the *that*-clause is a complement of *anxious* and the particle *so* modifies the adjective:

- (94) ‘That, of course, is why you were so *anxious* that we pinpoint the spot where the Delos went down. (CKC 699)
- (95) That is, of course, why you were so *anxious* for us to pinpoint the spot where...

Another hint at the difference of these constructions is the fact that they can have verbs of perception as copula verbs.

- (96) He sounded so *anxious* that Folly was quite relieved to hear Luke put him at his ease. (H8S 1300)

This is not possible with *that*-clauses complementing the adjective:

- (97) \*I look/sound/feel *anxious* that you should understand the customs and manners of the country where the events in question took place, so different from your own.

### Complexity factors

<b>total: 16</b>	<b>Basic (11) = 69 %</b>		<b>SAC (5) = 31%</b>		<b>total</b>	<b>%</b>
no complexity factor	4	-	4	25		
complement insertion	-	1	1	6,2		
extraction	1	-	1	6,2		
negation	6	4	10	62,5		

Table 10 Complexity factors with *that*-clauses BNC

The most salient feature is the high number of negations. Ten of 16 instances contained negation in the *that*-clause:

- (98) Gabriel always slept under the stage, however, wrapped in a massively expensive duck-down quilt, because Garvey was *anxious* he should not catch cold. (HTN 945)

In two tokens (not represented in the table, of course) also the matrix clause contained negation.

This circumstance can be seen as a confirmation of the Complexity Principle. *That*-clauses are more explicit constructions than *to*-infinitives which are the only alternative regarding sense. Rephrasing (98) with a *to*-infinitive would make it necessary to use the *for* + NP + *to*-infinitive pattern because the subordinate clause has its own expressed subject. In combination with negation the result is more difficult to process:

- (99) Gabriel always slept under the stage, however, wrapped in a massively expensive duck-down quilt, because Garvey was *anxious* for him not to catch cold.

As this sentence contains several clauses and therefore is rather complex, the use of the subordinator *that* could have been expected, also because the referent of the subject of the lower clause must be retrieved from a distant position at the very beginning of the sentence. This structure is thus not ‘maximally explicit’. However, the mentioning of the names of the subjects makes it possible to assign the appropriate roles to the arguments.

In the only example containing extraction the Complexity Principle may be at work. The object of the *that*-clause, “these documents”, was extracted, leaving a gap after the lower clause predicate. As *that* is missing, the example supports the above mentioned assumption of Vosberg (2006, 181) regarding higher acceptability of extractions from finite clauses in the absence of the complementizer:

- (100) ‘What is this document these two are so *anxious* you should sign?’ (CN3 913)

Maybe this is why the alternative with the *for* + NP + *to*-infinitive construction does not appear to be significantly increasing cognitive complexity in this case:

- (101) What is this document these two are so *anxious* for you to sign?

### ***To*-infinitives**

*To*-infinitives were the most common complements in the BNC. Semantic roles were distributed as before: The matrix subject had the role of the experiencer, and the coreferential lower subject's role depended on the verb in the infinitive clause. The verbs did not reveal any salient similarities in meaning, but a tendency to avoid verbs of concrete action might be detectable. With this I mean the rare use of verbs like *eat*, *build*, *hit*, *run* etc. to the advantage of verbs denoting actions in a more abstract way. If, for example, *to run*, *to walk*, *to drive* etc. can be considered concrete verbs of movement, *anxious* would prefer expressions like *get away*, *be back*, *return* or *leave*. Some verbs occurred more frequently than others: The verb *to please* appeared in eight tokens which makes up for seven per cent of the *to*-infinitive tokens and *avoid* was found six times (5,5%). The construction with interpretative verbs + *wh*-clause was reduced to only one instance, with the verb *find out*:

- (102) There are a lot of people *anxious* to find out what's happened to it — not least your father.  
(CEC 2201)

Regarding the sense of the pattern *anxious* + *to*-infinitive, nothing has changed. The notion of *desiring something very much* is present as a basic ingredient in all cases, but the fine-grained meaning depends on the lower verb. It can often be replaced with *eager* without losing much of the meaning, except for the notion of *concern* or other “uneasy” savours, related for example to *nervous excitement* as in:

- (103) All the other girls had at least a best dress, and some of them were burningly *anxious* to display clothes bought by extravagant parents especially for the occasion. (EFP 697 )

In most of the cases, though, it expresses the notion of *wanting something* quite plainly:

- (104) Molly felt she had lost all control of the situation and was only *anxious* to withdraw from it.  
(FB9 820)
- (105) Seems a naive little bitch: very *anxious* to meet her famous sister again, and kiss and make up some pathetic family squabble.’ (B20 1357)

- (106) S. Kettering was either a particularly serious-minded chap or *anxious* to show off to his tenants. (FB9 999)

### Complexity factors

A difference to earlier time periods is detectable in the distribution of the basic and SAC clause types. Whereas in the CLMETEV the relation between the clause types was more or less 80% to 20%, the proportions in the BNC are 60% to 40%. The percentage of tokens without complexity factors is the highest since the CLMETEV 1.

<b>Total: 109</b>	<b>Basic (64) = 59 %</b>	<b>SAC (45) = 41 %</b>	<b>total</b>	<b>%</b>
no complexity factor	61	41	<b>102</b>	<b>93,5</b>
complement insertion	1	-	<b>1</b>	<b>0,9</b>
extraction	2	-	<b>2</b>	<b>1,8</b>
negation	-	4	<b>4</b>	<b>3,6</b>

Table 11 Complexity factors with to-infinitives BNC

Insertions between adjective and complement were as rare as in the other data sets, where they varied between one to three instances. As before, the insertion was rather short:

- (107) I am *anxious* beyond measure to be in the country as soon as possible ... (ADA 746)

Extractions are found in two tokens, a cleft sentence in (109) and a relative extraction in (110):

- (108) She was not afraid of the dark or the shadows; it was people she was *anxious* to avoid. (GW8 640)
- (109) A meeting he had been very *anxious* to keep a secret from the other Ping Tiao leaders. (G04 179 )

A conspicuous difference between *that*-clauses and *to*-infinitives is exhibited in the proportion of complexity factors, especially regarding negation. 62,5% of the *that*-clauses contained negation, compared to only 3,6% of the *to*-infinitives. Interestingly enough, all of them appeared in the SAC clause type.

- (110) She poured them more tea and he kept silent, *anxious* not to disturb her present mood. (CN3 998)

***for* + NP + *to*-infinitive**

Two tokens were of the form *for* + NP + *to*-infinitive:

- (111) William seemed almost *anxious* for him to accept. (F9C 2186)
- (112) An irrational anger swept over Rose, so that, although she had planned his favourite food and was *anxious* for him to enjoy it, she now wanted to strike the fork from his lips. (K8V 3160)

Example (112) is simple enough and does not require further discussion. (113) contains interlaced subordinate clauses and coordination and can therefore be considered more complex than (112).

However, the less explicit *for* + NP + *to*-infinitive construction might have been chosen to avoid another *that*-clause.

***-ing* clauses**

Two instances of *-ing* clauses appeared in the data. It has to be noted that the construction here is not a directly linked *-ing* clause but a prepositional *-ing* clause. As we have seen above, *about* occurs with NPs in the sense of *being concerned* which supposedly is also the meaning intended here:

- (113) She could remember the incident quite clearly, although the circumstances surrounding it had vanished into oblivion, beyond recall of any form of analysis: it had been early afternoon, so clearly not a party incident — maybe they had had lunch together? — and she had been *anxious* about picking up children from school. (FB0 236)

The *-ing* form is used like a NP. Rather than drawing on the distinctive meaning inherent in the structure of *-ing* and *to*-infinitive, I suggest that the choice of complement is simply motivated by the meaning the author of this sentence wanted to express, which most likely is *being concerned*. Since neither a *to*-infinitive nor a *that*-clause are alternatives here, the choice of a PP with *about* is appropriate. The same applies to the second example of an *-ing* clause complement:

- (114) Both of them (for different reasons) were *anxious* about seeming to exclude the rest of the household, each of them still (even after so long) unsure of her claims on the other. (HJH 2512)

**Lest**

Like in the third part of the CLMETEV, one token with a subordinate clause introduced by *lest* was found. Again, the whole sequence with *anxious* could be rephrased by *fearing that*:

(115) She was laughing at his antics, but *anxious* lest he should be heard. (C98 1344)

**8.4.2. Non-sentential complements****About**

*About* had the highest frequency amongst the prepositional complements with 15 tokens (6,5%). In this corpus, like in the CLMETEV 3, it was more frequent than *for*, which has steadily retreated since the first part of the CLMETEV. The sense clearly was clearly identifiable as sense 1, *concerned*. About two thirds of the NP complements with *about* designated a human being or the welfare of one; there even was a token which explicitly mentioned the word *welfare*:

(116) My friend is very *anxious* about your welfare. (JXV 340)

Other NPs comprise *the safety of the curious evidence in his saddle bag/about his next major work /photographs / the injury / our journey to Glastonbury / her ability to cope with the inmates of the pet shop*

One question extraction was present in:

(117) But I should like to know what he was *anxious* about.' (BMX 819)

**For**

This pattern has experienced an extraordinary decline from 26% in the CLMETEV 1 to a mere 1,7% in the BNC. *For* is still used in both senses. The relation of the proportions has continued its direction towards a preference for sense 2. Three of the four cases contained the notion of *desire*, as illustrated in:

- (118) Now she was no dream, but a warm, trembling reality who seemed as *anxious* for his embrace as he was to caress her. (FS1 1796)

The one example in which the pattern *for* + NP had the sense of *being concerned* contained a personal pronoun:

- (119) She asked after you and was pleased when I told her how well your business was doing and that you seemed in good spirits since she said she had been *anxious* for you. (ADS 1607)

The decline of *for* might be connected to the rise of *about* if we consider the ambiguous meaning of the *for* + NP complement. Both complements can be used with the same sense in cases where the complement denotes animate beings or concerns the welfare of an animate being. Thus, a situation is produced where two complements are available for expressing more or less the same meaning.

Concerning this kind of state of affairs, Bolinger (in Vosberg 2006, 31) remarks that “if ever two different surface structures were found which were totally identical in function, they could not remain that way for long – not only is the situation rare, it is also unstable”.

### At

According to Quirk et al. (1985, 701), *at* can express the relation between an emotion and its stimulus (normally an abstract stimulus). It is compared to instrumental *by*, and labelled a “semi-agent”. The NP in this construction thus stimulates the emotion in the matrix clause, which is nicely illustrated in (120).

- (120) All over the island and its neighbours, the indigenous islanders grew more *anxious* at the bustle of the settlement, at its expansion. (GOS 519)

Semantically, the pattern tends to sense 1. Its meaning can be described quite accurately with *nervous*.

Interestingly, like in Poutsma’s illustration of this pattern, one of the examples also had the NP *absence* in it.

- (121) She was *anxious* at the long absence of her visitor, and at the voices, her mother's voice in particular, sounding on and on through the afternoon. Yet she dared not interrupt, and show the woman rudely out, for fear of an influence upon her decision. (AD1 1887)

The third example is an instance of topicalization:

(122) At this the thin man seemed more *anxious* than ever. (BMX 981)

## 9. Conclusion

This thesis investigated the complementation of the adjective *anxious* in two corpora consisting of text samples from British English literature. The material dated from the year 1710 to 1993, therefore enabling a diachronic research approach. The research questions will be repeated and answered according to the findings made in this study:

1. What kind of complements does the adjective *anxious* select?

The variety of sentential and non-sentential complements which were discovered in a survey of dictionaries and grammars as well as the analysis of 680 instances of *anxious* are presented in table 1 below. The last row, marked with a grey background, lists the patterns which were found in the dictionaries but did not appear in the data.

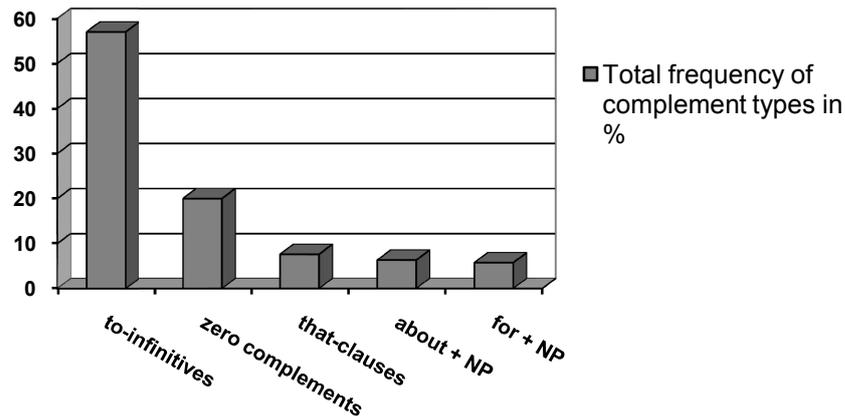
Sense 1	Sense 2
<i>that</i> -clauses <i>lest</i> -clauses <i>about</i> + <i>-ing</i> clause <i>about</i> + NP + <i>-ing</i> <i>of</i> + <i>-ing</i> clause <i>for</i> + <i>wh</i> -clause <i>upon</i> + <i>wh</i> -clause <i>about</i> + NP <i>on/upon</i> + NP <i>for</i> + NP <i>at</i> + NP <i>on/upon</i> + NP	<i>that</i> -clauses <i>to</i> -infinitives <i>for</i> + NP + <i>to</i> -infinitive
<i>of</i> + NP <i>at</i> + <i>-ing</i> clause <i>about</i> + <i>wh</i> -clause	<i>for</i> + NP + <i>-ing</i> clause <i>over</i> + NP

Table 1 Overview of pattern and senses found in the dictionaries and the data

Five main patterns could be recognised. The most frequent complement was the *to*-infinitive, which accounted for more than 57 % of all tokens. It was followed with significant distance by zero

complements at a rate of 20 %. The third rank was occupied by *that*-clause complements (7,6 %). The two last ranks were reserved for the prepositional complements *about* + NP (6,3 %) and *for* + NP (5,73 %). The remaining complements appeared only marginally.

Figure 1 Total frequency of complement types



Two complement types could be found in the data which were not mentioned in the dictionaries: the patterns *on/upon* with either a NP or a *wh*-clause complement and the rare sentential complement *lest*.

Several constructions with recurring lower verbs could be carved out as patterns of speech. These involved the construction *anxious to know* (also *learn/hear/see*) + *wh*-clause and the expressions *anxious to please* and *anxious to avoid*. The first mentioned though seems to be retreating. As was pointed out in the beginning of this thesis the command of sequences like these may prove fruitful for speech fluency of learners of the English language.

## 2. What senses are related to the complementation patterns of *anxious*?

Two main senses can be distinguished, labelled here according to the definition suggested in the OED:

Sense 1: *Troubled or uneasy in mind about some uncertain event; being in painful or disturbing*

*suspense; concerned, solicitous. Sense 2: Full of desire and endeavour; solicitous; earnestly desirous*

(*to effect some purpose*). The senses provided by the dictionaries were appropriately defined. The fine grained distinction noted in the *OED* also proved to be accurate in my corpus material. Table 1 above shows that some complements can have both senses. This is especially true for the pattern *for* + NP. It turned out that with *for* the meaning of *anxious* depends on the NP which follows the adjective. If we recall the meaning groups of the NPs *for* appears with, we see a variation in the meaning of the matrix predicate: NPs referring to human individuals induce an interpretation of *anxious* as *being concerned* or *worried*. With NPs denoting objects or abstract notions the meaning turns towards sense 2.

*That*-clauses, too, appeared under both senses, but a strong tendency towards sense 2 was prevalent.

*About* had the stable meaning of *being concerned* in the data. The NPs occurring with *about* showed a tendency towards denoting human beings or concerning a person's welfare.

The *to*-infinitive complement had sense 2, with slight variations in the degree of *concern*, depending on the lower verb. The notions associated with the *to*-infinitive described in chapter 4 can be seen as very strongly represented with *anxious*. The fact that the subject of the matrix clause was assigned the experiencer role in virtually every analysed token confirms the notion of *agentivity* as outlined by Wood (cf. 4.1.). In the pattern *anxious* + *to*-infinitive the emphasis is on the experiencer as a *performer*.

Furthermore, *potentiality* is a salient component of *anxious* because the "target" of *anxious*, be it an action, an event or an object, is always felt to be shrouded by some kind of uncertainty. This can be considered the crux of the meaning of *anxious*, it being the cause for the ever present faint or strong traces of *fear* or *concern*.

*Anxious* also involves the source-path-goal scheme delineated in 4.2, in that what is expressed in the *to*-infinitive is perceived to be the goal of the matrix subject. Future orientation as a notion inherent in *desire* and *eagerness* is another prevalent semantic feature of *anxious*. It might explain its

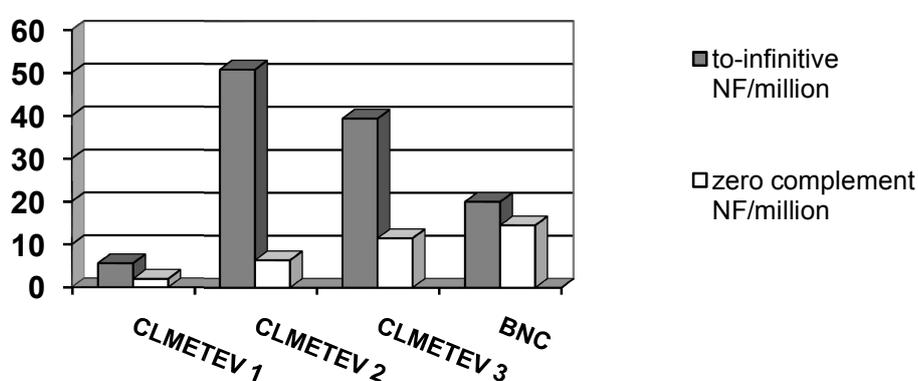
preference for *to*-infinitives, which, according to some scholars (cf. 4.2), inhabit the same notion in their structure.

3. In what way do the complementation patterns of *anxious* change in the time span from the early 18<sup>th</sup> century to the late 20<sup>th</sup> century?

A preference of *anxious* to occur with *to*-infinitive complements could be detected from the beginning of the 18<sup>th</sup> century to present day English. However, in the third part of the CLMETEV, and even more so the in the BNC corpus, the *to*-infinitive was reduced steadily from its high times in the CLMETEV 2 with almost 70 % to 47 % in the BNC corpus.

The zero complement in turn made quite a contrary development from six per cent in the 18<sup>th</sup> century data to over 34 % in Present day English. The following table shows the normalized frequency of the constructions in the different corpora sections:

Figure 2 NF of *to*-infinitive and zero complements

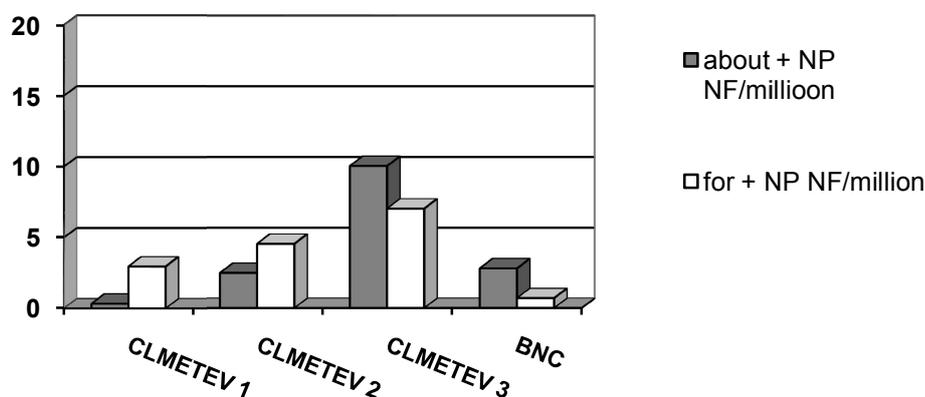


This development of the complementation of *anxious* in the 19<sup>th</sup> century might offer an opportunity for further research. The effect described here could be seen in connection to features of *grammaticalization* and *degrammaticalization*. Allerton (cf. section 4.1.) pointed out that the *to*-infinitive complement can give some predicates the appearance of an auxiliary. Regarding the dominance of the *to*-infinitive pattern in the 18<sup>th</sup> and still in the 19<sup>th</sup> century, it could be worth having

a closer look at a possible shift from the adjective's lexical meaning in its earlier history towards auxiliary functions of the *to*-infinitive pattern in the period of Late Modern English. The subsequent decline of the *to*-infinitive and simultaneous rise of the zero complement pattern with its more lexical meaning could be looked at from the angle of degrammaticalization.

The progression of the prepositional complements *for* and *about* could be interpreted as a process of meaning stabilization. Whereas *about* has always had a very straightforward, stable meaning, *for* allowed more semantic variation, thus being the unstable factor in this situation. The decline of *for* might therefore be caused by the aspiration towards unambiguous interpretation. By reducing *for* to instances of NP complementation with sense 2, also its range of occurrence abated, at the same time opening more “semantic gaps” to be filled with the pattern *about* + NP.

Figure 3 NF of *about* + NP and *for* + NP



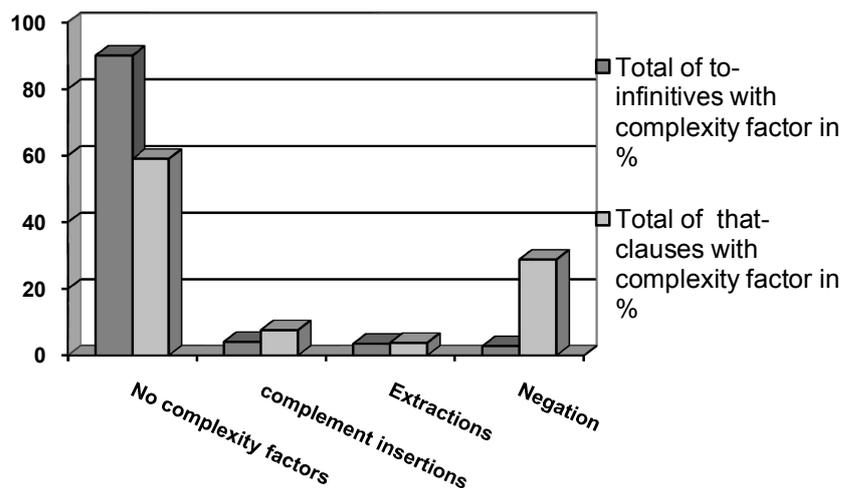
4. To what extent do the changes in complementation interact with theories like the Great Complement Shift, the Complexity Principle or the *horror aequi* effect outlined in the theory section?

The influence of the *horror aequi* effect was not very distinctively perceivable in the data. The reason for this may be the semantic and syntactic rigidity of the complement types of *anxious*. The adjective's different senses are rather tightly associated with different patterns, thus substitution with another pattern without changing the meaning is difficult. This fact may be the reason for the presence of some

of the marginal patterns, which offer an alternative in situations where there would otherwise occur similar grammatical forms.

*That*-clauses were presented as dual sense complements in the literature, but the analysis revealed a clear tendency towards sense 2. This leads to an overlap in meaning with the *to*-infinitive, thus preparing the ground for the influence of the Complexity Principle. The data showed that the principle actually does affect complement choice. The following diagram gives an overview over the distribution of complexity factors which were investigated in this thesis:

Figure 4 Complexity factors with *to*-infinitives and *that*-clauses



According to these findings, the more explicit *that*-clause complements are preferred to *to*-infinitives in more complex environments, especially with negation. Contrary to the hypothesis that extractions preferably appear in *to*-infinitives, the data showed an even slightly higher percentage of extractions in *that*-clauses.

However, another factor proved more important for the choice of the complement type. Data analysis showed that the *that*-clause complement was never used in cases where the matrix subject and

the subject of the subordinate clause were coreferential. This situation was entirely reserved for the *to*-infinite. The *that*-clause was used in situations with different subjects in the two clauses.

The construction with *for* + NP + *to*-infinitive would provide an alternative for *that*-clauses in cases where the subject of the higher clause and the lower clause are not coreferential. It was, however, so rare that it could not be considered a relevant substitution for a *that*-clause. The reason for the scarcity of the *for* + NP + *to* infinitive pattern might be found in cognitive complexity. The *for* + NP + *to* infinitive pattern arranges the elements of a clause in a cognitively more demanding way. A *that*-clause has the ability to preserve canonical word order and explicit predicates and subjects, even when affected by complexity factors.

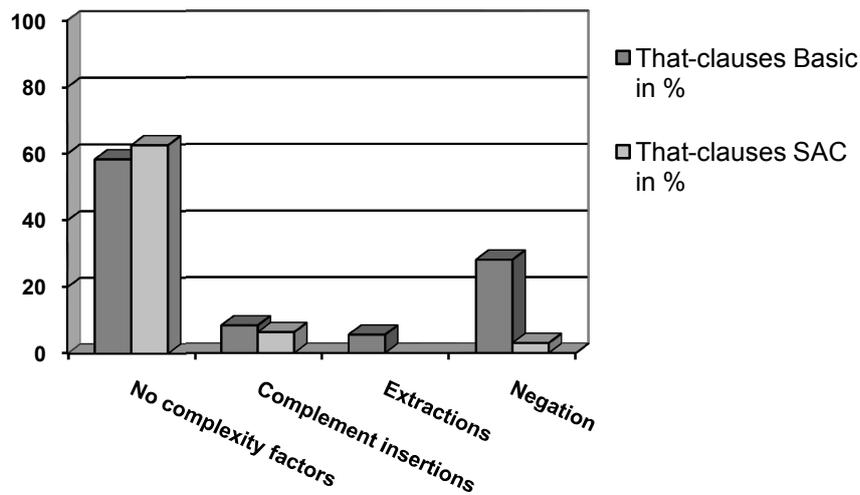
*Anxious* has not been affected by the Great Complement Shift, probably because the *-ing* clause complement with *anxious* has always been marginal. The *-ing* forms in the data strongly resembled nouns, they were linked by prepositions and often accompanied by possessive pronouns or articles.

As was predicted by Rudanko, who stated that a shift in complementation from *to*-infinitives to *to -ing* patterns “is likely to occur in cases where a matrix verb governing the infinitival construction also selects the prepositional *to* + NP complement construction, but it is unlikely to occur where it does not” (Rudanko 1998, 21), *anxious* did not undergo that shift. Rather, it displayed relatively stable patterns of complementation and preservation of meaning throughout the almost 280 years which have been investigated in this thesis.

The last issue mentioned here concerns the division between Basic and SAC clause types. It was claimed that the clause types represent different levels of explicitness, therefore a lower range of complexity factors might be expected with the less explicit SAC type. The distribution of complexity factors is not separately calculated for every corpus section, as I was interested in the general tendency of a possible effect.

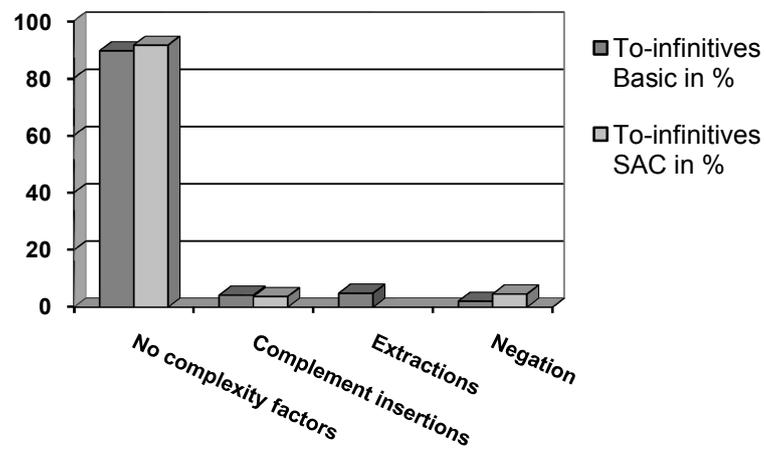
The proportion of Basic and SAC clauses amongst *to*-infinitives was 73% to 27%, which is not significantly different from the distribution amongst *that*-clauses with 69% of the Basic type and 31% of the SAC type. The following diagram visualizes the distribution of complexity factors in the complements of Basic and SAC clauses with *that*-clauses:

Figure 5 Clause types appearing with *that*-clauses



Based on these results, more *that*-clauses of the Basic type take complexity factors (especially negation) than the SAC type. However, the diagram for *to*-infinitives shows that negation occurs more frequently in SAC clause complements, even though the overall tendency to exclude complexity factors is the same as in *that*-clauses. Extractions were completely absent from the SAC clause type.

Figure 6 Clause types appearing with *to*-infinitives



As a final result the comparison of the last two diagrams shows that the more explicit *that*-clause complement is more apt to appear with complexity factors than the *to*-infinitive complement.

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