

On the Complementation and Semantics of the Verb *Refuse*
in Late 20th Century British and American English

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Master's Thesis
May 2018

Tampereen yliopisto
Viestintätieteiden tiedekunta
Englannin kielen, kirjallisuuden ja kääntämisen tutkinto-ohjelma
Järvinen, Krista: On the Complementation and Semantics of the Verb *Refuse* in Late 20th Century
British and American English
Pro gradu –tutkielma, 79 sivua
Toukokuu 2018

Tämä Pro gradu –tutkielma selvittää mitkä olivat *refuse*-verbin komplementaatorakenteet britti- ja amerikanenglannissa aikana 1985–1993. Tavoitteena on vertailla varieteettien keskeisiä eroja verbin komplementaation suhteen sekä antaa verbistä tyhjentävä semanttinen kuvaus. Tutkielma vertailee *refuse*-verbin komplementteja ja merkityksiä pitäen oletuksenaan Bolingerin (1968) periaatteita, jonka mukaan erilaisen syntaktisen rakenteen käyttö johtaa muutokseen pääverbin merkityksessä.

Tutkimusmateriaali koostuu 500 satunnaisesta elektronisesta korpusesimerkistä, jotka on haettu korpuksista *British National Corpus (BYU-BNC)* ja *Corpus of Historical American English (COHA)* käyttämällä hakukomentoa [refuse].[v*]. Tutkimuksen *BYU-BNC*-data edustaa kirjoitettua brittienglantia, *COHA*:sta saatu data puolestaan kirjoitettua amerikanenglantia.

Tutkielman ensimmäisessä osassa nostetaan esille asiaankuuluvia englannin komplementaatio-tutkimuksen teorioita, joita myöhemmin korpusdataa tarkasteltaessa sovelletaan *refuse*-verbiin. Sen jälkeen sanakirjoja *Oxford English Dictionary (OED)*, *Collins Dictionary (CD)*, *Collins Learner's Dictionary (CLD)* sekä *Valency Dictionary of English (VDE)* konsultoidaan, tarkoituksena antaa *refuse*-verbistä mahdollisimman kattava semanttinen kuvaus. Sanakirjoista saatujen tietojen perusteella mukautetaan kolmea eri *refuse*-verbin päämerkitystä, jotka luovat perustan korpusdatan analyysille. Tutkielman analyysiosassa tarkastellaan kvalitatiivisesti ja yksityiskohtaisesti *refuse*-verbin semantiikkaan liittyviä seikkoja ja miten verbin eri komplementit heijastavat näitä.

Korpusdatasta nousee esiin viisi erilaista komplementaatorakennetta *refuse*-verbin yhteydessä: *to*-infinitiivi, NP, NP + NP, NP + *to* + NP ja nollakomplementti. Näistä *to*-infinitiivilause on yleisin ja NP + *to* + NP marginaalisin. Tutkimuksella osoitetaan muun muassa, että NP + NP ja NP + *to* + NP rakenteet ovat yhteensopivia vain tietyn *refuse*-verbin merkityksen kanssa. Näin vahvistuu Bolingerin (1968) päätelmä, että verbin merkityksien ja komplementtimuotojen välillä on havaittavissa selkeitä yhteyksiä. Nollakomplementtia sovelletaan *refuse*-verbin kanssa ainoastaan silloin, kun torjuttu/hylätty henkilö tai asia on syntaktisesti löydettävissä tai pragmaattisesti pääteltävissä kontekstista.

Tutkimuksen merkittävimmät havainnot ja löydökset liittyvät kuitenkin *refuse*-verbin *to*-infinitiivikomplementin sisältöön ja sen potentiaaliin viedä *refuse*-verbi uusiin ulottuvuuksiin. Tutkielma selittää ja havainnollistaa millä tavoin *to*-infinitiivi erilaisin sisällöin mahdollistaa *refuse*-pääverbin merkityksien muutoksen. Alisteisessa *to*-infinitiivissä *refuse* käyttää esimerkiksi apunaan verbejä *accept* ja *believe* ilmaistakseen faktuaalisia asioita sekä verbejä *allow* ja *let* kuvatakseen tilanteen, jossa subjekti kieltää toisen tekemästä jotain. Kaava *refuse* + *to*_{INF} + *allow/let*... nähdään tutkielmassa tapana välttää liian kognitiivisesti kompleksia komplementtirakennetta NP + *to*-infinitiivi. Koska *refuse*-verbin kanssa ei tutkimuksessa löydetä muun tyyppisiä lausekomplementteja kuin *to*-infinitiivilause, voidaan tehdä johtopäätös, että *refuse* on eräs *Great Complement Shift* –ilmiötä vastustava verbi.

Avainsanat: *refuse*, verbikomplementaatio, komplementaatio, korpuslingvistiikka, syntaksi

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1 Introduction

The verb *refuse* is mainly a borrowing from French *refuser* and from vulgar Latin *refūsāre*, but also has connections to Latin *refundere*, which means to pour back, give back (Barnhart 1988, 903). This thesis is a head-based case study on the verbal predicate *refuse* as it was used descriptively in written British and American English in the time frame of 1985–1994. The research will rely on the *British National Corpus* and the *Corpus of Historical American English* for empirical evidence and to represent each of the two varieties of English. Ideally, the goal of the present study is to answer the research inquiries hereunder:

- Which complementation patterns did the verb *refuse* select in British and American English from 1985 to 1994?
- Were there differences between British and American English as regards the proportions/frequencies of the various complement patterns of *refuse*?
- Was there a specific complementation pattern of *refuse* which was more common in one of the varieties? If so, why?
- What are the different meanings of the verb *refuse*?
- Which was the most common meaning of *refuse* in British and American English, respectively?
- In what kinds of contexts was the verb *refuse* commonly found?

Key to the present study is the investigation of the complementation patterns of *refuse*, with an all-pervasive provision of a deep dive into the semantics of *refuse* and how the semantics of the verb uncovers and manifests itself syntactically. The questions above are the spine of the research, however the data will in itself lead the way to the right questions to ask, and thus much more specific factors and issues than the above will as well be covered in this thesis.

This thesis contributes to the field of ‘British English versus American English’. It is well known that when in America, we take the *elevator* to see somebody’s *apartment*, whereas in Great Britain in the same situation we would be taking the *lift* to see somebody’s *flat*. What is lesser known (or given much less attention) is that there are actual differences to be found in the *syntax* of British and American English as well, i.e. the syntactic forms that complementation patterns shape into differ, although aiming at describing the same thing/situation/event. A case in point is the sentential complementation of the verbal predicate *prevent*, investigated by Mair (2002). His study brought to

light that Americans, without exception, include the preposition *from* with *prevent*: *prevent* + NP + *from* + V-*ing* (ibid., 112). The British, on the other hand, in addition to the aforementioned pattern, also allow the dropping of *from*: *prevent* + NP + V-*ing* (ibid.), despite this being a less explicit option.

The present study of *refuse* will not reveal such a clean-cut difference between British and American English – the differences found will be subtle and intricate, and they will be examined layer by layer. The most significant contribution of this thesis is to the study of the *to*-infinitive, as the thesis offers an in-detail inspection of this pattern in particular. The thesis urges the reader to approach the *to*-infinitive differently than before, with a special focus on the nature of the lower verbs.

This thesis is a testament to the great potential of the *to*-infinitive to create and express meaning in more diverse ways than perhaps perceived before, and thus the findings should be of considerable relevance to linguists working in the field of syntax, who moreover are interested in how syntax ties in with semantics.

2 Working with corpora

Corpus linguistics is a methodology through which we may obtain valid, generalisable information about language use as it occurs in authentic, natural texts (Biber 2010, 159–60). The method of using corpora to conduct linguistic research has its beginnings in the early 1960s and has continued to develop ever since (Svartvik 1992, 7–8). Today corpus linguistics is the big field that it is thanks to new technological possibilities. Texts from all genres, periods, and varieties of English (and other languages) may be put under the microscope more effortlessly than ever because massive amounts of data are easily accessible in electronic form. Many corpus search engines allow looking into any lexeme, syntactic construction, suffix etc. as it is used in practice by language users, with the collected corpus texts displayed as empirical evidence. Although investigation with the aid of corpora is convenient, in this chapter some disclaimers regarding the use of corpora will be put forward, and the corpora which have been utilised for the purposes of the present study will be briefly introduced.

2.1 Issues with reliable data retrieval from corpora

When dealing with data elicited from a corpus one should ask the question: What is the data representative of? Will for example the data in the forthcoming study be able to comprehensively display the natural usage of the verb *refuse* in British and American English? The answer is that in the end, a corpus only represents itself. It consists of limited contents of a language, and due to its finiteness it could never completely accurately represent the infinite concept of language. Investigating linguistic phenomena with the aid of corpora is still a well-approved method since it allows for quite large data collection, and the data are conveniently in electronic form. Presumably, the larger the sample, the more accurately it represents language use in reality.

The bittersweet aspect of many corpora is that all the words are tagged according to part of speech. Since the tag system is automatic, there will inevitably be errors. According to Biber, “no automatic tagger is 100 percent accurate” (1998, 262), and the errors can often only be fixed manually. The *British National Corpus* and the *Corpus of Historical American English*, which

provide the data for the present study, are both such tagged corpora. Therefore, when searching for the verb *refuse*, even with the verb tag which should exclude all other parts of speech, the *noun refuse* (meaning “waste”) may still surface in the data, incorrectly tagged as a verb. Those occurrences one must simply make sure to exclude from the data when manually inspecting the accuracy and relevance of each occurrence, so as not to bias the results.

Two concepts vital to corpus linguistics are *precision* and *recall*. Precision refers to “the proportion of retrieved material that is relevant” and recall to “the proportion of relevant information that was retrieved” (Ball 1994, 295). The goal when conducting a search in a corpus is that one should attempt to formulate a search string in such a way that it would return as many *relevant* hits as possible, while simultaneously excluding as many *irrelevant* hits as possible. No relevant hit ought to be missed/excluded from the data, and no irrelevant hit should even be present in the set of data. This would be the ideal balance between and aim of precision and recall. To avoid having to check massive amounts of (irrelevant) data manually, one uses the part of speech tag(s) to limit the search. This is keeping in mind precision – one should aim for the highest possible percentage of relevant tokens in the data. However, tagged corpora, as mentioned before, are liable to error due to the automatic tagging system. Therefore while limiting the search so as to increase precision, some in fact relevant data may be unintentionally excluded in the process, which in turn decreases recall since not *all* relevant instances were found or taken into account. The dilemma is that there is often no way of knowing what kinds of relevant tokens may have been lost when narrowing the search. In fact, oftentimes one has to try many different search commands in order to determine which one is the most appropriate in that it yields the most reliable precision and recall. The ultimate truth in the end is though that in order to get one hundred per cent accurate precision and recall, one would have to manually go through the entire corpus. Only that way one could be certain that not *one* relevant token is missed, but even then there is room for human mistakes.

In the present study, the results from two different corpora will be compared. This is not completely unproblematic. If, for instance, a word has ten tokens in Corpus A, which is a *five-million-*

word corpus, and equally ten tokens in Corpus B, a *ten*-million-word corpus, then it would be inaccurate to conclude that the frequency of the use of the word searched for is the same in the two corpora. The size of (or amount of contents) in the latterly mentioned corpus is double the size of the former. Nevertheless there must still be a way of comparing the results from the two. The raw frequencies from the two corpora need be adjusted to some common base (Biber et al. 1998, 264). This is why what is called *normalised frequencies* are calculated. Here is the formula on how a normalised frequency is calculated (Hoffmann et al. 2008, 72): (number of instances / number of words) x 1,000,000. More often than not the constant number chosen is one million, so that one will get the number of instances *per one million words* (wpm = words per million). Now, both corpus A and B had ten tokens of the same word, but due to size they were not comparable. Therefore we count:

$$\begin{array}{ll} \text{Corpus A} & (10 \text{ tokens} / 5,000,000) \times 1,000,000 = 2 \quad \rightarrow \text{NF 2.0 wpm} \\ \text{Corpus B} & (10 \text{ tokens} / 10,000,000) \times 1,000,000 = 1 \quad \rightarrow \text{NF 1.0 wpm} \end{array}$$

With the help of these normalised frequency figures, we see that the word searched for is twice as common in Corpus A as it is in Corpus B, and we have a more accurate description of the results. We ought not to neglect to calculate these frequencies, adjusted to the sizes of the corpora, if we wish to draw an accurate analogy between the results from two or more corpora (Biber et al. 1998, 263). Further, normalised frequencies make the results applicable to other studies (*ibid.*).

3 Theoretical framework: complementation

This chapter is dedicated to the overview of factors bearing on complementation as well as taking a look at the syntactic nature of the verb *refuse*. The important terms and concepts that will be introduced are well-known in the field of syntax and complementation, and the theories may offer an insight into what might affect the complement selection of *refuse*.

3.1 Complements vs. adjuncts

Complements, which may be phrasal (NPs, PPs etc.) or clausal (infinitival clauses, gerundial clauses etc.), need obligatorily be present in order to complete the meaning of a predicate (e.g. a verb or an adjective), while adjuncts need not (Huang 1997, 75; Quirk et al. 1972, 801). Adjuncts in a sentence, which are unexceptionally optional, only elaborate on various circumstances such as time, place, and manner (Huddleston 1984, 223; Huddleston & Pullum 2002, 215). This information is entirely separate from the meaning of and is not depended on by the predicate itself, and could therefore be added after any predicate or its complement(s). The deletion of an adjunct from a sentence would not render the sentence ungrammatical, while the omission of a complement where a predicate requires one would generate a sentence which is both syntactically and semantically incomplete. Alternatively, by taking away the complement, the meaning of the predicate changes, and thus the sentence, while still grammatical, will mean something different.

While a predicate never selects an adjunct, it must C-select (Category-select) its complements (Huang 1997, 68), and it is encoded in our mental Lexicon which complements are permissible/compatible with which predicates (ibid., 64). In other words it is the unique properties of the predicates themselves that allow them to *license* (Huddleston & Pullum 2002, 219), or subcategorise for, particular patterns of complementation. For example, it is an “idiosyncratic property” of a verb whether it is intransitive, transitive, or ditransitive (Haegeman 1991, 33). It should be noted that it is not the *pattern* that selects the *predicate*, although it often may appear that the same complementation pattern happens to fit semantically-similar predicates. Besides licensing,

Huddleston and Pullum list *obligatoriness* as another property of complements, which adds that the predicate must not only *allow* (i.e. license) but strictly *require* the complement to fulfil its meaning (ibid., 221).

Below is a complement versus adjunct case illustrated (ibid., 222; examples adapted):

- | | |
|--|------------------------------|
| (1) She <i>treated</i> us <u>remarkably well</u> . | AdvP as a complement |
| (2) She <i>carried out</i> all the duties <u>remarkably well</u> . | AdvP as an adjunct of manner |

In (1), the verbal predicate *treat* requires the adverb phrase to fulfil its meaning, whereas in (2) the AdvP is just an addition, optionally indicating manner. Regarding adjuncts of purpose in particular, Huddleston (1984, 223) offers the insertion of *in order to* in the place of simply *to* as a way to make a distinction between a *to*-infinitival adjunct (3) and complement (4) (ibid.; examples adapted):

- | | |
|---|--|
| (3) He <i>worked</i> late <u>to impress the boss</u> . | |
| → He worked late in order to impress the boss. | |
| (4) He <i>wanted</i> desperately <u>to impress the boss</u> . | |
| → *He wanted desperately in order to impress the boss. | |

3.2 Argument structure and theta theory

A predicate has one or more arguments, which are “the participants minimally involved in the activity or state expressed by the predicate” (Haegeman 1991, 36). In English, every predicate must have an *external* argument (a subject) prior to it, and the *internal* argument(s) would be the complement(s) following the predicate. Observe the following examples adapted from Haegeman (ibid., 24, 36-7):

- | | |
|---|--------------|
| (5) Maigret <i>refused</i> . | [NP – Ø] |
| (6) Miss Marple <i>refuses</i> the problem. | [NP – NP] |
| (7) I <i>refused</i> Bill the money. | [NP – NP NP] |

Next to examples (1-3) are the relevant *argument structure frames* of the verb *refuse*, where “–” is the spot reserved for the predicate. All sentences have an NP external argument to represent the subject, and in fact in (5), the external argument is sufficient. Here, *refuse* is said to be a one-place predicate. After the verb in (6–7) come the internal arguments (complements), and as can be observed, *refuse* in these cases is a two- or three-place predicate, respectively, in that it requires two or three arguments – the act of *refusing* depends on two or three participants. The argument structure of a

predicate defines which constituents are minimally required in order for a sentence containing the predicate to be grammatically correct.

Arguments are assigned *theta roles* (Θ -roles) according to the semantic part they play in a sentence¹. There are fairly many theta roles, and in fact it is still not agreed upon among linguists how many they really are. Nevertheless the Θ -roles relevant to the verb *refuse* are the following (with definitions from Haegeman 1991, 41-42):

AGENT: the one who intentionally initiates the action expressed by the predicate
 EXPERIENCER: the entity that experiences some (psychological) state expressed by the predicate
 BENEFACTIVE: the entity that benefits from the action expressed by the predicate
 GOAL: the entity towards which the activity expressed by the predicate is directed
 PATIENT: the person or thing undergoing the action expressed by the predicate

In spite of the fact that not even how thematic roles are assigned is clean-cut, there is a two-part golden rule which is referred to as the Theta Criterion, worded by Haegeman (ibid., 46) as follows:

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

Bearing these restrictions in mind, let us return to examples (5-7) above (repeated below as (5'-7')) and assign each argument one Θ -role, and only assign each Θ -role once (each example contains the relevant *theta grid* for *refuse* concerning that particular sentence²):

(5') [Maigret]_i *refused*.

refuse, v.

<u>Experiencer/Agent</u> NP
i

(6') [Miss Marple]_j *refuses* [the problem]_k. *refuse*, v.

<u>Agent</u> NP	Patient NP
j	k

(7') [I]_l *refused* [Bill]_m [the money]_n.

refuse, v.

<u>Agent</u> NP	Benefactive/Goal NP	Patient NP
l	m	n

¹ Note that even in non-canonical/marked sentences, for example in a passive construction such as *He was refused entrance*, the assignment of Θ -roles is not affected by the transformation. The semantic *relations* in the sentence are the same and the theta roles would be assigned in the same way as in a corresponding active sentence: *I refused him entrance*.

² The theta grids have been put together in accordance with Carnie (2013, 233). In the grids, the external argument is underlined as is the convention.

When *refuse* takes no internal argument (i.e. the zero complement) as in (5'), the *refusing* may remain an experience of the *refuser* as in 'to not want' – being in refusal is a state (of mind), or alternatively the refusal is shown or communicated to someone, and thus the refusal is an action. This depends entirely on the context. Therefore the NP *Maigret* bears the Θ -role of Experiencer or Agent to *refuse* in this case (or maybe even *both*; this issue will be addressed in section 4.1 below). In (6'–7') however, there is something *being refused* or *undergoing* the refusal. Therefore the subject is appropriately labelled an Agent since *refusing* here is an action affecting something and/or somebody. For instance in (7'), *I* “deprives” *Bill* of *the money*. *The money* is the thing *I refused* to give (to) *Bill*, and *Bill* is whom the refusal is directed towards (Goal) or the person who ‘non-benefits’ from the refusal (Benefactive)³. In (7'), both of the two complements (the NP arguments *m* and *n*) are necessary to complete the meaning of *refuse*. If for example *the money* was dropped, the sentence would mean that *I refused Bill* as a person, as a suitor, or something the like. To repeat the most important property of a complement: if a complement is dropped, A) the sentence is rendered ungrammatical (the meaning of the predicate is unfulfilled), or B) the sentence remains grammatical still, but it *means* something different (the meaning of the predicate changed).

3.3 Subject control with *refuse* and the problem of the NP + *to*-infinitive

Davies and Dubinsky (2004) present several ways of testing whether a predicate is a subject control or subject-to-subject raising predicate. One of these tests is commonly referred to as “the weather-*it* test”. By attempting to give *refuse* a pleonastic subject such as weather *it* or existential *there*, we may see that *refuse* is a predicate which does not allow a semantically empty subject, and is therefore a subject control predicate (examples adapted from Davies and Dubinsky 2004, 7):

- (8) **It refused* to be raining.
- (9) **There refuses* to be a unicorn in the garden.

³ Indeed, the Θ -role of Benefactive (also called Beneficiary) may likewise be assigned to a party which oppositely does *not* benefit from an action.

The verbs in each category “exhibit uniform control constraints” and are semantically similar (ibid.). Most straightforwardly, *refuse* is a subject control predicate, as is seen above in category B). If looking at the verbs accompanying *refuse* in category B), which are supposed to function similarly, previous studies have been conducted at least on *promise* (Rickman 2010), *intend* (Rantanen 2007), *propose* (Saarimäki 2015), and *aim* (Sihvonen 2009). As a curiosity, did any of these verbs allow a (*for*) + NP + *to*-infinitive complementation pattern (i.e. the object control structure)? The results are inconclusive, and it must simply be attributed to the idiosyncratic nature of the English language.

The verb *intend* did take the NP + *to*-infinitive complement, especially in the data elicited from the *British National Corpus (BNC)* (Rantanen 2007, 40). In Saarimäki’s research on *propose*, only one token of *propose* + NP + *to*-infinitive was found in her *BNC* data (2015, 96), this pattern being the most marginal one since it had a proportion of but 0.3% in the *BNC* data (ibid., 100). As regards *aim*, the *for* + NP + *to*-infinitive complementation pattern had been suggested to be valid for this verb in the literature, however Sihvonen did not find any tokens of it in the entire *BNC* in his study of *aim* (2009, 80). In Rickman’s (2010) study of *promise*, the verb did in fact select the NP + *to*-infinitive pattern despite controversy around it. The pattern was considered to cause confusion as to whom the PRO of the *to*-infinitive refers to, and thus it would be clearer to paraphrase the NP + *to*-infinitive complement of *promise* into a more explicit structure. Rickman (2010, 22-23) referred to Rohdenburg (1996, 168) and Egan (2006, 2) having similar lines of thought or reasoning regarding *promise* having an explicit object: the finite *that*-clause complement is generally preferred to the *to*-infinitive. Hence a solution was offered to the NP + *to*-infinitive problem with *promise*: to use the finite *that*-clause complement ((11) b.) instead of the non-finite NP + *to*-infinitive complement ((11) a.), as follows (examples adapted from Rickman 2010, 22):

- (11) a. I had *promised* Mr. Franklin [PRO] to speak to Rosanna.
 b. I had *promised* Mr. Franklin that I would speak to Rosanna.

The (11b) option is clearer as a *that*-clause is more explicit in that the subject is structurally represented in the clause, unlike in a *to*-infinitive (11a).

Given all this, the question arises whether *refuse* selects the NP + *to*-infinitive pattern or not. Could the use of this object control structure with it be relevant, where “the main clause object is co-referential with PRO” in the *to*-infinitive (Carnie 2002, 267)? This question is warranted in that *refuse* can, in addition to meaning for example “to decline to do”, also mean to “forbid/not allow/not permit somebody else to do something”. This makes *refuse* an eye-catcher among the other verbs in Sag and Pollard’s (1991, 65) verb category B) above, since *refuse* *semantically* has the capability of belonging to *both* groups A) and B) – but does its syntactic restrictions allow for the possibility of it belonging to both groups A) and B) *syntactically* as well? In order to express “not allowing somebody else to...”, would it be acceptable for *refuse* to select the NP + *to*-infinitive complement, as in *She refused him to enter*, and thus have a place in *both* group A) and B) above? At least Huddleston and Pullum (2002, 1227) do not mark the *for* + NP + *to*-infinitive complement with *refuse* as questionable.

If *refuse* does select the NP + *to*-infinitive complement pattern, its complexity needs to be considered. If it does not, the data must be reviewed carefully to try to single out the ways in which *refuse* “makes up for” the absence of the NP + *to*-infinitive complement option. In other words, the question must be asked if language users have found a way of expressing the meaning of the NP + *to*-infinitive pattern differently with *refuse*, with some other pattern, similarly to how a *that*-clause was a clearer option to use with *promise*.

3.4 Extractions and the Extraction Principle

Extractions are “deviations from the canonical sentence structure” (Vosberg 2003b, 201). Sometimes a constituent in a clause is moved leftward in a sentence and it leaves behind a gap in the functional position where it originated. This gap is called a *trace* and may be indicated by [t]. The trace is anaphorically linked to its antecedent, i.e. the constituent which has been moved. The antecedent and the trace are co-referential (indicated through co-indexation), and so the semantic interpretation of the trace is derived from its antecedent (Huddleston and Pullum 2002, 1079). If a sentence contains many clauses (the superordinate clause plus one or more subordinate clauses), the extracted constituent may even cross one or more clause boundaries, resulting in an increasingly complex

linguistic environment since extractions create an unbounded (long-distance) dependency relation between the gap and its antecedent.

Postal offers a list of nine extraction types, of which only the following three will be relevant to the verb *refuse* (illustrations adapted from Postal 1994, 159):

1. Question extraction [Who]₁ did they nominate [t]₁ to be director?
2. Restrictive relative extraction [The gun]₂ (which)₂ they claimed [t]₂ was used in the crime.
3. Non-restrictive relative extraction Frank, [who]₃ they adored [t]₃, is dishonest.

The bracketed phrases to the left are the constituents which have been extracted, and they are the antecedents of the traces, marked with [t].

Vosberg has a theory regarding what type of clause is a more “favourable” environment to extraction. He formulates his theory, called the Extraction Principle, as follows (2003a, 308):

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

Although in the present data there will be no *-ing*-clause complements found with *refuse*, one can look at whether there were more extractions with the *to*-infinitives or the non-sentential complements, as it is assumed that sentential complements are higher in degree of complexity than non-sentential ones.

3.5 The Complexity Principle and insertions

Speakers constantly have a choice between applying different grammatical constructions in a flow of language. In a linguistically more complex, cognitively challenging environment, speakers will be more likely and *prone* to opting for the more explicit grammatical option where there is a choice between two different forms/structures that closely enough correspond in terms of meaning (Rohdenburg 1996, 151). This is the assumption of the Complexity Principle (ibid.). In other words, according to this theory it is predicted that speakers will, unaware or knowingly, *favour* a more explicit option so as to make the understanding of communication less burdening when the linguistic environment is complicated and demands increased explicitness (ibid.). Complexity factors and thus

triggers for the more explicit option are for instance the following: various discontinuous constructions (resulting from e.g. extractions), lengthy/heavy subject expressions, complex subordinate clauses, and passive constructions⁵ (ibid., 173).

Aside from extraction, another complexity factor which belongs under ‘discontinuous constructions’ is insertion (Vosberg 2003b, 210). An insertion is mid-positioned, intervening linguistic material that “cuts off” a complement from its head resulting in discontinuity (ibid.). An insertion can intervene for example between an embedding (higher) and embedded (lower) clause (ibid.), making the two distanced and less directly linked syntactically (Rohdenburg 1995, 368). This increases the need for the complement to establish its sentential status more explicitly (ibid., 368). The explicitness hierarchy of sentential complements goes as follows, starting from the most explicit: the *that*-clause (alternatively a zero *that*-clause), the infinitive clause (e.g. *for* + NP + *to*-infinitive), the gerundial clause (e.g. NP_{poss} + *-ing* etc.), the participial clause (NP + *-ing*) (Noonan 1985, 43).

3.6 The Great Complement Shift and the *horror aequi* condition

The Great Complement Shift (GCS) refers to a system shift in syntax that has happened in the sentential complementation of English predicates over the past three hundred years (Rohdenburg 2006, 143). The beginnings of the shift could be witnessed in the late 1600s when gerundial (*-ing*-clause) complementation began to replace the non-finite (*to*-infinitive) or finite (*that*-clause) complements of a predicate (Vosberg 2003a, 305). The *-ing*-clause has become an established “alternative” especially to the *to*-infinitive, but much research has been done in attempts to tease the two structures apart and argue for the fact that the two are in fact *not* entirely interchangeable in terms of meaning (see e.g. Allerton 1988; Bolinger 1968; Duffley & Tremblay 1994; Duffley 2000; Smith & Escobedo 2001; Smith 2009; Wierzbicka 1988).

One phenomenon which has paved the way for the *-ing*-clause is the *horror aequi* condition, which Rohdenburg (2003, 236) defines as follows:

⁵ Rohdenburg notes that passive clauses require significantly more processing effort than their active counterparts (1996, 162). In his view this is partly because complements in the passive clauses are separated and in unusual positions (ibid.).

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

In practice this means that an author or speaker may be inclined to use an *-ing*-clause complement with a matrix verb that normally takes a *to*-infinitive complement if this verb itself is in the form *to* V, or if the preposition *to* is near the complement. The same logic works the other way around: if a verb stands in the *-ing*-form itself or another word containing *-ing* is near, it predisposes one, consciously or subconsciously, to opting for the *to*-infinitive complement. Rohdenburg states that English has in all probability always evinced reluctance towards “sequences of (non-coordinated) *to*-infinitives, in particular to those not separated by any intervening material” (2003, 236). Concisely, the *horror aequi* is a theory which may account for why an author or speaker resorted to an unexpected and/or unusual pattern of complementation, disregarding the internal selective restrictions of a predicate.

As regards *refuse* and the effects of the GCS and *horror aequi*, based on research by Fanego (1996) *refuse* has remained fairly unaffected. Fanego’s research covers a considerable time span, all the way from 1400 to 1710, and in all those years only two instances of *refuse* taking an *-ing*-clause complement could be attested (1996, 38, 40, 46)⁶. It shall be interesting to see whether any changes can be detected in the present study covering Present-Day English (PDE).

⁶ Poutsma notes that both the gerundial and infinitival complements are used with *refuse*, although stating that the infinitive is the usual option (1904, 628), which is the same conclusion as made by Fanego (1996).

4 *Refuse* syntactically and semantically in the literature

This chapter will mainly present what four dictionaries put forward for the verb *refuse*, primarily how they describe it semantically will be of interest, but also which syntactic complementation patterns they suggest to be predominantly used in connection with *refuse* is noted. The *Oxford English Dictionary* is the major source, and to support it and provide an even more wholesome picture of the description of *refuse*, the following dictionaries are brought in: the *Collins Learner's Dictionary*, the *Collins Dictionary*, as well as the *Valency Dictionary of English*. The semantic and syntactic aspects described of *refuse* will be laid side by side, so as to later be able to potentially discern a pattern of compatibility between the senses and structures of *refuse*, once the corpus data are reflected against it. But firstly, a few thoughts on some aspects of the subject of *refuse*, which pertain to the semantics of the verb.

4.1 The subject of *refuse*: [+/-AGENT], [+/-VOLITIONAL], and [+/-ANIMATE]?

This section is dedicated to the inspection of the nature of the subject of *refuse* from various angles. First to the question of which Θ -role to assign to the subject of *refuse*: Agent or Experiencer, the issue which surfaced above in section 3.2 when introducing theta theory. Rudanko notes that predicates show “varying degrees of agentivity” (1989, 63), for instance the subject of *intend* is less agentive than the subject of *decide* (ibid., 62). He states for example that the subject of *intend* is “always an Experiencer *and* an Agent and never an Experiencer *or* an Agent only” (ibid., emphases added). As concerns *refuse* on the other hand, he affirms that the subject can only be an Agent, offering (13) below as proof that the subject of *refuse* cannot be an Experiencer (ibid., 64; examples adapted):

- (12) Under such circumstances, John *refused* [[PRO] to write a letter to a friend]_{S2}.
 (13) *Under such circumstances, John *refused* [[PRO] to know the answer]_{S2}.

At first glance this looks quite convincing, as one cannot *refuse to know* something, technically. The argument is that since the lower verb *know* assigns PRO the theta role of Experiencer, the higher verb *refuse* should also be an Experiencer at least to a degree (in order to allow the lower verb *know*). However since (13) does not work, *refuse* conclusively does not have Experiencer-like properties

since PRO is supposed to be a reinterpretation of the higher subject. Example (12) however adds up because *refuse* and *write* match in agentivity.

Perhaps one aspect that makes Rudanko deem *refuse* more agentive than for example *intend* on an agentivity scale is that *refuse* as a verb implies that the subject “communicates his negative volition (desideration) and his negative intention” (ibid., 45), and is therefore [+COMMUNICATIVE]. That is, refusal is often shown or expressed verbally, whereas intention may be kept to oneself. Wierzbicka (1988, 37) also only treats *refuse* as a “speech act verb”, alongside *promise*, *decline*, *agree* etc. The two examples which are presented below are tokens from the data of the present study, and serve as objections to 1) the subject of *refuse* always being an Agent only, and 2) *refusing* always being a [+COMMUNICATIVE] act:

- (14) Tracy squeezed her eyes tightly shut, *refusing to think* about it any further. (COHA, Sheldon 1985) sense 1
- (15) For several terrifying moments she kept prodding him with her foot, *refusing to believe* that he was dead. (COHA, Michener 1985) sense 3

Witnessing (14-15), first of all, *refuse* does allow lower verbs pertaining to contemplation, intuition etc. (similar to *know*⁷), which assign PRO the theta role of Experiencer, and thus in turn *refuse* must assign its subject the Θ -role of Experiencer to some degree. Secondly, these tokens prove that refusal can be [-COMMUNICATIVE], meaning something along the lines of ‘to not want’ (Poutsma 1904, 59). Incontestably in (14–15), the subjects did not communicate their refusals explicitly.

The next properties of a subject of *refuse* to be put under scrutiny are the semantic features [+/-VOLITIONAL], and [+/-ANIMATE]. It is quite correct to assume that *refusing* is a volitional act. It is however not applicable to all cases. *Refusing* normally involves volition and is a deliberate act – if done by a *person* (an animate subject). Interestingly however, the *OED* and *VDE*⁸ exemplify that even inanimate subjects can in fact *refuse*, figuratively speaking. The following examples are given by the *OED* of an inanimate subject with *refuse* (see table 1 in upcoming section 4.2):

⁷ The incompatibility of particularly the verb *know* with *refuse* is due to factuality. The issue of *refuse* and factuality will be addressed in section 5.2.3.1 below where the *to*-infinitive complements and its various lower verbs are scrutinised.

⁸ These are two dictionaries upcoming in this chapter, sections 4.2 (the *Oxford English Dictionary*) and 4.4 (a *Valency Dictionary of English*).

- (16) The acid... causes the stone to *refuse* the printing ink except where touched by the chalk. (E. Spon 1873) the *OED* sense 2
- (17) *Call Mrs.*—his mind, blank, surprisingly *refused* her married name and he laid the pencil down. (J. G. Cozzens 1936) the *OED* sense 4

In (16), there is a form of *resistance*⁹ from *the stone* independent of volition since inanimate, ‘dead’ objects do not have intention. In (17), the man in question had not wanted or intended to forget the woman’s *married name*, but his memory simply would not cooperate to recall it for him. Rudanko has noted the permissiveness of *refuse* to take an inanimate subject, and states that “metaphorical extensions should be allowed even for verbs that are +volitional” (1998, 116). He offers the following illustration with a *car* being the *refuser* (*ibid.*; example borrowed):

- (18) This morning my car *refused* to start.

Rudanko goes on to explain regarding (18) that when *refuse* has a ‘dead’ subject such as *my car*, we are forced to intuitively reinterpret the sentence and reconsider the [+VOLITIONAL] nature of the verb *refuse*, and thus the verb actually “straddles” the +/-volitional divide (*ibid.*). What has not been noted in any source regarding the subject of *refuse* is that even to a [+ANIMATE] and more precisely [+HUMAN] subject, the act of *refusing* may be involitional or undeliberate, still. Observe the example found in the *OED* hereunder:

- (19) I could not *refuse* her, she asked so entreatingly.
(W. Stephens 1915) the *OED* sense 4

If looking closely at (19), one might propose the question as to whether the animate subject has volition or not. There are two options: A) he could not *decide not to grant* her what she wanted (deliberate action), or B) he could not *resist* her because of the manner in which she asked (undeliberate action). Thus, one might ponder whether yielding and giving in are voluntary or involuntary actions.

⁹ ‘Resist’ is a meaning of *refuse* that will be essentially relevant to the refusal of inanimate subjects in particular. See section 5.2.6 below, where the inanimate subjects of *refuse* found in the corpora data are discussed.

4.2 The Oxford English Dictionary on *refuse*

The *Oxford English Dictionary* (referred to as the *OED*) is the main dictionary consulted in the present study, with the aim of reliably gathering which meanings and compatible syntactic structures can be attested for the verb *refuse*. Table 1 represents the *OED*'s description of *refuse*, v.:

Senses in the <i>OED</i>	Example(s)	Complementation pattern(s)
<p>1. To decline to do something. <i>trans.</i> to decline to do something; to express or show determination not to do something (with infinitive clause as object, with gerund or verbal noun)</p>	<p>The successful healing of wounds which had <i>refused</i> to heal for years. (R. B. Tisserand 1977)</p> <p>I therefore considered myself entitled, like an accused person put upon trial, to <i>refuse</i> giving my own evidence to my own conviction. (Scott 1829)</p>	<p><i>to</i>-infinitive</p> <p><i>-ing</i>-clause</p>
<p>2. To reject. <i>trans.</i> in early use: to reject or spurn. Later chiefly: to reject (one of two or more alternatives) in making a choice or selection (now <i>rare</i>)</p> <p><i>trans.</i> to reject or turn down (something offered or presented); to decline the offer of</p> <p><i>trans.</i> to reject or turn away (a person); to exclude (a person) from a place, post, etc.</p> <p><i>trans.</i> to reject (a person) as a lover, suitor, or spouse; <i>esp.</i> to decline to marry</p> <p><i>trans.</i> to reject or resist (instruction, advice, etc.); to decline to accept or submit to (a command, rule, decision, penalty, etc.) (now <i>rare</i>)</p> <p><i>trans.</i> to reject or resist (something); (formerly also) †to exclude (<i>obs.</i>)</p>	<p>Suppose you then <i>refuse</i> both retribution and revenge. (G. Lakoff 1996)</p> <p>Collins irritated Millais by <i>refusing</i> a helping of blackberry pudding. (A. C. Amor 1990)</p> <p>His former visit, when he was <i>refused</i> at the Waltham's door, had been paid at an impulse. (G. Gissing 1886)</p> <p>... a lady always <i>refused</i> a gentleman the first three times he proposed... (M. Mitchell 1936)</p> <p>The orders to ride behind... could scarcely be <i>refused</i> by the jockey. (<i>Man. Brit. Rural Sports</i> 1856)</p> <p>The acid... causes the stone to <i>refuse</i> the printing ink except where touched by the chalk. (E. Spon 1873)</p>	<p>NP</p> <p>NP</p> <p>NP</p> <p>NP</p> <p>NP</p> <p>NP</p>

<p><i>intr. Engin.</i> of a pile (=pointed stake or post): to resist further driving (now <i>rare</i>)</p> <p><i>trans.</i> of a horse: to stop short or turn aside at (a jump) (also <i>intr.</i> and <i>fig.</i> and in figurative context)</p>	<p>When the pile ‘<i>refuses</i>’, as it is technically termed... it... is capable of supporting the buildings. (Sir R. Ball 1879)</p> <p>However bold the horse may be, he will soon <i>refuse</i> water if his rider be perpetually in two minds when approaching a brook. (<i>Encycl. Brit.</i> 1881)</p> <p>It was evident, at all events, that he did not mean to <i>refuse</i>. Nor did he; he... cleared it [<i>sc.</i> a wall] by more than twice its height. (E. Æ. Somerville 1903)</p>	<p>∅</p> <p>NP</p> <p>∅</p>
<p>3. To make refusal or denial. <i>intr.</i> to decline acceptance or compliance; to withhold permission (also <i>fig.</i>)</p>	<p>She <i>refused</i>, and he—he struck her down. (E. Brontë 1847)</p>	<p>∅</p>
<p>4. To deny or withhold. <i>trans.</i> with direct and indirect object: to deny (something) to (a person or thing)</p> <p><i>trans.</i> with the person as sole object (frequently in <i>pass.</i>)</p> <p><i>trans.</i> to deny (something asked for); to decline to give or grant (something) <i>to</i></p> <p><i>refl.</i> to refrain from yielding or giving oneself over <i>to</i> something; to withhold oneself from (now <i>rare</i>)</p> <p><i>trans.</i> to forbid <i>to</i> do or be something; <i>esp.</i> to deny (a person) permission <i>to</i> (now <i>rare</i>)</p> <p><i>trans. Mil.</i> to withdraw or move back (a section of a line of troops) into a position at an angle to the regular alignment (also occasionally <i>intr.</i>)</p>	<p>When the boys came by he’d stand in the doorway and <i>refuse</i> them entry. (S. Hall 2004)</p> <p>I could not <i>refuse</i> her, she asked so entreatingly. (W. Stephens 1915)</p> <p>When I... <i>Refused</i> her to him, then his pride awoke. (Tennyson 1859)</p> <p><i>Call Mrs.</i>—his mind, blank, surprisingly <i>refused</i> her married name and he laid the pencil down. (J. G. Cozzens 1936)</p> <p>Not... that he <i>refused</i> himself to other mistresses at the same time. (O. Mandel 1985)</p> <p>After her death the clergy of the church of Saint-Roch, in Paris, <i>refused</i> her to be buried there, because she had been an actress. (H. van Laun 1869)</p> <p>The French during the whole of the action... <i>refused</i> their right wing. (C. James 1802)</p>	<p>NP + NP</p> <p>NP</p> <p>NP + <i>to</i> + NP</p> <p>NP</p> <p>NP + <i>to</i> + NP</p> <p>NP + <i>to</i>-infinitive</p> <p>NP</p>

Table 1. *The different senses of refuse documented in the OED*¹⁰.

The dominant complementation pattern given to *refuse* in the *OED* is the NP complement, and particularly so under sense 2: *to reject*. However be it mentioned that rather than giving *refuse* itself many sub-meanings under sense 2, the *OED* describes the different categories of things that may commonly be subject to rejection. One group is advice and instruction, another is people (for instance a suitor), but in terms of refusal they are all *rejected* in the same manner. *Refuse* has entirely separate meanings specific to engineering and military vocabulary, which will not be given attention in the present study due to them being outside the scope of the “everyday” meaning of *refuse*.

To sum up, below is a complete list of the complementation patterns listed for the verb *refuse* in the *OED*:

- *to*-infinitive
- NP + *to*-infinitive¹¹
- *-ing*-clause
- NP
- NP + NP
- NP + *to* + NP
- ∅

4.3 The *Collins Learner’s Dictionary* and *Collins Dictionary* on refuse

To provide a backbone to and to support the entries for *refuse* in the *OED*, the *Collins Learner’s Dictionary* (henceforth the *CLD*) and the *Collins Dictionary* (hereafter referred to as the *CD*) have been consulted. The *CLD* is worth looking at due to its simplicity, to contrast with the different purpose of the *OED*. Being directed towards the learner, the *CLD* neatly sums up the very core meanings of *refuse*. Moreover, the *CD* invited the chance to compare *refuse* in British and American English. Below in table 2 is the contribution of the two *Collins* dictionaries to the study of the meanings of *refuse*:

¹⁰ Only senses and examples valid from the 1800s and onwards have been taken into account. Among the senses of *refuse* which appear to have died out are “to forsake, abandon, give up (a practice, way of life, action etc.)”.

¹¹ What ought to be noted about the *OED*’s mention of the NP + *to*-infinitive pattern is that all examples given of it had the *to*-infinitive in the passive voice. Here is an additional example from the *OED*: “A school girl ... threatened to commit suicide if her parents *refused* her to be mutilated.” (D. N. Karanja 2003).

Senses in the <i>CLD</i>	Example(s) and pattern(s) in the <i>CLD</i>	Senses in Br.E. in the <i>CD</i>	Senses in Am.E. in the <i>CD</i>
1. If you refuse to do something, you deliberately do not do it, or you say firmly that you will not do it.	He <i>refused</i> to comment after the trial. V + <i>to</i> -infinitive He expects me to stay on here and I can hardly <i>refuse</i> . V + Ø	3. to express determination not (to do something); decline	6. to decline to accept, agree to, or do something
2. If someone <i>refuses</i> you something, they do not give it to you or do not allow you to have it (<i>syn. deny, withhold, not grant, discountenance</i>)	The town council had <i>refused</i> permission for the march. V + NP	2. to decline to give or grant (something) to (a person, organization, etc.)	2. to decline to do, give, or grant
	The United States has <i>refused</i> him a visa. V + NP + NP	5. (of a woman) to declare one's unwillingness to accept (a suitor) as a husband	3. to decline to accept or submit to (a command, etc.); decline to undergo; or to decline to grant the request of (a person)
3. If you <i>refuse</i> something that is offered to you, you do not accept it.	He offered me a second drink which I <i>refused</i> . V + NP	1. <i>trans.</i> to decline to accept (something offered)	1. <i>trans.</i> to decline to accept; reject
--	--	4. (of a horse) to be unwilling to take (a jump), as by swerving or stopping	4. to stop short at (a fence, etc.), without jumping it (said of a horse)
--	--	--	5. <i>intrans.</i> to renounce (<i>obs.</i>)

Table 2. Comparison between the senses of refuse entered in the *CLD* as well as in the *CD* for its use in British English and American English.

One sub-sense under the *OED* sense 2 (table 1) and the *CD* American sense 3 (table 2) are worded almost exactly the same: “to decline to accept or to *submit* to” (cursive added). The dictionaries thus acknowledge that when refusal is involved there is an imbalance or disparity between wills, and that one party must yield at some point. *Refusing* is “the speaker’s response[] to the thought that he should decide and intend to do something” but the speaker *rejects* to form such an intention (Wierzbicka 1988, 37), or forms this intention *negatively*. Someone may be forced into doing something he or she does not wish to, and consequently the response will be as strong as a *refusal*, so as to make a

statement of contrasting wills. *Refusing* therefore incorporates a *determination* to act against something/somebody (see *OED* sense 1 [table 1] and *CD* British sense 3 [table 2]), for example for the purpose of *defiance* or for the sake of one's own *unwillingness*. What the dictionaries fail to describe is that *refuse* means “to decline/reject passionately/resolutely/vehemently/stubbornly/adamantly”; there is an extra load of emotive meaning to *refuse* which makes it a much stronger choice of word than to *reject* or *decline*, which are quite neutral in comparison¹².

4.4 A Valency Dictionary of English on *refuse*

Herbst et al. (2004) have an impressive *Valency Dictionary of English* (henceforth the *VDE*) on the complementation of different predicates with evidence from the *Bank of English*, the COBUILD-corpus representing present-day English (ibid., vii). As concerns the senses of *refuse*, the *VDE* oversimplifies the verb and only divides it into two general senses. What is more is it does not specify which meaning is compatible with which complement of *refuse*. However the motivation for consulting the *VDE* is not to get a comprehensive list of the meanings of *refuse*, but to see what a dictionary based on corpus evidence of ‘real English out there’ reveals of the verb. Table 3 below has been compiled based on Herbst et al. (2004, 666-7):

Complementation pattern	Examples	Definition of <i>refuse</i>
∅ complement (only if clear from context)	I found out I'd got the job and you couldn't <i>refuse</i> . He <i>refused</i> and ran off.	<i>Refuse</i> means ‘not accept something offered’. A person^I can refuse something^{II} [ÆFFECTED] or refuse to do something^{II} [ÆFFECTED] , i.e. choose not to accept or do something. A person^I can refuse another person^{III} [BEN/REC] something^{II} [ÆFFECTED] , i.e. prevent the other person from having it.
NP	We were the first paper in the UK to <i>refuse</i> advertisements for American pit bull terriers on the grounds they are bred for fighting. This is an offer you surely can't <i>refuse</i> !	
NP + NP	But British law still <i>refuses</i> them the right to change their birth certificate...	

¹² As a matter of fact, the *MacMillan Dictionary* lists the following adverbs as frequently used in connection with *refuse*: *absolutely*, *adamantly*, *consistently*, *flatly*, *politely*, *resolutely*, *steadfastly*, *stubbornly*. This confirms that *refuse* is a ‘non-neutral’, strong verb as far as its meaning is concerned.

	Many journalists based outside of Sudan have been <i>refused</i> visas to enter the country to report on political affairs.	
<i>to</i> -infinitive (>30%)	Too often, would-be entrepreneurs <i>refuse</i> even to think about going into their own business because they believe they have nothing to offer the marketplace. She started to back away from the window, but her bare feet <i>refused</i> to grip the tiled floor.	

Table 3. *The complementation patterns and meanings of refuse in the VDE.*

There are several noteworthy aspects in this dictionary entry for *refuse*:

- The zero complement is only allowed if *what* and/or (*to*) *whom* something is *refused* is recoverable from the context.
- There is one NP pattern example in which *an offer* has been extracted out of its original position as the complement of *refuse*.
- In the entry for *refuse* in the book it is indicated that the NP and NP + NP patterns may be passivised. Three of five of the NP + NP pattern examples offered by the *VDE* are in the passive voice, although it is not officially stated that the pattern is “usually passive”.
- There are two examples in which *refuse* has a [–ANIMATE] subject: *British law* and *her bare feet*.
- Among the infinitival examples, there is one in which the adverb *even* is an insertion between *refuse* and its *to*-infinitive complement.
- The NP + *to* + NP complementation pattern is not mentioned at all, which is different from the previous dictionaries consulted.

The above facts will be of relevance once we reach the analysis part of the thesis where the corpora data for the present study is laid under scrutiny.

As a brief note, “BEN/REC” and “ÆFFECTED” on the right-hand side of table 3 refer to the theta roles of *Benefactive/Beneficiary*, *Recipient*, and *Patient*, respectively¹³. The *VDE* does not address the issue of whether the subject of *refuse* ought to be an Experiencer and/or Agent (under discussion previously in 4.1).

¹³ The definition of the *VDE*’s “ÆFFECTED” semantic role (Herbst et al. 2004, xiii) corresponds to Haegeman’s definition of the theta role of *Patient* (1991, 41; see section 3.2 above).

4.5 Connecting the form and meaning of *refuse*: the simplified senses

Based on how the verb *refuse* was described in the *OED*, *CLD*, *CD*, and *VDE*, below is table 4 with its summarised senses¹⁴:

Simplified sense	Suggested complementation patterns
1. to decline to do something; to express or show determination not to do something; to make refusal or denial	V + <i>to</i> -infinitive V + <i>-ing</i> -clause V + NP V + Ø
2. to withhold or deny (something asked for); to decline to give or grant (something to somebody)	V + NP + <i>to</i> -infinitive V + NP V + NP + NP V + NP + <i>to</i> + NP
3. to reject, resist, or turn down (somebody or something); to decline to accept or submit to something	V + NP V + NP + NP V + Ø

Table 4. *The summarised senses of the verb refuse and the expected complementation patterns under each sense based on the OED, CLD, CD, and VDE.*

The senses presented in the table above will be returned to in the corpus analysis section where each corpus token will be assigned one of these three simplified meanings. There the compatibility of the meanings and structures of *refuse* will be analysed. Under sense 1, based on the dictionaries, we should expect to see most of the sentential complements: the infinitival and gerundial clause complements. Most of the ditransitive constructions with *refuse* are most likely to be tied to sense 2, as there will be *something* denied to be granted *to somebody*. The zero complement is not expected to be seen here, since when withholding something from somebody, usually *what* is being withheld and from *whom* is mentioned. The NP complement seems to be relevant under all three senses. Which sense each of the NP complements will be labelled with will come down to subtle differences that will be determined by the larger context around the token in the corpus text. Under sense 3 it will be interesting to see how many animate and how many inanimate subjects there are, since it is, as was established in section 4.1 above, possible for ‘dead subjects’ to *resist* something.

¹⁴ One final remark on the entries of the senses of *refuse* offered by all dictionaries. What all of them (save the *CD* with its British senses 4 and 5) missed regarding *refuse* is what Poutsma *has* included in his entry for *refuse*, namely that *refuse* manifests *unwillingness* as an opposite phrase to *will*, and thus indicates ‘to not want’ (1904, 59). A meaning as simple as this – ‘to be unwilling’ – must apparently have been too obvious to even document. It is such a basic and integral meaning of *refuse*, yet not even the *OED* mentions it, and note that in the *Collins* dictionaries *unwillingness* is explicitly relevant in British English only.

5 Corpora analysis

This chapter marks the beginning of the analysis part of the thesis. Firstly, information is given on the corpora data collected for this study, along with a brief comment on analysing the data. After introducing the data and the methodology applied to it, the analysis of the data itself begins, from section 5.2 onwards. The order of discussing the results of the study is structured as follows: first a few general, contextual observations are reported regarding the corpora tokens (section 5.2.1); after this comes the core part of the data analysis (sections 5.2.2–5.2.3.1), where each complementation pattern of *refuse* is given its own section; lastly other findings relating to the semantics and syntax of *refuse* are singled out, again each phenomenon having its own section.

5.1 Data and method

The data for the present study is elicited from two corpora: the *British National Corpus* (hereafter referred to as the *BYU-BNC*) and the *Corpus of Historical American English* (henceforth the *COHA*). The *BYU-BNC* contains approximately 100 million words of spoken and written British English (more precisely 98,313,429 words), covering the 1980s to 1994. The *COHA* contains 400 million words of only written American English all the way from 1810 to 2009. In both corpora it is possible to limit searches within specific text genres, e.g. fiction, academic, and newspaper texts. Although, as discussed in section 2.1, a corpus technically is representative of nothing but itself, these corpora have been chosen to represent the two varieties of English taken into account in this study: British English as well as American English.

The present study is a *corpus-based* study (as opposed to *corpus-driven*), which means that its aim is to detect systematic patterns in the data so as to describe the uses and variations of particular linguistic features which have already been defined in linguistic theory (Biber 2010, 162–3). The data of the study have been selected randomly but limited to written texts only, thus excluding only the spoken part of the *BYU-BNC*. The data come from all written genres of the *BYU-BNC* (fiction, magazine, newspaper, non-academic, academic, misc) and the *COHA* (fiction, magazine, newspaper,

NF books). The search string used in both corpora is “[refuse].[v*]” (without the quotation marks). This search command allows any elements before and after a verb-tagged *refuse*, *refuses*, *refusing*, or *refused*. The two corpora have an equal contribution of 250 tokens each to the data from the years 1985–1994¹⁵. Thus the data amounts to 500 corpus tokens in total. By eliciting material from these corpora in particular, the aim is to get a representative sample of the use of the verb *refuse* in British and American English in the late 20th century. Comparisons will be made between British and American usage, however the main motivation for using two different corpora instead of just one is to ensure a more accurate representation of the use of the verb *refuse* more generally as a whole, in the two “basic” and most established varieties of English.

The fundamental premise upon which the present study is built is that “a difference in syntactic form always spells a difference in meaning” (Bolinger 1968, 127). This dictum is known as Bolinger’s Principle. For instance, when *refuse* takes an NP complement, it is to be assumed that this complement is there for a reason, most typically to indicate the object of rejection. On the other hand, even the *absence* of a complement (i.e. the zero complement) affects the main verb in that it leaves the main verb responsible to take on all meaning by itself. What Bolinger’s Principle essentially affirms is that different complementation patterns contribute differently to the shaping of the meaning of a main predicate. Bolinger’s Principle ties in well with the corpus-based approach of the study: different syntactic structures (patterns) systematically have different uses (meanings). When looking at the corpus tokens from the *BYU-BNC* and the *COHA*, it will be assumed that the complementation patterns of *refuse* take the forms they take for a meaningful and purposeful reason. What the reasons behind the selected complementation patterns are will be reflected upon and discussed from section 5.2 onwards.

¹⁵ There was only one irrelevant token in the data:

Roads, schools, *refuse* collection, etc. will provide inputs to the scheme but the cost of these inputs will be reported within the departments’ accounts. (BYU-BNC, Pendlebury & Jones 1992)

Above *refuse* is used as a noun and means “waste”. Since there was only this one irrelevant token, it was easy to randomly replace it with a new, relevant one without obscuring the results. This way the amount of data from both corpora matched exactly: 250 tokens from the *COHA* and 250 tokens from the *BYU-BNC* (instead of 249 tokens from the latter).

As for the methodology applied in the present study, each token displays a certain pattern of complementation for *refuse*, and how many instances there are of each type of complement is documented. In addition to being labelled with a specific pattern of complementation, each corpus token is assigned the most fitting simplified sense of the verb *refuse*. The three core meanings of *refuse* worked with in this study were summarised in section 4.5 above (see table 4). Once the syntax and semantics of *refuse* are cast against each other and compared, the results may reveal whether the different meanings of *refuse* in a systematic way also manifest themselves differently syntactically. In other words, a certain meaning of the verb may be compatible with a particular pattern of complementation. Such findings would validate Bolinger's Principle, according to which a different structure entails a different meaning as well.

Categorising the *to*-infinitive tokens proved especially challenging. In the case of many a *to*-infinitive, the token had to be analysed very scrupulously to detect, for example, if there was an implicit offer/order/instruction/suggestion or the like in the context. If there was no such thing and simply taking the action denoted in the *to*-infinitive was *declined*, the *to*-infinitive token would be assigned sense 1. If however the action denoted by the *to*-infinitive was a response to an implicitly present offer/order etc. in the context, then the token would be assigned sense 3, where *rejection* of *something* was involved. In these cases, the lower verb in the *to*-infinitive complement was not a refused action, like in tokens under sense 1. Here the lower verb has much bigger of an influence on the meaning of *refuse*. This issue will be dealt with and exemplified in detail later in 5.2.3.1., in which the *to*-infinitival complements are analysed and discussed.

5.2 Findings in the corpora

Clearly the *to*-infinitive is the most common complement of *refuse*. Despite the *OED* listing the *-ing*-clause complement as well as the NP + *to*-infinitive complement as other sentential complements for *refuse*, none of these was found at all in the data. Table 5 displays the proportions and frequencies of the verb *refuse* in the corpora data:

Complementation pattern	BYU-BNC			COHA			Both corpora	
	Tokens	%	NF	Tokens	%	NF	Tokens	%
<i>to</i> -infinitive	158	63.2	1.84	180	72.2	6.79	338	67.6
NP	41	16.4	0.48	41	16.4	1.55	82	16.4
NP + NP	27	10.8	0.31	8	3.2	0.30	35	7.0
NP + <i>to</i> + NP	5	2.0	0.06	1	0.4	0.04	6	1.2
∅	19	7.6	0.22	20	8.0	0.75	39	7.8
TOTAL	250	100%	2.59	250	100%	9.43	500	100%

Table 5. *The complementation patterns found with refuse in the corpora data*¹⁶.

Where the most drastic difference can be seen in terms of raw frequencies (aside from with the *to*-infinitive) is in the results for the NP + NP and NP + *to* + NP complements: based on these figures alone the British use these ditransitive patterns with *refuse* significantly more than Americans. This seems to be what takes away some of the *to*-infinitives from British English; if looking at table 5 above, it is almost as if 20 tokens of the *to*-infinitive have been moved to the NP + NP category instead. However, when comparing the *normalised* frequencies of the NP + NP and NP + *to* + NP patterns in British and American English, they are close to exact matches with 0.31 wpm and 0.30 wpm for the NP + NP pattern, respectively, and 0.06 wpm and 0.04 wpm for the NP + *to* + NP pattern, respectively. Thus the *syntactic* statistics alone for these patterns, in table 5, suggests that there is not much to observe here, but that is a false conclusion. Let us begin by observing which sense(s) of *refuse* the aforementioned patterns take in British (table 6) and American (table 7) English¹⁷:

¹⁶ Although granted that the *COHA* is a bigger corpus than the *BYU-BNC*, its amount of words for only the period 1985–1993 is significantly smaller than the word count that the *BYU-BNC* offers for the same time period. This is why the normalised frequency statistics (occurrences of words per million) is higher for the *COHA* than the *BYU-BNC* – due to the size differences of the two corpora. However, by these numbers we may see, for example, that in the *COHA* we are almost three times more likely to find an NP complement with *refuse* than in the *BYU-BNC*.

¹⁷ How to interpret tables 6-7? As an example reading, let us take the American *refuse* with a *to*-infinitive in table 7. There were 75 tokens of *refuse* taking a *to*-infinitive and falling under sense 1 of *refuse*. A sense 1 *refuse* with a *to*-infinitive as complement could be found almost three times per million words in the *COHA*, indicated by an NF of 2.83. In addition, when considering sense 1 of *refuse* as a whole (with a total of 79 tokens belonging to this sense), 75/79 tokens were *to*-infinitival, which gives a proportion of 94.9%. That is, 94.9% of the time a *to*-infinitive was used to indicate sense 1 of

Complementation pattern in the <i>BYU-BNC</i>	<i>Sense 1:</i> to decline to...			<i>Sense 2:</i> to withhold or deny			<i>Sense 3:</i> to reject or resist		
	Tokens	%	NF	Tokens	%	NF	Tokens	%	NF
<i>to</i> -infinitive	99	97.1	1.15	16	32.7	0.19	43	43.4	0.50
NP	-	-	-	-	-	-	41	41.4	0.49
NP + NP	-	-	-	27	55.1	0.31	-	-	-
NP + <i>to</i> + NP	-	-	-	5	10.2	0.06	-	-	-
∅	3	2.9	0.03	1	2.0	0.01	15	15.2	0.17
TOTAL	102	100%	1.18	49	100%	0.57	99	100%	1.16

Table 6. Combining the senses and complementation patterns of refuse in the *BYU-BNC*.

Complementation pattern in the <i>COHA</i>	<i>Sense 1:</i> to decline to...			<i>Sense 2:</i> to withhold or deny			<i>Sense 3:</i> to reject or resist		
	Tokens	%	NF	Tokens	%	NF	Tokens	%	NF
<i>to</i> -infinitive	75	94.9	2.83	45	78.9	1.70	60	52.6	2.26
NP	1	1.3	0.04	2	3.5	0.08	38	33.3	1.43
NP + NP	-	-	-	8	14.0	0.30	-	-	-
NP + <i>to</i> + NP	-	-	-	1	1.8	0.04	-	-	-
∅	3	3.8	0.11	1	1.8	0.04	16	14.0	0.60
TOTAL	79	100%	2.98	57	100%	2.16	114	100%	4.29

Table 7. Combining the senses and complementation patterns of refuse in the *COHA*.

The non-sentential patterns NP + NP and NP + *to* + NP only mean simplified sense 2 of *refuse*. The second strongest (or in American English, the strongest) complementation pattern candidate for sense 2 of *refuse* is the *to*-infinitive complement. This is where it becomes relevant that we should compare the two non-sentential complement options to the sentential *to*-infinitive, as it seems to be the case that the *to*-infinitive can take on the same sense as these non-sentential options. If going back to table 5, we should look at the drastic difference in the normalised frequencies for the *to*-infinitive (1.84 wpm in British English vs. 6.79 wpm in American English), and then look at tables 6-7 to see that in American English (table 7), the *to*-infinitive has sense 2 much more frequently than in British English (table 6). At the same time in British English (table 6), the *to*-infinitive much more often has sense 1, and in American English there are less *to*-infinitival tokens with sense 1 (table 7). From this it can thus be deduced that for some reason Americans prefer to use a *to*-infinitive with *refuse* to indicate sense 2, whereas the British prefer a non-sentential complement. The British rather reserve the *to*-infinitival complement of *refuse* for indicating sense 1 (mostly).

refuse. Finally, the likelihood of finding a sense 1 *refuse* (with any complementation pattern of *refuse* that can give *refuse* sense 1) in the *COHA* is 2.98 per million words, making sense 1 the second most common sense of the verb *refuse* in American English (after sense 3 with an NF of 4.29).

The point here is that even if one and the same pattern is used in two varieties (as the *to*-infinitive with *refuse*), and perhaps it is even used equally much in both, mere numbers could not expose, let alone account for, the differences in the *meanings* of the pattern that may lie between the two varieties. That is, the pattern looks the same in both varieties, but means different things when digging under the surface. Thus, the major deal-breaker will come in when we talk about the *semantics* of *refuse* taking a *to*-infinitive, in section 5.2.3.1 below, and the semantics of course manifests itself by giving the *to*-infinitive different kinds of contents (e.g. various lower verbs).

As for some general results, in the *COHA* most commonly something or someone was *rejected* (sense 3). The second most common sense of *refuse* in American English was sense 1 in which the subject *declines* to take some action (here no *thing* is directly affected by the subject's refusal, but the focus is on the action denied). The least common meaning of *refuse* was that the subject's refusal lead to *withholding* from or *not granting* somebody something (sense 2). In the *BYU-BNC* on the other hand, sense 1 of *refuse* was the most frequent, and in second place came the *rejection* of a thing or person (sense 3). Least common for British English was sense 2, as was for American English.

5.2.1 Contextual findings

Firstly a few general observations regarding the data. It was clear that *refuse* is a verb especially common within certain fields. It was specifically found in contexts of law (20), media (21), and business (22):

- (20) In *refusing* a motion to dismiss the suit, Black ruled that... (COHA, Presecky 1985) sense 3
- (21) When informed of the attacks on photographers, League president Gordon McKeag *refused* to comment. (BYU-BNC, CEP) sense 1
- (22) He *refused* to sell to some buyers because he wanted to retain his stock and watch the prices go up. (COHA, Andreae 1988) sense 2

In legal contexts the subject was most typically a *judge* (two tokens in the *BYU-BNC*; three tokens in the *COHA*), including Judge *Black* in (20) above, or a *court* (one token in the *BYU-BNC*; three tokens in the *COHA*). In the *BYU-BNC* there were seven and in the *COHA* eight tokens with a clearly¹⁸ legal type of context, reporting judges' rulings etc. In the media type of contexts someone was often indirectly reported to have *commented*, *admitted*, *confirmed*, *made a statement* etc., and so verbs of communication are evidently pertinent to the verb *refuse*. As for business, the typical token revolved around trade in particular, and often had a subject who *withheld* a product from a buyer, as was the case in (22) above.

In addition to the aforementioned formal settings, *refuse* was of course found in personal/private settings, and our second general observation pertains to these contexts. It could be detected that the surrounding elements in the context of *refuse* reflected the strength of *refuse* and thus 'enhanced' its emotive aspect of meaning; the 'environment' of *refuse* was also "stubborn" or "strong-willed" in nature. For instance *refuse* a few times co-occurred with the verb *insist (on)* (which is an equal in terms of strength but instead usually has positive meaning):

- (23) A student teacher, during dinner time, asked a boy, Nicky Wragg, to take the teacher's dinner tray of dirty dishes back to the kitchen hatch for him. The boy *refused*. The teacher insisted. (BYU-BNC, Coulby & Booth 1987) sense 3

¹⁸ These contexts were strictly legal without the media involved. The numbers for 'legal context' would however accumulate significantly if counting in all the instances where the media reported legal affairs (and thus the token was a 'mix' of media and law), as in the following token:

Levy, who *refuses* to comment on her charges, is currently facing at least 11 other lawsuits... (COHA, Podolsky 1992) sense 2

- (24) He had *refused* to go to bed on time, insisted on watching The Late Show on television... (BYU-BNC, Williams 1993) sense 1

In British English particularly, refusal was sometimes made in order to stand by one's values or get one's point across:

- (25) ... Andrew was *refusing* to give it to me, as a matter of principle.
(BYU-BNC, Harrison 1991) sense 2
- (26) She flushed angrily, *refusing* to back down on a point of principle.
(BYU-BNC, Browning 1992) sense 1
- (27) No one in the case will admit to knowing where the barrels are except Paringaux, who languishes in jail *refusing*, as a point of honour, to talk.
(BYU-BNC, B7G) sense 1

Moreover, plenty of various expressions pertaining to stubbornness were found with *refuse*:

- (28) It is the child who *refuses* to abandon Dreams -- who stubbornly persists in believing that he or she will explore the depths of the Amazon, [...] -- who becomes the adult who will achieve those ambitions. (BYU-BNC, Edwards 1991) sense 1
- (29) "Yes, madame," she would say, *refusing in her resoluteness* to meet the eye that searched, demanding that she meet it in the glass. (COHA, Gordon 1989) sense 1
- (30) ... Jesse [...] *refused* to wipe that obstinate expression off his face...
(COHA, Tan 1989) sense 1

Conclusively, it seems that *refuse* has the ability to be a trigger for the use of other strong expressions.

5.2.2 Non-sentential complements

Four different types of non-sentential complementation patterns were found with *refuse* in the data, which is in accordance with what the *OED* described with *refuse*: the NP pattern, the NP + NP pattern, the NP + *to* + NP pattern, and the zero complement. These will now be discussed in the aforementioned order.

5.2.2.1 The NP complement pattern

The simple NP complement was the most frequently occurring non-sentential pattern of the verb *refuse*, and all in all it was the second most frequent pattern.

In British English all 41 NP complement tokens belonged to sense 3 of *refuse*, and in American English all 41 NP complement tokens but 3 belonged to sense 3 (see tables 6 and 7, section 5.2 above). Let us firstly look at the nature of the typical NP complements of *refuse*:

- (31) Mr Vasarhelyi said he has never *refused* any offers of work and hoped one day to draw for the royal mail. (BYU-BNC, K52) sense 3
- (32) “More fool me for *refusing* an evening with the handsome, successful, and excruciatingly boring Dr. Fuller” (COHA, Morris 1987) sense 3
- (33) The Divisional Court *refused* the application. (BYU-BNC, FCE 1992) sense 3
- (34) What if a woman repeatedly *refuses* dates with a coworker but he won’t give up? (COHA, Gest & Saltzman 1991) sense 3

In (31–32) something *offered* to the subject is (or is not) *rejected* by the subject, whereas in (33–34) the subject *rejects* a request, something asked for¹⁹. These two different settings were essential to the NP complement (the formerly mentioned one being most typical) when the NP complement was a *thing*, i.e. [-HUMAN].

The NP being an ‘unliving’ *thing* was considerably more common than it being a *person*, however there were some *people* being *rejected* in the data as well. Notably, about twice as many people were *rejected* in American English than in British English:

¹⁹ The *OED*, the *CLD*, the *CD*, and the *VDE* all only mentioned the possibility of *rejecting* something *offered* to the subject (see tables 1–4 in sections 4.2–4.4) – not *rejecting* something *asked for* from the subject. Only under the sense of *withholding* did they say that something *asked for* was relevant. It should be noted that there is a difference between *rejecting* and *withholding* something *asked for*. For instance, token (33) above as evidence, *The Divisional Court* does not here *withhold the application* in which something is *asked for*, but they *reject the application* and what is *asked for* in it.

Type of NP complement	BYU-BNC		COHA		Both corpora	
	Tokens	%	Tokens	%	Tokens	%
[+HUMAN]	6	14.6	13	31.7	19	23.2
[-HUMAN]	35	85.4	28	68.3	63	76.8
TOTAL	41	100%	41	100%	82	100%

Table 8. *The number of NP complement tokens of refuse with the [+/-HUMAN] semantic feature.*

This is counter to what the *CD* predicted. The *CD* had only listed separately for British English that a woman may turn down *a suitor* in particular (see the *CD* Br.E. sense 5 in table 2, section 4.3), and for American English *rejection* of a *person* was not mentioned at all. This British sense 5 was the only sense where the *CD* or *CLD* acknowledged that *a person* of any sort may be *rejected*. Only the *OED* acknowledged the *turning away* or *rejection* of a person *other* than a suitor to a woman, and those were exactly the kinds of instances found in the corpora data (in addition to the few suitors that, indeed, were also found in the data):

- (35) IRENKA I always *refuse* him. I don't want to marry Koshchei.
(COHA, Scollard 1990) sense 3
- (36) He held desperately on to her arm. Cathy could not *refuse* the boy, who seemed almost mad with fear. (BYU-BNC, GWH) sense 3
- (37) In 1912, he was believed to have attempted to board the ill-fated Titanic only to be *refused*, thus saving his life. (BYU-BNC, CL1) sense 3

In (35) we have the suitor type of NP who is *turned down*, but much more frequent were the 'non-suitors', such as *the boy* in (36), whom *Cathy* could not *turn away* or *not allow* to stay close to her²⁰. In (37), *he* is *rejected* and *not allowed* to board the *Titanic*. Relevant in each case (35–37) is that a person is *rejected* (or not *rejected* in (36), and thus *allowed*). A suitor is clearly *rejected as a person*, whereas most typically a person other than a suitor is *turned away from a place*, such as the ship in (37), which did not really have anything to do with the person *personally*.

There were 3 instances of an NP complement in the *BYU-BNC* almost appearing as a 'short form' of the NP + NP complement (section 5.2.2.2. below). Poutsma (1926, 63) holds that "verbs that ordinarily have two objects not seldom have one of them understood", and illustrates this with the following sentence (*ibid.*; example borrowed):

- (38) It was Mr. Fitz-boodle... who offered me the cigar, and I did not like to *refuse* him.

²⁰ Why *allowing* or *not allowing* someone (else) to do something is especially relevant to the verb *refuse* will become clearer when the *to*-infinitive complement is discussed below in section 5.2.3.1.

(almost = displease him)

In other words, in (38) it is not *Mr. Fitz-boodle* himself who is directly *rejected*, but his *offer*. With the idea of an understood object in mind, consider the following two contexts:

- (39) In *refusing* people admission [sense 2] at the airport, Immigration Officers have to obtain the approval of an Inspector in direct contact with the Home Office. But as an ex-Immigration Officer told the magazine *Race Today* (June 1973) ‘If you don’t show a good record in *refusing* people [sense 3] it is thought you are not doing your job properly.’ (BYU-BNC, Wilson 1988) sense 2; sense 3
- (40) On the contrary he strode in, rubbing his hands and making it clear that he, too, would like a piece of venison, and he being *Bodo* it was not really possible to *refuse* him. (BYU-BNC, Carter 1986) sense 3

Example (39) contains two tokens of *refuse*. In this airport setting it is first made clear, through the first instance of *refuse* and its complementation, that some passengers are *not granted* or *withheld admission* (this is the NP + NP complement that takes sense 2 of *refuse*). Here, the focus is on *what* is being *withheld* from some people: *admission*. The second instance of *refuse* (with the simple NP complement) is however assigned sense 3 because the focus is now on the *rejection* or *turning away* of the people themselves. At this point what is *denied* to some people has already been established (and thus NP₂ in the scheme NP₁ + NP₂ can be dropped). Due to the action of the officers *turning away* people now being the focus instead, this is also reflected in the choice of complement: the simple NP complement is applied, although it is simultaneously relevant still that it is *admission* which is being *withheld* from the people. In the context of (40) there was an offer of *a piece of venison* that supposedly did not apply to *Bodo*. What the NP complement says is that it was impossible to *turn him away* now that he is clearly already expecting to get himself a piece. However, when considering the larger context, the *piece of venison* was mentioned before, and so that is the thing that can impossibly be *withheld from him*. It could be argued that the *refuse* + NP₁ structure in (40) should have been a *refuse* + NP₁ + NP₂ scheme instead, where NP₁ is *him* and NP₂ would have been *a piece of venison*. Nevertheless, since strictly syntactically only the simple NP complement is present, we need to assume that the focus is on not being able to *reject Bodo* as a guest (sense 3 of *refuse*), just as the focus shifted from *denying admission* to *rejecting* people in (39).

Examples (39–40) above corroborate Bolinger’s Principle and his assumption that a difference in syntax entails a difference in meaning (1968, 127). In these examples an NP complement has been chosen instead of a possible NP + NP complement for focus reasons: the author did not wish to focus on the *thing* being *withheld* (i.e. the NP + NP pattern), but the *person* being *rejected/turned away* (i.e. the NP pattern) and as a consequence being *withheld* something.

As was previously mentioned, the absolute majority of the NP complements belonged to sense 3. However, in the American data there were three sense exceptions: one token fell under sense 1 and two tokens under sense 2. Let us now look at what made these tokens special:

- (41) President Reagan at first *refused* comment, claiming hostages’ lives were at stake. (COHA, 1987) sense 1
- (42) Kiam *refuses* comment on the investigation or whether he’ll proceed with his... (COHA, Dodd 1990) sense 2
- (43) Bartenders are measuring out vodka with stingy precision or *refusing* service altogether when customers reach the legal limit. (COHA, Moody 1985) sense 2

In (41), the noun (phrase) *comment* appears without an indefinite or definite article (*a/the comment*), and so in this context *President Reagan* is not *rejecting a comment*, but he is *declining to comment* (sense 1: “to decline to do something”). He does not wish to commit an act that will endanger *hostages’ lives*. Example (42) is the same situation where *comment* is found by itself with no determiner, however this context differs from the one in (41) in that it is more about the subject, *Kiam*, not wanting to *reveal* details about *the investigation* etc., and therefore *Kiam* is *withholding comment* for now. Context (43) is about the bartenders *not granting* customers any more drinks after *the legal limit* has been reached. There is something about the word *service* inherently that means it is given to others, and so when service is *refused* to be given to someone, service is *withheld* (sense 2 of *refuse*).

As a final point and small footnote, there were all in all eight passivised tokens of *refuse* having an NP complement, of which 7 were found in the *BYU-BNC* and only 1 in the *COHA*. Here are three examples:

- (44) Benefit was *refused* or withdrawn on grounds of ‘cohabitation’ (as it was then called) in about 8000 cases a year. (BYU-BNC, Ungerson 1991) sense 3
- (45) Only gold and silver coins were accepted, paper money was *refused* everywhere. (BYU-BNC, Rose 1990) sense 3
- (46) The reason some paintings are *refused* for large exhibitions is often their condition.

(COHA, 1993) sense 3

As can be deduced from (44–46), the passive voice was used when a decision was made by an authority, when the refusal of something applied in general, or when the focus was on the thing *refused* rather than on the person who was behind the act of *refusing*, respectively.

5.2.2.2 The NP + NP complement pattern

This pattern only took sense 2 of *refuse*: “to withhold or deny (something asked for); to decline to give or grant (something to somebody)” (see previous section 4.4). In the scheme relevant for this pattern, *refuse* + NP₁ + NP₂, the first NP₁ was always [+HUMAN], describing from *whom* something was *withheld*, and the most frequent NP₂ was ‘permission’, which occurred nine times in the *BYU-BNC* and once in the *COHA*. After ‘permission’, the most popular NP₂s were ‘right’ for British English (two tokens in the *BYU-BNC*) and ‘job’ for American English (two tokens in the *COHA*), ‘entry’ (one token in the *BYU-BNC*; one token in the *COHA*), and ‘admission’ (one token in the *BYU-BNC*; one token in the *COHA*). Below are two examples of this complement pattern with *refuse*:

- (47) He could *refuse* her nothing, of course, and she bought the house.
(BYU-BNC, Craven 1993) sense 2
- (48) Meanwhile, gospel church members criticised the council for *refusing* them permission to hold services there [in the building]. (BYU-BNC, K50) sense 2

Example (47) means that *he* could *deny her nothing*, and so *he* could not either *withhold the house* from *her* (sense 2 of *refuse*). This was the easy, short kind of NP + NP pattern, but then there was the longer type of NP + NP pattern containing ‘permission’ and its *to*-infinitive complement, as in (48). One might ask the question why such tokens were common in the British data, with ‘permission’ as NP₂. If trying to omit *permission* in (48), the question might be answered:

- (48’) Meanwhile, gospel church members criticised the council for *refusing* them to hold services there.

In the alternative (48’), it is harder to fast comprehend who is the understood/implicit subject of the *to*-infinitive *to hold services there*. By “inserting” *permission* and letting this noun take on the *to*-

infinitive as complement, instead of *refuse* having to take an NP + *to*-infinitive complement²¹ (as demonstrated in (48')), understanding the sentence is made much more effortless²²: 1) *the council did not grant the gospel church members permission*, and more precisely 2) *the members were not granted permission to hold services there*.

What was a stand-out feature regarding the NP + NP complementation pattern of *refuse* was that a considerable proportion of the tokens were in the passive voice; in the *BYU-BNC* 14 of the 27 tokens were passivised, which means about 52%, and in the *COHA* four of eight tokens were passivised, which means 50%. Thus the *VDE* presenting three of its five examples of the NP + NP pattern in the passive voice was an accurate representation of this pattern with *refuse*. Here is an example of an NP + NP complement of *refuse* in the passive voice in both varieties from the data:

- (49) She had a degree in mathematics but was *refused* a job in the Math Department because the head of it, [...] said he didn't want a bloody woman on the staff. (COHA, Theroux 1989) sense 2
- (50) ... batsman Robin Smith was *refused* permission to make a 25,000-mile round trip home to be with his wife... (BYU-BNC, CBG) sense 2

It seems that in (49) *the head of the Math Department* influenced the decision to *deny* the woman the *job*. Case (49) has arguably been passivised in order to protect the name of or avoid directly pointing out the person who was ultimately behind the *refusing*, as 'avoid[ing] giving blame or taking blame or responsibility' is one function of or motivation for passivisation (Downing & Locke 2006, 254). Example (50) might have been passivised for the simple reason that it is 'predictable by general knowledge' (ibid.) that an authority lies behind having *refused* the *round trip*, and so stating exactly *who refused* is considered unnecessary, or irrelevant in the context.

Particularly these two motivations for passivisation were the most relevant to the verb *refuse*. '[P]redictable by general knowledge' (ibid.) was common due to the formal contexts in which the verb naturally occurs, where authorities are responsible for declining people's requests. The avoidance of giving blame type of passive was used when for example a woman turned down a suitor

²¹ Further discussion on why this pattern was not found with *refuse* in the data is offered below in section 5.2.3.1, when analysing the *to*-infinitival complements of *refuse*.

²² The sentence is less 'cognitively complex' or the construction is less 'heavy' (see section 3.5).

or a person was turned away from a place, where one avoids expressing who caused the subject of the passive clause (original object in the corresponding active) this ‘embarrassing’ or unpleasant situation. The passivisation might also be a way of maintaining privacy (ibid.).

5.2.2.3 The NP + *to* + NP complement pattern

The NP + *to* + NP complement pattern had the weakest representation in the data. There were altogether only six tokens displaying its usage: five in the *BYU-BNC* and only one in the *COHA*²³.

With this pattern of complementation *refuse* only takes on sense 2: to *withhold* something from somebody or *not grant* something *to* somebody. Here are three of the altogether six tokens of the NP + *to* + NP pattern found in the data:

- (51) Immigration officials have *refused* entry to a Russian medical expert who was coming to Britain to help a paralysed teenager. (BYU-BNC, K1V) sense 2
- (52) *REFUSING* drugs to a person who needs them is a disgrace to the medical profession... (BYU-BNC, CBC 1992) sense 2
- (53) The new law has permitted those judges to *refuse* bail to thousands of suspects, most of them accused of violent and drug-related crimes (COHA, Lacayo 1987) sense 2

If paying careful attention to (51–53) while reading them, we notice that NP₂ in the scheme *refuse* + NP₁ + *to* + NP₂ is a very long and thus ‘heavy’ constituent. Let us look at what (51–53) would look like if each was converted into a corresponding NP + NP pattern, without *to*:

- (51’) ?Immigration officials have *refused* a Russian medical expert who was coming to Britain to help a paralysed teenager entry.
- (52’) ?*REFUSING* a person drugs who needs them is a disgrace to the medical profession...
- (53’) ?The new law has permitted those judges to *refuse* thousands of suspects, most of them accused of violent and drug-related crimes, bail.

From (51’–53’) all doubts are cleared: *to* is used, and the NP + *to* + NP pattern exists, in order to postpone a ‘bulky’ indirect object NP₁ in the scheme NP₁ + NP₂ so that it instead becomes NP₂ in NP₁ + *to* + NP₂. This way the heaviest element in the sentence comes last (end-focus), as is the typical principle in English, and the processing of the sentence is alleviated on the reader’s part.

²³ Hence, although this pattern does exist, the *VDE* not exemplifying it at all is fairly accurate, as the pattern is marginal.

There was however one token, (54), displaying the NP₁ + *to* + NP₂ pattern in which NP₂ was only one word and thus not to be considered a heavy constituent:

(54) Planning permission has been *refused* to you. (BYU-BNC, HAJ) sense 2

Why was this pattern still used? Reflect on the NP + NP version of (54), illustrated as (54') below:

(54') You have been *refused* planning permission.

Undeniably, (54') may feel an imposition. The word order is much more direct and 'threatening' than that in the original (54), which is a more neutral way of stating the decision of denial. Here *to* is used so as to allow the distancing of *you* from the beginning of the clause; if the clause began with *you*, the context would become much more personal as shown in (54'). Therefore (54) is the more proper or commonly accepted way of reporting a negative decision.

The meaning of the preposition *to* in this pattern of complementation for *refuse* corresponds to the *OED*'s sense I.1.b. of *to*: "In figurative expressions of motion; the following n. [noun] denoting [...] a thing or person reached by some action figured as movement". Rohdenburg (1996, 151) holds that including "an optional grammatical signal", such as the directional preposition *to* in this case, is more explicit compared with a version without the preposition: *refusing* something *to* somebody vs. *refusing* somebody something. There was one NP + *to* + NP token in the data with (restrictive relative) extraction, (55), where *to* had been attached together with *whom*, a phenomenon referred to as pied-piping (Denison 1998, 220, 291; Ross 1967, 196 ff.). Extraction involves an unusual, deviating word order and thus the need to include *to* becomes greater (the context demands greater explicitness; see 3.5 on complexity):

(55) Johnny Come Lately, the man to whom the Home Office *refused* a work permit in 1984, was now fast making up ground on the inside. (BYU-BNC, CH5 1992) sense 2

Trying to read (55) skipping *to* makes for a reading that may be misleading. By placing *to* early on together with *whom* gives the reader the cue that directionality will be involved – *the man* will not be *rejected* in the sentence, but something will not be granted *to* him.

Although it is to be presumed that the NP + *to* + NP pattern is more explicit than the NP + NP pattern without the prepositional link indicating direction, there were no passivised NP + *to* + NP

complements – only a considerable amount of passivised NP + NP complements, as was discussed in the previous section 5.2.2.2. This might be a surprising result from the point of view of the Complexity Principle (see 3.5 above), given that the principle predicts that a more explicit option will be used in passive constructions because they are more cognitively complex. The data of the present study reveal that passives are ‘not complex enough’ to make authors want to include *to*. The use of *to* is warranted only by the presence of lengthy object NPs, because these seem to be a significantly burdening complexity factor.

As a final point regarding the NP + *to* + NP pattern of *refuse*, it might be the case that the inclusion of *to* is a more *formal* alternative to the NP + NP pattern. Consider the legal context below:

- (56) Counsel for the Crown conceded, [...] that in a case where the prosecution has been completed and the judge thereafter *refuses* leave to the Crown to discontinue, it is counsel for the prosecution’s duty to remain in the case.
(BYU-BNC, FCY 1992) sense 2

Case (56) has not been formulated: ... the judge thereafter *refuses* the Crown leave to discontinue.... In addition to legal discourse being formal, it is also inherently the kind of context that calls for extra explicitness so that there can be no ambiguities or misinterpretations. Therefore *to* is used to clearly indicate *to whom leave is denied*. Example (56) also defies the *horror aequi* principle (see 3.6 above), since there are two occurrences of *to* close to each other. Nonetheless the legal register with its need for a higher degree of explicitness warrants the use of *to*, even to the defiance of this condition.

5.2.2.4 The zero complement pattern

The results for the zero complements were slightly surprising. One might expect this pattern to simply mean “to make refusal”, as described by the *OED*. Nevertheless, this was not the case. In fact, the distribution of the zero complement meanings was as follows (all in all, for both corpora): five tokens with sense 1, two tokens with sense 2, and 32 tokens with sense 3. Thus most zero complement tokens belonged to sense 3, in which *refuse* means “to reject, resist or turn down (somebody or something); to decline to accept or submit to something”. Why? How can something be *rejected*, without the rejected thing or person being structurally represented after *refuse*?

Huddleston and Pullum (2002, 1527) put forward that *refuse* is a verb which permits its complements to be ellipsed; that is, the complement may be “left unexpressed when retrievable anaphorically”: I asked Max to tidy up his room, but he *refused* __ (ibid.). This is exactly the key to the zero complement tokens found in the data, as what was *rejected* could be found elsewhere in the context, most often in a previous clause. To illustrate how the zero complement gives *refuse* sense 3, observe the following tokens from the data:

- (57) ‘[...] Open the window, Ellen! I’m so hot!’ I *refused*, as it was the middle of winter. (BYU-BNC, GWH 1992) sense 3
- (58) ... they offered a ride and it became more difficult to *refuse*, until on the sixth day I weakened. (BYU-BNC, Howard 1990) sense 3
- (59) ... his wife had pleaded with him daily for her to give him her kidney, but [...] he *refused* completely, not wanting to hurt her in any way. (COHA, Russell 1990) sense 3

In (57), *Ellen* is requested to perform an act of opening *the window*. She however *rejects* this request. In (58), there was an offer of *a ride* that in the end was too hard to *resist*. In (59), the wife’s wish to offer her husband *her kidney* was *rejected* by the husband; he “declined to accept” it. There were also a few trickier tokens straddling between sense 3 and sense 1:

- (60) They suggested that I speak in Russian but I *refused*. I preferred stammering in Hebrew. (COHA, Shaham 1993) sense 1
- (61) Her pediatrician, doubtful that the seizures were caused by the DPT vaccine, recommended continuing with the series, but Sylvia *refused*. (COHA, Trubo 1989) sense 1

Despite there being a suggestion and a recommendation present in examples (60) and (61), respectively, they have both been assigned sense 1 since the subjects’ refusals are directed towards their own future actions: they “decline to do something” (sense 1), and do not directly reject the suggestion/recommendation in itself (sense 3).

The zero complement giving *refuse* sense 2 was the rarest case, and understandably so; it is quite clear that it is difficult to express *withholding* something from somebody, involving three participants (see section 3.2 on theta theory), with a complement that is not even there. However, two zero complement tokens all in all still expressed this sense. Here is one of those two tokens:

- (62) We must respond as quickly as possible, and at the latest within two months, by either providing the information or by *refusing*. (BYU-BNC, HJ9) sense 2

Again it is clearly the previous context in (62) that allows *refuse* to take on this complex sense 2 of *refuse* even with the absence of a complement. The verb *provide* supports sense 2 in that it makes us think of the opposite “to not grant” or “withhold”, thus making it is easier for *refuse* to take on this meaning.

5.2.3 Sentential complements

The sole sentential complement type of *refuse* that surfaced in the data was the *to*-infinitive pattern. However simple it may seem, in the case of *refuse* the *to*-infinitive turns out to be a very multifaceted pattern. There is much more complexity to it than could beforehand be imagined, and so there is a great deal to be observed and explained about it.

5.2.3.1 The *to*-infinitive complement pattern

As stated earlier, labelling the *to*-infinitive complements with the correct simplified sense of *refuse* was a challenge. How it worked in practice will be explained now. Observe the following display of all the senses of *refuse* with a *to*-infinitive as complement:

- (63) He had *refused* to hire a cook. (COHA, Theroux 1989) sense 1
- (64) Shop owners *refused* to sell goods to the yakuza. (COHA, Chua-Eoan 1988) sense 2
- (65) I've thrown you a rope several times but you've *refused* to grab onto it.
(COHA, Cadigan 1993) sense 3

In (63), *he* had declined the future *action* of himself hiring a cook – he had not *rejected a cook*²⁴. Since the subject is *declining* to perform the action denoted by the *to*-infinitive, (63) is assigned sense 1 of *refuse*. In (64), the *shop owners'* refusal leads to keeping away or *withholding goods* from *the yakuza*. Somebody *else* is affected by the refusal of the subject, and there is something “undergoing” the refusal (the NP *goods*) (see theta theory, section 3.2). For these reasons, token (64) is assigned sense 2 of *refuse*. Lastly, (65) is assigned sense 3 because *throwing you a rope* is implicitly or indirectly an offer in the context, and this offer of help is *rejected* by not *grabbing onto it*. You “declines to accept” to *grab onto* the rope. The *to*-infinitive complement tokens belonging to sense 3 are, in a way, “less explicit” instances of an NP complement. Compare (65) with (66) below, in which *refuse* takes an NP complement:

- (66) He hauled himself up, *refusing* the Corporal's arm. (BYU-BNC, Mo 1991) sense 3

Example (66) is, albeit syntactically dissimilar, semantically near-corresponding to (65) above.

²⁴ This might seem obvious to the reader and unnecessary to point out, but why this is explained this way will become clearer as we go along in the present section, for there are certain aspects of the *to*-infinitival complement that will become complicated.

There were instances in the data where *refuse* took a short type of *to*-infinitive complement, whose formula was as follows: *refuse* + *to*_{INF} + V + NP. In this scheme, arguably, the *to*_{INF} + V part could be omitted, leaving only *refuse* + NP and resulting in no ultimate difference in meaning²⁵.

Consider the following:

- (67) The task of every member of the organization is reduced to a simple choice of obeying or *refusing to obey* a command. (COHA, Bauman 1990) sense 3
 → ... a simple choice of obeying or refusing a command.
- (68) ... he was dismissed from the police for *refusing to answer* questions about the charges. (COHA, Howe Verhovek 1988) sense 3
 → ... he was dismissed... for refusing questions about the charges.
- (69) The gull *refused to take* the fish, so I prized her beak apart and slipped a morsel over her tongue down the back of her throat. (COHA, Fletcher 1993) sense 3
 → The gull refused the fish...

All of the tokens above are from the *COHA* data since this placement of “a verb in the middle” was popular in American English. It definitely seemed to be preferred to the simple NP pattern. Although much less common in British English, the *refuse* + *to*_{INF} + V + NP type of structure was however also found in this variety:

- (70) The hospital is *refusing to take* non-emergency patients.
 (BYU-BNC, A9F) sense 3
 → The hospital is refusing non-emergency patients.
- (71) An innkeeper may *refuse to accommodate* a traveller only when: ...
 (BYU-BNC, Paige & Paige 1992) sense 3
 → An innkeeper may refuse a traveller only when: ...
- (72) Griffin spent three days in jail after he *refused to give* a breath sample.
 (BYU-BNC, CBE) sense 3
 → Griffin spent three days in jail after he refused a breath sample.

Following Bolinger’s Principle, there must be a *reason* why the NP being *rejected* is placed inside a *to*-infinitive complement instead of standing as a complement on its own (immediately following *refuse*). We know for a fact that, ultimately, in (70–72) a person or thing is *rejected* or *turned away* (sense 3), but my theory is that the *to*-infinitive is a way of *distancing* the rejection of this NP. This is to direct the focus on the action instead, drawing attention away from the actual rejection of the

²⁵ This is why with example (63) above (He had *refused* to hire a cook.), it was explained that *he* is in fact not *rejecting a cook*, but the action denoted by the *to*-infinitive which pertains to himself. Here, *to hire* could impossibly be left out without resulting in a considerable difference in meaning. Contrast example (63) with (67–69). Due to the differences between these examples in what is omissible, they have consequently also been assigned different senses of *refuse*.

person or thing in question. This way, the rejection is *mitigated* in a way (although it still *is* there, which is why tokens such as these are assigned sense 3 of *refuse*). For example in (70), the option with only the NP as complement would sound rather harsh. By leaving only the NP in the complement clause, it might be thought that *the hospital* is strictly *rejecting patients*. This is on a personal level: the *patients* are *rejected* or *turned away* directly, because as individuals they are not considered worthy of care until they are sick enough, for example. Whereas when *to take* is in between *refuse* and the NP, *the hospital's* turning away of the *patients* is not because of the *patients* themselves, but because of other circumstances: *the hospital* needs to make more urgent matters a priority. In (71), just as a hospital can be expected to care for patients, an innkeeper is expected to gladly receive guests. *Refusing a traveller* at the door sounds unkind, and so the *to*-infinitive is brought in so as to make the statement of refusal seemingly more polite.

Thus, in *to*-infinitives containing a [+HUMAN] NP, the NP is within the *to*-infinitive so as to soften the rejection of this person, making it more indirectly directed towards that person personally. As for the [-HUMAN] NPs contained in *to*-infinitives, having *to* + V between *refuse* and the NP is often unnecessary, particularly so in (67). Looking at (67)²⁶ among others as evidence, especially in American English having the short type of *to*-infinitive intervene between *refuse* and the NP (so that the NP is contained by the *to*-infinitive instead) is stubbornly given preference to, even when it means repetition.

To contrast with the previous type of tokens, there were *to*-infinitival tokens of *refuse* with the same scheme *refuse* + *to*_{INF} + V + NP, but from which the *to*_{INF} + V part could *not* be omitted due to the nature of the NP contained by the *to*-infinitive. Consider the following tokens:

- (73) Melanie *refused* to believe the truth. (BYU-BNC, George 1991) sense 3
 → */? Melanie refused the truth.
- (74) ... [her brain] *refused* to admit the passage of time, of change itself.
 (COHA, Downer 1993) sense 3
 → */? ... [her brain] refused the passage of time, of change itself.
- (75) For one thing, he *refused* to accept laws of nature... (COHA, Jones 1992) sense 3
 → */? ... he refused the laws of nature...

²⁶ Example (67) also violates the *horror aequi* condition (see 3.6) by having two near-successive occurrences of *obey*.

- (76) Personally, I *refuse to accept* such rumors. (COHA, Duffy 1987) sense 3
 → Personally, I refuse such rumors.
- (77) Russia is *refusing to accept* the dangerous transports... (BYU-BNC, J39) sense 3
 → Russia is refusing the dangerous transports...

Once more, this was a phenomenon more common in American English. The uniting factor of the NPs in (73–77) above is that they are all factual and thus ‘non-refusable’. No matter how strong the volition of the subject, these NPs will be stronger than the will of the subject. All examples (73–77) are assigned sense 3 because the subject cannot, but at least wishes to, *reject*, and thus *resists* or “declines to accept” the NP in the *to*-infinitive complement. Due to the subject being unable or powerless to *refuse* the NP directly, the *to*-infinitive is needed, and it has to have a lower verb that will give the *refusing* a sense of denial. This lower verb was most often – in fact, nearly in all cases – *accept* or *believe*. The pattern emerges that especially *believe* and *accept* are used as the lower verb when whatever the complement contains cannot be *refused* because it is factual (examples (73–75)), or already exists or has already happened (examples (76–77))²⁷. This might account for why *accept* (ten tokens) and *believe* (eight tokens) were such frequent lower verbs in the *to*-infinitive complement of *refuse* (see table 9 in this section). In addition to the way in which *believe* was used in (73) above, the verb was used to allow or help *refuse* to indirectly take a factual *that*-clause complement. *Refuse* itself does not license a *that*-clause complement, but *believe* does:

- (78) Baruch Bashan *refused to believe* that I couldn’t remember the reason why I came to his parents’ house. (COHA, Shaham 1993) sense 3
- (79) For several terrifying moments she kept prodding him with her foot, *refusing to believe* that he was dead. (COHA, Michener 1985) sense 3

²⁷ Kiparsky and Kiparsky (1970) address the issue of the (in)compatibility of some predicates with factuality. They note that the superordinate sentence may deny what is presupposed by the complement, and therefrom comes the semantic anomaly (ibid., 148; examples adapted):

- *I *refuse* that the door is closed.
 *I don’t *refuse* that he has gone away.

It seems that *refuse* truly is a non-factive predicate, as the following are ungrammatical or very questionable (ibid., 146; examples adapted):

- *[?]I *refuse* Mary to have been the one who did it.
[?]He *refuses* himself to be an expert in pottery.
 *I *refused* there to have been a mistake somewhere.

In (78), the subject can impossibly *refuse* the other person's forgetting something, and in (79) *she* cannot *refuse* his death, but can however *resist* or “decline to accept” that reality (sense 3). In conclusion, the scheme *refuse* + *to*_{INF} + *accept/believe* + NP/*that*... is used whenever something factual is counter to or more than the subject is able or willing to *accept* or *believe*.

Another noteworthy discovery of the *to*-infinitive complements of *refuse* is that there is a subcategory of them in the passive voice. Yet again, this was a more prominent feature in American English (ten tokens) than in British English (two tokens). Below are three of the altogether twelve tokens to demonstrate how the passivised type of *to*-infinitive worked with *refuse*²⁸:

- (80) Once I'd eaten dinner that was it. I *refused* to be tempted by anything else.
(BYU-BNC, HRT) sense 3
→ *I refused that anything else (should) tempt me.
- (81) ... Davis *refuses* to be hurried and sometimes slows his own tempo to half...
(COHA, Rosenthal 1992) sense 3
→ *Davis refuses that they hurry him...
- (82) The next day, he flat *refused* to be dragged along on a rope.
(COHA, McCaffrey 1988) sense 3
→ ?... he flat refused that they (would) drag him along on a rope.

All instances of a passive *to*-infinitive were assigned sense 3 since in all contexts the subject *rejected*, *resisted*, or “declined to accept or submit to” something. The subject of (80) *refused* temptation; in (81) *Davis* won't *submit to* being hurried, or *resists* others' hurrying him; and in (82) *he* *refused* to “reduce himself to” being *dragged along on a rope*. Clearly, this passivised type of *to*-infinitive complement of *refuse* gives a sense of the subject adamantly declining to be influenced or affected by something or somebody (as in (80–81)), or alternatively the subject *refuses* to be forced into “undergoing/being exposed to/being reduced to” something (as in (82))²⁹. Converting the lower passives of (80–82) into corresponding actives verifies itself a challenge as *refuse* is incompatible with *that*-clauses, and this might be the very explanation for why the passivised *to*-infinitive is resorted to: to find a way around factuality. As stated before, note that the subject of *refuse* only has

²⁸ Rudanko (2014, 232) notes that the most classic [–CHOICE] subjects (corresponding to [–VOLITIONAL] in the present study) are found in passive lower clauses.

²⁹ Under American sense 3 (see table 2, section 4.3) the *CD* offers that *refuse* may mean “decline to undergo”. This is only in the entry of *refuse* for American English, which is quite in accordance with the results of the present study.

the power to *resist* undergoing something, but for example in (81), it is a *fact* that people may still hurry *Davis* despite his *refusing to be hurried*. In cases such as (80–82), the passivised *to*-infinitive works as a substitution for a factual *that*-clause due to *refuse* being a non-factive predicate.

Now, finally, let us view table 9 below, which shows the most frequently found lower verbs in the *to*-infinitive complement clauses of *refuse*:

Lower verb: <i>to...</i>	<i>BYU-BNC</i>	<i>COHA</i>	Share of the 338 <i>to</i> -infinitives	Percentage of the 338 <i>to</i> -infinitives
<i>accept</i>	5	5	10	3.0
<i>acknowledge</i>	1	5	6	1.8
<i>admit</i>	-	3	3	0.9
<i>allow</i>	8	11	19	5.6
<i>answer</i>	2	3	5	1.5
<i>believe</i>	1	7	8	2.4
<i>comment</i>	3	4	7	2.1
<i>confirm</i>	3	0	3	0.9
<i>discuss</i>	3	2	5	1.5
<i>do</i>	3	-	3	0.9
<i>give</i>	6	2	8	2.4
<i>leave</i>	2	3	5	1.5
<i>let</i>	6	10	16	4.7
<i>look</i>	-	6	6	1.8
<i>make</i>	4	7	11	3.3
<i>marry</i>	3	-	3	0.9
<i>meet</i>	-	4	4	1.2
<i>obey</i>	-	3	3	0.9
<i>pay</i>	4	2	6	1.8
<i>say</i>	3	1	4	1.2
<i>sell</i>	-	4	4	1.2
<i>sleep</i>	-	3	3	0.9
<i>take</i>	7	4	11	3.3
<i>talk</i>	3	5	8	2.4
<i>work</i>	3	1	4	1.2
other	88	85	173	51.2
TOTAL	158	180	338	100%

Table 9. *The most commonly found lower verbs in the to-infinitival complement clauses of refuse (in alphabetical order).*³⁰

With a quick overlook of table 9, it may be deduced that generally verbs of *permission* and *communication* were most typical in the lower clause, such as the ones below:

Verbs of permission: *allow, accept, admit, comply, let, obey, submit*

³⁰ In order to be included in the table, the lower verb had to have a minimum of three instances in at least one of the corpora.

Verbs of communication: *acknowledge, admit, answer, comment, confirm, disclose, discuss, make, say, talk*

The reason why *make* has been listed as a verb of communication is that in connection with it, it was popular to *make a statement, make a comment* etc.

Discussed before were *accept* and *believe*, which have some of the highest frequencies as the lower verbs of *refuse* taking a *to*-infinitive. There are, nonetheless, two lower verbs that are even more frequent and truly stand out in the data: *allow* and *let*. *Allow* was the most commonly found lower verb in both British and American English, and *let* was used considerably in American English.

Why should this be the case? What is the use(fulness) of these particular lower verbs, *allow* and *let*?

Let us firstly review the following facts:

1. In the data there were no instances of *refuse* selecting the object control (NP + *to*-infinitive) complement pattern, ruling out the possibility of constructing sentences such as the following:
 After her death the clergy [...] *refused* her to be buried there...
 (H. van Laun 1869, the *OED*)
2. British English made significantly more use of the NP + NP (27 tokens vs. only eight in the *COHA*) and NP + *to* + NP (five tokens vs. only one token in the *COHA*) complement patterns with *refuse*. All of these tokens belonged to sense 2 of *refuse*.
3. The *to*-infinitival complement was used much more with *refuse* in American English (180 tokens [NF 6.79] in the *COHA* vs. only 158 tokens [NF 1.84] in the *BYU-BNC*). *Refuse* with a *to*-infinitive in American English had more instances of it belonging to sense 2 (45 tokens) and sense 3 (60 tokens) of *refuse*, while leaving less instances of it in sense 1 (75 tokens) compared with British English.

The <i>to</i> -infinitive complementation pattern	<i>Sense 1:</i> to decline to...		<i>Sense 2:</i> to withhold or deny		<i>Sense 3:</i> to reject or resist	
	Tokens	%	Tokens	%	Tokens	%
<i>BYU-BNC</i> (158)	99	62.7	16	10.1	43	27.1
<i>COHA</i> (180)	75	41.7	45	25.0	60	33.3

Table 10. *The to-infinitival senses of refuse in the data (parts of tables 6-7 repeated).*

Thus the question arises, does American English, with its increased number of *to*-infinitives, somehow make up for its shortage of the non-sentential, NP-type patterns? Do some specific types of *to*-infinitives still match the NP + NP and NP + *to* + NP patterns meaning-wise (i.e. have sense 2)? The main identifying factor was precisely the use of *allow* or *let* as the lower verb in the *to*-infinitive.

In the *COHA*, in 8/11 tokens with *allow* and 9/10 tokens with *let* as the lower verb, somebody (or something) *else* other than the subject was *refused* permission to do something by the subject of

refuse, and thus permission was *withheld* or *denied* (sense 2)³¹. The scheme *refuse* + *to*_{INF} + *allow/let* + NP + *to*_{INF} V... worked as follows³²:

- (83) ... if he *refuses to allow* her to work, it may reduce the woman's sense that he is fair toward her... (COHA, Scanzoni et al. 1989) sense 2 deprives her of or denies her work
- (84) The U.S., he claimed, *refused to let* him seek internal exile in the Philippines. (COHA, Wallace 1986) sense 2
- (85) Vincent at first *refused to let* me play, but when I offered my Life Savers as replacements for the buttons that filled in for the missing pieces, he relented. (COHA, Tan 1989) sense 2

In (83–85) above, *her*, *him*, and *me*, respectively, are all *denied* or *not granted* something. When speaking of sense 2 of *refuse*, *allow* and *let* were of course not the only lower verbs that gave the matrix verb this sense:

- (86) In America a journalist was sent to prison for *refusing to disclose* information which could have revealed the innocence of a person on trial... (BYU-BNC, A9W) sense 2
- (87) The caller *refused to name* the agent, but the description sounded a lot like Kaye. (COHA, Blakely 1994) sense 2
- (88) When she left home at seventeen, I *refused to give* her the money. (COHA, Henkin 1993) sense 2

The tokens (86–88) above all have a lower verb that is given a negative/opposite sense by *refuse*, or the lower verbs modifies *refuse* into meaning to *withhold* (sense 2). In fact, in sense 2 of *refuse*, it

³¹ Sometimes one could even *refuse to allow/let oneself* (to) do something. This occurred only twice in the data:

Lynley *refused to let* himself become involved in a shouting match with the man. (COHA, George 1989) sense 2
 The Court *refused to allow* itself to be caught in a circular argument as to which State needed... (BYU-BNC, Chinkin 1993) sense 3

The *OED*'s closest matching description for this was worded as follows: “*refl.* to refrain from yielding or giving oneself over to something; to withhold oneself from (now *rare*)” (see table 1, section 4.2), but the suggested complementation pattern for this sense was not the *to*-infinitive pattern but the NP + *to* + NP pattern. It seems that this reflexive type of usage in connection with *refuse* has become a sentential complementation pattern instead of a non-sentential one, with the aid of *allow/let*. *Allow* or *let* are presumably used to avoid having to use the structure *refuse* + NP + *to*-infinitive. Moreover, there might be a difference in meaning between the two options:

Option A) Lynley *refused to let* himself become involved in a shouting match with the man. *to*_{INF} + *let*...
 Option B) Lynley *refused* himself to become involved in a shouting match with the man. NP + *to*_{INF} + V...

In option A), which is the original, *Lynley* declines to be exposed to or undergo being involved in an argument. He has more of a ‘victim’ position here; it is unacceptable for him to be treated this way. In option B), *Lynley* does not want to reduce or “lower” himself to arguing with *the man*. He has more honour than that. He *resists* his own anger or temptation, almost, to want to quarrel with *the man*.

³² This usage was present in the *BYU-BNC* data for British English as well, although not as prominently as in the *COHA* data for American English.

was very common for some kind of information (as in (86–87)) or money (as in (88)) to be what was *withheld*. If *allow* or *let* was the lower verb, then naturally it was inherently permission which was *not granted*.

To come back to the use of *allow* or *let* as the lower verb, there is one more thing to be observed about it. The present author's educated guess is, based on the data, that these two verbs are "a way around" the complexity of an object control structure with *refuse*: *refuse* + NP + *to*_{INF} V.... This applies to both American and British English, and to *to*-infinitives giving *refuse* either sense 2 or sense 3³³. *To allow* or *to let* is inserted in between to make a sentence more easily understandable:

- (89) Citibank apparently *refused to allow* him to sell it [his house]...
(BYU-BNC, K1X) sense 2
→ ? Citibank apparently refused him to sell it...
- (90) The government *refused to let* him travel to Oslo for the ceremony...
(COHA, Nelan 1990) sense 2
→ ? The government refused him to travel to Oslo for the ceremony...
- (91) If our mind *refuses to let* our body respond, the feelings stay locked in...
(BYU-BNC, Carmichael 1991) sense 3
→ ? If our mind refuses our body to respond, the feelings stay locked in...
- (92) Bush, however, *refused to allow* his new chief of staff to fix what was broken.
(COHA, Podhoretz 1993) sense 3
→ ? Bush, however, refused his new chief of staff to fix what was broken.
- (93) She had *refused to let* Karen come to the gate with her.
(COHA, Michaels 1986) sense 3
→ ? She had refused Karen to come to the gate with her.

In cases (89–90) above, the focus is on permission being *withheld* or *not granted* to someone, whereas in (91–93) something/somebody else's doing something is *not accepted* or *rejected*. As can be seen under each case after the arrow, if we were to delete *to allow* or *to let* from the sentences, they would certainly become more complex or 'misleading' to read. Suddenly there may be some uncertainty as to who is the *Agent* in the *to*-infinitive (see 3.2 above). Moreover, the object control type of structure may sound archaic or old-fashioned in Present-Day English (PDE).

To further attempt to account for why the *to*-infinitival type of complement was used more in American English than British English, observe the following:

³³ The object control structure is naturally incompatible with sense 1 of *refuse*, as this sense only ever pertains to the subject's *own* refusal of his own future-oriented doings. The only way the object control structure could possibly be assigned sense 1 of *refuse* is if the object NP is reflexive and co-referential with the higher subject and PRO in the lower clause.

- (94) ... as friendly Mrs Gracie had said, he could not now *refuse* Paul and herself permission to marry. (BYU-BNC, Hill 1990) sense 2
 → ... he could not now refuse to allow Paul and herself to marry.
- (95) Immigration officials have *refused* entry to a Russian medical expert... (BYU-BNC, K1V) sense 2
 → Immigration officials have refused to let a Russian medical expert enter...

Next to the arrows under British examples (94–95) are the “Americanised” versions of the British sentences. Since British English displayed more NP + NP (as in (94)) and NP + *to* + NP (as in (95)) complements of *refuse*, it could be argued that the Americans instead using *allow* and *let* more as lower verbs in a *to*-infinitive complement is a way for them to avoid (or they otherwise disprefer) these two non-sentential patterns. Based on the way in which the data of the present study unfolded itself, it seems that *allow* and *let* are seen as handy “interveners” in American English in that they allow one to express a situation in which someone *refuses* (for) someone/something *else* to do something.

As this section explaining the vast possibilities of a *to*-infinitive with *refuse* was a fairly heavy one, here is a brief summary of the main points discussed:

1. There were *to*-infinitives in which $to_{INF} + V$ could have been left out in the scheme *refuse* + $to_{INF} + V + NP$, so that the NP would have been *rejected* immediately (sense 3). However, especially in American English, placing the NP within a short *to*-infinitive is preferred, so as to mitigate the rejection of a thing or person directly. This type of tokens all belonged to sense 3 of *refuse*.
2. There were *to*-infinitives in which $to_{INF} + V$ could *not* have been omitted in the scheme *refuse* + $to_{INF} + V + NP$, due to the factual nature of the NP. The most typical lower verbs in these cases were *accept* and *believe*.
3. To indicate sense 2 of *refuse*, Americans preferred using a *to*-infinitive containing the lower verb *allow* or *let*. In comparison, the British most frequently used non-sentential complement options to indicate sense 2 of *refuse*. We may witness these facts in tables 6-7 in 5.2 above.
4. There were *to*-infinitives in the passive voice, which could be schematically represented as follows: *refuse* + $to_{INF} + be + V-ed...$ The construction gave a sense of the subject firmly declining to be influenced, affected, or forced by somebody else or something into being exposed or reduced to something. This construction was found more frequently in the data for American English.
5. Most commonly the lower verb in a *to*-infinitive complement of *refuse* was a verb of permission or communication.

5.2.4 Extractions, insertions, and the *horror aequi* with *refuse*

Table 11 below displays the number of extractions or insertions in connection with *refuse*:

Complementation pattern	BYU-BNC			COHA		
	Tokens	Extractions	Insertions	Tokens	Extractions	Insertions
<i>to</i> -infinitive	158	1	14	180	5	6
NP	41	3	-	41	-	1
NP + NP	27	-	-	8	1	-
NP + <i>to</i> + NP	5	1	-	1	-	-
∅	19	-	-	20	-	-
TOTAL	250	5	14	250	6	7

Table 11. *Extractions out of and insertions between the different complementation patterns of refuse in the data.*

There were no violations of the Extraction Principle (see 3.4) in the data, as the *to*-infinitive was the only sentential complement of *refuse*. In the American data most extractions occurred out of precisely a *to*-infinitive complement. Here are two examples of the most common type of extraction with *refuse*, relative extraction, with the traces drawn in:

- (96) She actually had with her [the man]_i [∅]_i he had *refused* to meet [t]_i, whose existence was a matter for the police to deal with... (COHA, Frucht 1993) sense 3
- (97) Sharon had graduated from [the nuns' school]_j [that]_j Ellen had *refused* to allow Cam to attend [t]_j. (COHA, Gordon 1989) sense 2

Example (96) has a zero restrictive relative clause (i.e. *that/which/who/whom* has been left out) which contains *refuse*, and the NP *the man* has been extracted out of the *to*-infinitive complement of *refuse*, after *meet*. The extracted NP crosses two clause boundaries, as it travels from being located in the *to*-infinitive to the *wh*-clause and finally to the superordinate clause. Example (97) displayed the most complex extraction in all the data, as here the NP *the nuns' school* originates in the fourth clause but crosses three clause boundaries to end up in the highest clause.

Extracting the simple NP complement out of the position after *refuse* occurred only in British English (three tokens) and the extracted NP was invariably *an offer*³⁴. The one relative extraction that occurred with the NP + *to* + NP pattern was already discussed in 5.2.2.3 (see example (55)) but is

³⁴ The *VDE* exemplified the extraction of 'an offer' as the complement of *refuse* in 4.4 above.

repeated below as (98). Extraction out of an NP + NP complement of *refuse* occurred only once and in American English (99).

- (98) Johnny Come Lately, [the man]_i [to whom]_i the Home Office *refused* a work permit [t]_i in 1984, was now fast making up ground on the inside.
(BYU-BNC, CH5 1992) sense 2
- (99) [What]_k had his father asked for [t]_k [that]_k his mother had *refused* him [t]_k?
(COHA, McElroy Ansa 1993) sense 2

Example (98) involves restrictive relative extraction and (99) is an instance of question extraction. Note that in these examples, in the former the NP denoting the *person* has been extracted and in the latter the *thing refused* has been extracted. This might affect why (98) is an NP + *to* + NP complement and (99) only an NP + NP complement. It may be the case that since in (98) the person NP has been extracted, there is a need to include *to* to indicate directionality and improve readability (this issue was addressed above in 5.2.2.3). In (99) on the other hand, the person to whom something is *refused* stays syntactically close to *refuse*, rendering *to* unnecessary, which is why this example remains an NP + NP complement and is not turned into the more explicit option NP + *to* + NP as (98), despite extraction being a complexity factor (see 3.5 on complexity).

Be it mentioned briefly at this point that the *horror aequi* condition did not seem to affect the complementation of *refuse*, as tokens such as the below were attested in the data:

- (100) In this case, the doctor involved, Dr Robert Dinwiddie, *refused* to consent to the parents' decision... (BYU-BNC, Senior 1985) sense 3
- (101) He *refused* to sell to some buyers because he wanted to retain his stock and... (COHA, Andreae 1988) sense 2

Replacing the *to*-infinitives of (100–101) with an alternative *-ing*-clause would not be an entirely unimaginable scenario, but with (100–101) as evidence the *to*-infinitive continued to be selected even in linguistic environments that presumably would trigger deviating complementation. Based on the data of the present study, it seems that it is quite deeply encoded in the mental Lexicon of language users that *refuse* belongs together with the *to*-infinitival complement only. In other words, *refuse* seems to resist other sentential complementation patterns, even where the context would make language users particularly prone to altering their complement selection.

The insertions almost invariably occurred between *refuse* and a *to*-infinitive (see table 11 above). The insertions between *refuse* and its complements were typically adverbs. In the *BYU-BNC*, eight of fourteen insertions were adverbs, and in the *COHA* four of six were adverbs. The most common adverb found modifying *refuse* overall was ‘steadfastly’, but as an insertion ‘even’ was the most common, with four tokens in the *BYU-BNC* and one in the *COHA* (see table 12 in 5.2.5). Below are some examples of insertions between *refuse* and its *to*-infinitival complement:

- (102) I *refuse* absolutely, however, to insult the noble mountains of Scotland by quoting their altitudes in foreign metres instead of British feet.
(BYU-BNC, Wainwright 1992) sense 1
- (103) They are *refusing* adamantly even to investigate thin slab technology.
(BYU-BNC, HHV 1992) sense 1
- (104) Oldfield *refused* even to speak to the person he had once idolised.
(BYU-BNC, Brown 1989) sense 1
- (105) The Israeli Government over the last two years *refused* even to talk with any real Palestinian leaders. (COHA, Lewis 1991) sense 1

There were two instances in the data, (102) and (103), where two successive elements of insertion were found. What is important to remember regarding (103–105), containing ‘even’ as an insertion, is that ‘even’ pertains to the lower verb in the *to*-infinitive rather than *refuse*. For example in (104) the least expected of Oldfield was that he would have been able to or agreed to *speak* to his former idol, but he did not *even* do this. Despite that ‘even’ relates semantically to the lower verb, it is however significant that *refuse* in particular should frequently co-occur with ‘even’. My reasoning regarding this is as follows: since there is an action (denoted by the lower verb in the *to*-infinitive) that the subject is minimally expected to perform (in order to show respect etc.), but the subject however (perhaps surprisingly) *declines* to do *even* this, the subject has to have a very strong disapproval for the person or thing that this minimally expected action is directed towards (the idol in (104) or the *Palestinian leaders* in (105)). This is the motivation for why a verb as strong as *refuse* is used in connection with ‘even’. *Refuse* inherently having a subtle sense of disapproval is dealt with in section 5.2.7 below.

The longest and thus heaviest insertion elements found in the data are shown below in (106) for British English and (107) for American English ((27) and (29) repeated, respectively, from section 5.2.1 above):

- (106) No one in the case will admit to knowing where the barrels are except Paringaux, who languishes in jail *refusing*, as a point of honour, to talk. (BYU-BNC, B7G) sense 1
- (107) “Yes, madame,” she would say, *refusing in her resoluteness* to meet the eye that searched, demanded that she meet it in the glass. (COHA, Gordon 1989) sense 1

The purpose of longer insertions was to further enhance the “determined/adamant” aspect of meaning of *refuse*. The fact that *refuse* often had other “stubborn” elements in its surrounding context was discussed in 5.2.1 above.

5.2.5 Strengthening adverbs modifying *refuse*

Being a strong verb itself, it might have been expected that adverbs of a similarly strong character would be found modifying *refuse*, and indeed this was true:

Strengthening adverb	<i>BYU-BNC</i>	<i>COHA</i>
<i>absolutely</i>	3	-
<i>acerbically</i>	-	1
<i>adamantly</i>	2	2
<i>altogether</i>	1	1
<i>angrily</i>	-	1
<i>completely</i>	-	1
<i>even</i>	4	1
<i>flat</i>	-	1
<i>flatly</i>	-	1
<i>flat-out</i>	-	1
<i>furiously</i>	-	1
<i>insolently</i>	-	1
<i>outright</i>	1	2
<i>point-blank</i>	1	-
<i>resolutely</i>	1	-
<i>simply</i>	1	1
<i>steadfastly</i>	2	3
<i>stubbornly</i>	2	2
<i>vehemently</i>	-	1
TOTAL	18	21

Table 12. All the strengthening adverbs used in connection with *refuse* in the data.

Note that all adverbs found with *refuse* were adjuncts indicating manner (e.g. ‘adamantly’, ‘resolutely’) or degree (e.g. ‘absolutely’, ‘altogether’, ‘completely’), and not for example time or reason. With a total of five tokens each, ‘even’ and ‘steadfastly’ stood out as the most common adverbs found in connection with *refuse* in the data all in all³⁵. The placement of an adverb modifying *refuse* was one of the following:

- A) immediately before *refuse*
(eight in the *BYU-BNC*; fourteen in the *COHA*)
- B) immediately after *refuse*, the adverb being an insertion between *refuse* and its complement(s)
(eight in the *BYU-BNC*; four in the *COHA*)
- C) immediately after the complement(s) (or zero complement) of *refuse*, and the sentence may or may not have continued after the adverb
(two in the *BYU-BNC*; three in the *COHA*)

³⁵ The *VDE* earlier exemplified having *even* as an insertion between *refuse* and its *to*-infinitive complement, which means it accurately depicted this contextual feature of the “the syntactic environment” of *refuse*.

Placing the strengthening adverb prior to *refuse* (as in (108) below) or as an insertion (as in (109)) was most typical. Least popular was placing the adverb last (as in (110)): it was only ‘outright’ and ‘altogether’ which occupied this end-position.

- (108) ... Livingston had flat-out *refused* to be interviewed on camera. (COHA) sense 3
- (109) They are *refusing* adamantly even to investigate thin slab technology.
(BYU-BNC, HHV) sense 1
- (110) I’d *refuse* them admission altogether if I could afford to lose the business.
(BYU-BNC, Gill 1993) sense 2

5.2.6 Inanimate subjects with *refuse*

In the *COHA* there were 17 and in the *BYU-BNC* 24 tokens of *refuse* with an inanimate subject³⁶.

Animacy/inanimacy of subject	<i>BYU-BNC</i>		<i>COHA</i>		Both corpora	
	Tokens	%	Tokens	%	Tokens	%
[+ANIMATE]	226	90.4	233	93.2	459	91.8
[-ANIMATE]	24	9.6	17	6.8	41	8.2
TOTAL	250	100%	250	100%	500	100%

Table 13. *The [+/-ANIMATE] semantic feature of the subjects of refuse in the corpora data.*

There were three different types of inanimate subjects of *refuse*:

- A) subjects related to *body and mind*: self, brain, vocal cords, body, fingers, arm, pride etc.
- B) subjects that were *physical items*: car, dress, antenna, drift-net vessels
- C) subjects that were *units of people*: companies, associations, courts, organisations etc.

Let us first look at a few examples representing group C: *units of people*:

- (111) By refusing to include theory, the department is, in effect, *refusing* to declare its own theoretical standpoint... (*BYU-BNC*, Thomas 1990) sense 1
- (112) Citibank apparently *refused* to allow him to sell it [his house]... (*BYU-BNC*, K1X) sense 2
- (113) The Food and Drug Administration *refuses* them permission to test it... (*COHA*, 1994) sense 2
- (114) The insurance company, *refusing* to accept the IRA as culprits, declined to pay. (*BYU-BNC*, Anthony 1987) sense 3

Strictly speaking, the subjects of (111–114) are abstract terms but we know living people are part of the department, bank, administration, and insurance company, respectively. The people actually responsible for *refusing* are only “hidden” behind these corporate names, probably to avoid disclosing exactly who made the refusal. Alternatively, the refusal is seen as a joint decision and the whole company/court etc. stand behind it, and thus the refusal represents the standpoint of this entire company/court etc. The most common meaning of *refuse* with a subject of this type was, quite reasonably, sense 2, in which somebody is *denied* or *not granted* something, as courts and companies etc. often have such powers to for example *withhold* permission. In the data there were 14 tokens in the *BYU-BNC* and seven tokens in the *COHA* with a these kind of *unit of people* (group C) as an

³⁶ As a point of comparison, Sihvonen (2009, 81) noted in his study of *aim* that in the *BNC* data the *to*-infinitival complements of *aim* had particularly more [-ANIMATE] than [+ANIMATE] subjects.

inanimate subject of *refuse*. The remaining 10 tokens in the *BYU-BNC* and 10 tokens in the *COHA* with [–ANIMATE] subjects belonged to groups B and C.

All inanimate subjects categorised in groups B and C belonged to sense 3 of *refuse* for the following reasons:

1. There was a form of *resistance* on behalf of the subject despite its involitional nature (due to the subject being [–ANIMATE]-featured).
2. The subject “declined” to cooperate or comply with, submit to, or *rejected* the human’s will, unintentionally going against the human’s wishes.

Observe the tokens hereunder, belonging to group A: *body and mind*:

- (115) Still her pride *refused* to let her ask him why he found her company so amusing. (BYU-BNC, McCallum 1993) sense 3
- (116) ... during the day she cooked until her fingers *refused* to move. (COHA, Campbell 1992) sense 3
- (117) ... the soft body that *refused* to become fit, had been no help... (COHA, Mott Davidson 1993) sense 3

Token (115) is *mind*-related and tokens (116) and (117) pertain to *body*. In (115), perhaps she really would have wanted to ask *him* a question, if it had not been for *her pride* stopping or *rejecting* this. In (116) *her fingers* ultimately unintentionally tired after all the cooking. It could be said that *her fingers resisted* movement against the subject’s will, and despite her *effort* to try to make *her fingers* respond and cooperate. In (117) there is also effort involved on the subject’s behalf: the subject wishes *to become fit* but the subject’s *soft body* seems to *resist* this.

Lastly, here are tokens exemplifying the absolutely ‘dead’ *physical items* (group B):

- (118) After trying two cars that *refused* to work, they found one that, with considerable effort, was persuaded to sputter into action. (COHA, Greeley 1987) sense 3
- (119) After the launch, engineers had to fiddle with stubborn antennas that *refused* to extend. (COHA, Thompson 1990) sense 3
- (120) She did get into it [the dress], with a great deal of assistance from Julie and Karen, and the collapse of only one side seam. However, the dress *refused* to meet at the back. (COHA, Michaels 1986) sense 3

In (118) *two cars* “declined” to cooperate and comply with the humans’ wills. In this example, the one car that finally worked was even regarded as *persuadable*, i.e. it could be convinced to start. In fact there were altogether 3 inanimate tokens in which a *car* was responsible for *refusing*. In (119), *antennas* “decline to be extended”. Moreover they are described as being *stubborn*, regardless of their

inanimacy. In (120), *the dress*, notwithstanding considerable effort from many people, did not “agree” to close at the back.

With the evidence in this section, it can be concluded that sense 3 of *refuse* is a highly metaphorically extendable meaning: an abstract *unit of people*, or something relating to a person’s *mind* or *body*, or a *physical item* may *refuse* to cooperate, i.e. put up *resistance*. Sense 2 of *refuse* was only extendable to the *units of people* since only something at least implicitly living can (intentionally) *withhold* and *not grant*. Sense 1 of *refuse* is the least metaphorically extendable meaning of *refuse* since, like sense 2, it requires a [+ANIMATE] subject who can volitionally *decline* to do something.

5.2.7 An additional nuance of meaning of *refuse*

In the corpus data, an additional branch of meaning was discernible for *refuse*, one which all four of the dictionaries previously consulted failed to describe. Namely, *refuse* sometimes has the nature of being indirectly or implicitly *disapproving*. At times *refuse* can mean “to show disapproval”. Disapproval is very subtly present in *refuse*, but it is there, more in some instances and less in others.

This dimension of meaning is more easily detectable within a private/personal sphere than in a formal setting, as for example judges are only allowed to be objective. When a judge *refuses* leave (i.e. permission) to somebody to do something, for instance, it is not due to personal disliking but because of a professional, objective assessment.

Consider the following personal contexts:

- (121) But she had *refused* him, saying that she could not accept his methods. (COHA, Goldstein 1993) sense 3
- (122) Machiko came to Baton Rouge to seek the support of her in-laws, but they *refused* her. They wouldn't admit a Japanese as a member of their family. (COHA, Yoshimeki 1990) sense 3
- (123) Arnold has asked for Peggy's hand. Her father *refused*, but she says she'll marry him. (COHA, Watt-Evans & Friesner 1993) sense 3

In (121), behind her *rejecting* him was her disapproval of his, to her mind, unacceptable methods. In (122), *Machiko's in-laws* turned her away for they disapproved of her because she was Japanese. In (123), the *father* did not have the power to *reject Arnold* for *Peggy*, but could however show his disapproval of their union and *resist* it.

Examples (121–123) above were cases where disapproval was implicit, very subtly there. There were however tokens in the data where the connection between *refuse* and ‘disapprove of’ arose clearly:

- (124) ‘I should *refuse* to work with that rotten cow!’ (BYU-BNC) sense 1
- (125) Hugh de Tracy *refused* me his daughter as if I had less worth than the slave who cleans out the garderobe tunnel. (BYU-BNC) sense 2
- (126) ... many of them showed their disapproval by *refusing* to have any more contact with me. (BYU-BNC) sense 3
- (127) ... the king himself showed his disapproval by *refusing* to attend his sister's wedding. (BYU-BNC) sense 3

In (124), the word *cow* is used derogatively about a coworker; in (125), the subject explains how disapprovingly *Hugh de Tracy* thinks of him; and in (126–127) *showing disapproval* is explicitly present. In the data there were at least nine tokens in which the meaning of ‘to disapprove of’ was clearly detectable.

This nuance of meaning of *refuse* has not been documented in any of the dictionaries consulted in sections 4.2–4.4. Granted, there usually must be some other element in the context that confirms that this ‘disapproval’ interpretation of *refuse* is valid (e.g. *accept* in (121) or *that rotten cow* in (124)). However, if we think about it for a moment, disapproval could be said to be always inherently present in the meanings of *refuse*³⁷. Take for example sense 1: if the subject *refuses* to do something, it is to be assumed that he *disapproves* of the *expectation* that he should form an intention to perform whatever the act in question. The subject forms a negative intention instead as a *response* to this expectation, due to his disapproval for the expectation. Remember that Wierzbicka maintained that refusals are “the speaker’s responses to the *thought* [emphasis added] that he should decide and intend to do something” (1988, 37). It stands to reason that sense 3 of *refuse* (where a person or thing is *rejected*, *resisted*, or *turned down*) most commonly admitted the meaning of disapproval. For instance a suitor *expects* to get a certain response from a woman when proposing to her but she then *refuses him*, i.e. turns him (or his offer of marriage) down because she *disapproves* of the prospect of being married to him, due to doubts etc.

³⁷ Only inanimate subjects belonging to categories A) and B) cannot adopt the ‘disapproval’ extended nuance of meaning of *refuse* (see previous section 5.2.6).

6 Discussion and concluding remarks

Refuse is a verb that defies. It does not submit to the *horror aequi* condition, nor does it follow the wave of the Great Complement Shift that has swept over many a predicate in the English language. So far *promise* (Rickman 2010), *intend* (Rantanen 2007), *propose* (Saarimäki 2015), *aim* (Sihvonen 2009), and now *refuse* have been proven to be heading in a direction away from this ‘mainstream’. This means that with these verbs, the *to*-infinitive reigns supreme. Namely, based on Fanego’s (1996, 38, 40, 46) results on *refuse* from 1400 to 1710 and the results of the present study covering 1985 to 1994, *refuse* insists on *to*-infinitival sentential complementation while the gerundial complement with *refuse* is nearly non-existent.

This thesis particularly focused and shed light on the *to*-infinitival complementation of *refuse*. With the help of the *to*-infinitive, and with its immense potential to create meaning, *refuse* can not only express what the subject himself *declines* to do (sense 1), but has also developed a specific pattern so as to convey what the subject will not *allow* or *let* somebody else (to) do (sense 2), precisely by including *allow* or *let* as the lower verb in a *to*-infinitive complement of *refuse*. Since this solution for communicating sense 2 of *refuse* surfaced frequently in the data (especially in American English), while no instance of an NP + *to*-infinitive complement was to be attested, it was postulated that language users shape the simple *to*-infinitive pattern with *allow* or *let* to “build a way around” and evade this complex object control pattern. A finding such as this testifies to the fact that it is of significance to inspect what a *to*-infinitival complement of a verb *contains*. The contents might change the semantic relations in the sentence and the meaning of the matrix verb itself, as happened with *refuse*. *Refuse* went from having sense 1 (*refuse* + *to*_{INF} + V...) to having sense 2 (*refuse* + *to*_{INF} + *allow/let* + NP + V...), where suddenly there was one more participant involved.

Another finding regarding the contents of a *to*-infinitive complement of *refuse* was the use of the lower verbs *accept* or *believe* in order for *refuse* to be able to express factuality. *Refuse* is a non-factive predicate (as one cannot *refuse* e.g. *the passage of time*, or something which has already happened) and thus uses the aforementioned lower verbs as “middle hands” to make it possible to –

not completely *reject* – but at least *deny* or “decline to accept” (sense 3) something factual (which is ‘non-refusable’). For example, *believe* was found to allow *refuse* to “indirectly” take a factual *that*-clause since *believe* does license a *that*-clause complement while *refuse* does not. Thus, the syntactic and semantic features of the lower verb in a *to*-infinitive complement of *refuse* has a great influence on shaping the matrix verb into its ultimate meaning.

Given the findings summarised above, the major discovery of this thesis was what an impact the nature of the lower verbs contained by the *to*-infinitive complement of *refuse* has on altering the meaning of *refuse*. The fact that *allow* and *let* in the *to*-infinitive pattern opened the door to an alternative way of expressing a ditransitive relationship with *refuse* was a particularly curious case. As *allow* and *let* were used notably in American English, American English had more tokens of the *to*-infinitive complement falling under sense 2 of *refuse* than British English had. British English seemed to prefer expressing a ditransitive relationship simply with the non-sentential complement option NP + NP, or with the more explicit NP + *to* + NP pattern when the Goal of the refusal (the NP after *to*) was a lengthy constituent.

Aside from the results discussed above, below are lists of more findings (some findings are repeated). The first bullet list covers syntactic findings and the second list focuses on findings pertaining to the semantic aspects of *refuse*, in no particular order of importance:

SYNTACTIC FINDINGS

- The *to*-infinitive was the most frequent complementation pattern of *refuse* in both British (63.2%) and American (72.2%) English. All in all there were 338 tokens displaying *to*-infinitival complementation with *refuse* (67.6%). Which sense *refuse* adopted most in connection with a *to*-infinitive was different in British and American English.
- The most frequent non-sentential complementation pattern was the simple NP pattern, with equally 41 tokens in both varieties (16.4%). All in all the NP pattern had a 16.4% representation in the data.
- A large proportion, just over 50%, of the NP + NP tokens were passivised. This was to avoid disclosing who the actual refuser was, so as to not give blame. Alternatively the refuser was an entire institution of people such as a company, court etc. Another, even more common, motivation behind passivising any complement of *refuse* was that it was predictable by general knowledge that an *authority* of some sort was behind the making of a formal decision.

Reporting the negative result (e.g. that an application *was refused*) was more relevant than stating exactly *who* made the refusal.

- The motivation for using the marginal NP₁ + *to* + NP₂ pattern was a heavy NP₂. NP₁ in the simple NP₁ + NP₂ pattern was postponed with the help of *to* in order to ease the linguistic processing of the sentence.
- The zero complement of *refuse* was only permissible if what was *declined* to be done (sense 1), *withheld* from somebody (sense 2), or *rejected* (sense 3) could be recovered from the surrounding context. The relevant element was nearly always in the preceding clause.
- Adverbs functioning as adjuncts of manner or degree were the most typical insertions found between *refuse* and its complement. All in all, 20 of 21 insertions were between *refuse* and a *to*-infinitive complement.

SEMANTIC FINDINGS

- The most common sense of *refuse* on the whole in British English was sense 1: to *decline* to do something; to express or show determination not to do something; to make refusal or denial.
- The most common sense of *refuse* overall in American English was sense 3: to *reject, resist, or turn down* (somebody or something); to decline to accept or submit to something.
- 99 of 158 tokens (62.7%) of *refuse* taking a *to*-infinitive in British English adopted sense 1 of *refuse*, where the action indicated in the *to*-infinitive pertained to a negatively intended future action of the subject.
- 75 of 180 tokens (41.7%) of *refuse* taking a *to*-infinitive in American English were associated with sense 2 of *refuse*, where the subject did *not grant* somebody else (to do) something. American English having more *to*-infinitives giving *refuse* sense 2 was due to the *to*-infinitive containing the lower verb *allow* or *let*.
- What was in British English most often *withheld* from or *denied* to someone in the NP₁ + NP₂ pattern (which took sense 2 of *refuse* only) was ‘permission’ (NP₂). The responsibility was left to this noun (phrase) to select a *to*-infinitive to indicate what NP₁ was not allowed to do. To indicate the corresponding relationship, American English preferred using the sentential *to*-infinitive complement as follows: *refuse* + *to*_{INF} + *allow/let* + NP + V....
- The NP + NP and NP + *to* + NP patterns only belonged to sense 2 of *refuse*: to *withhold* or *deny* (something asked for); to decline to give or grant (something to somebody).
- The simple NP pattern nearly only adopted sense 3 of *refuse* (100% in British English and 92.7% in American English).
- Regarding sense 3 of *refuse*, what was most commonly *refused* was an offer or a person. When a person was *refused*, he or she was typically *turned away* from a place.

- *Refuse* in some cases more than others inherently had a nuance of disapproval. This meaning was more easily detectable in private/personal contexts than for instance in professional legal contexts.
- *Refuse* allowed inanimate subjects. These subjects could be divided into three groups: A) subjects related to *body and mind*, B) subjects that were *physical items*, and C) subjects that were *units of people*. Sense 3 of *refuse* was the most metaphorically extendable one and thus allowed these inanimate subjects.
- The most commonly found strengthening adverbs modifying *refuse* were ‘steadfastly’ and ‘even’.
- Most commonly the lower verb in a *to*-infinitive complement of *refuse* was a verb of permission (e.g. *allow, let*) or communication (e.g. *acknowledge, discuss*).
- There were *to*-infinitive complements of *refuse* in the passive voice, which could be schematically represented as follows: *refuse + to_{INF} + be + V-ed...* The construction gave a sense of the subject firmly declining to be influenced, affected, or forced by somebody else or something into being exposed or reduced to something. This construction was found more frequently in the data for American English.

Further pertaining to the semantics of *refuse*, this thesis proved and established that *refusing* need not be a [+COMMUNICATIVE] act, counter to previous statements made on the verb by Rudanko (1989, 45) and Wierzbicka (1988, 37). When *refusing* is [-COMMUNICATIVE], it involves strong negative volition (unwillingness) which is only experienced internally by the subject and not shared verbally with others. Inanimate subjects are also an argument for the [-COMMUNICATIVE] aspect of *refuse*, although in the case of completely ‘dead’ subjects volition and intention are of course excluded. From the [-COMMUNICATIVE] possibility, among other things, it follows that the subject of *refuse* need not always be an Agent, running contrary to what was claimed by Rudanko (1989, 64).

This thesis diversely explored the verb *refuse* by offering an in-detail look into the complementation of *refuse* and the semantics which lies behind the syntactic manifestations of the verb. The present study found altogether five different patterns of complementation for *refuse*: the *to*-infinitive pattern, the NP complement, the NP + NP complement, the NP + *to* + NP complement, as well as the zero complement. The thesis qualitatively and fairly exhaustively explored the different meanings of *refuse* with a groundwork formed on the basis of four main dictionaries. The reason why I consulted this many dictionaries, compiled for different purposes, was to ensure an as exhaustive

semantic description of *refuse* as possible prior to looking at the data. The dictionaries were a solid starting point and many aspects of *refuse* outlined in them were corroborated by my data. As it turned out, however, not even their combined descriptions of *refuse* were sufficient to account for all uses of the verb. My study added another subtle branch of meaning for the verb not documented in any of these dictionaries consulted: ‘to show disapproval/to disapprove of’. Also the *refuse + to_{INF} + be + V-ed* pattern was introduced, meaning that the subject *declines* to be influenced/affected by something/somebody, or alternatively *refuses* to be forced into undergoing/being exposed to/being reduced to something.

This thesis drew some comparisons between how *refuse* was used descriptively in British and American English. The main purpose of eliciting the data for the study from the *BYU-BNC* and the *COHA* was not only to have each variety of English represented, respectively, but chiefly to get a combined depiction of how *refuse* was used in English as a whole. As far as the data used in this study is concerned, I deem that the randomised set of data was a good choice. Conveniently, the data covered quite evenly the years 1985–1994 despite being randomly selected. Nevertheless the sample could have been larger, more than 500 tokens, since generally the larger the sample, the more reliable and representative the results. Solely based on the data in this study one cannot draw absolutely certain conclusions regarding the differences between British and American usage of *refuse*. One aspect which detracts from the representativeness of the data is that it is impossible to know if the author of a text is a true native speaker of British/American English. Author names such as Yoshimeki, Theroux, and Ungerson raise doubts. Further, some corpus texts did not have an author reference at all (these were usually e.g. news transcripts). However, the complementation patterns and their variations which were attested in the data of this thesis allowed me to account for many an issue with *refuse*, such as why a large proportion of its non-sentential complements were in the passive voice, why *refuse* did not license a *that*-clause complement, why *refuse* needed assistance from various lower verbs in its *to*-infinitival complementation to fulfil its meaning, how the data showed how *refuse* found ways of evading the NP + *to*-infinitive complement etc.

As for the continuation of the investigation of *refuse*, one might look at its complement selection from 1995 and onward to the present day to see whether there are any signs of the verb waking up to the Great Complement Shift through budding *-ing*-clause complements. Moreover I consider that finding some instances of *refuse* selecting the *for* + NP + *to*-infinitive pattern is not impossible. Note that I believe the preposition *for* ought to be present. This hypothesis is based on my familiarity with the *for* –*to* pattern from my previous study of the verb *plan* (Järvinen 2015, 19ff.). Additionally, one might consider the possibility of the complementation of *refuse* being slightly different in spoken English, as speech was a “genre” or form of communication excluded from the present study. Perhaps in speech *refuse* would have a greater tendency to select the gerundial or *for* –*to* complement. Further, in the present study, the forms of *refuse* itself (*refuse*, *refuses*, *refusing*, and *refused*) were not investigated. Therefore this study did not provide an answer for whether a specific form of the verb has the tendency to favour a particular pattern of complementation.

At the beginning of this thesis it was promised that this thesis would be a testament to the powerful *to*-infinitive complement. Since *refuse* did not select any other sentential pattern of complementation, leaving the *to*-infinitive without any equal point of comparison, the opportunity presented itself to probe deeper into the *to*-infinitive itself and its contents. This thesis approached the pattern in a somewhat unusual way but it led to the exploration and discovery of some ground that the pattern has before not been known to cover. For instance, the pattern is capable of reaching a dimension in which it can express the involvement of as many participants as a non-sentential complement option (e.g. NP + NP vs. *to*-infinitive), if formulated in a certain way. This thesis encourages future studies within the field of complementation to pay attention to the nature of the lower verbs contained by a *to*-infinitive complement. It would be remarkable if for example *accept* and *believe* were found as lower verbs in the *to*-infinitival complementation of other non-factive predicates, so as to prove that *accept* and *believe* aid in building a bridge to factuality.

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