



## Diplomová práce

# Predicting text content in selected study materials

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## Zadání diplomové práce

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Flowerdew, John, and Richard Forest. 2015. *Signalling nouns in English: A corpus-based discourse approach*. Studies in English language. Cambridge; New York: Cambridge University Press.

Fraenkel, Jack R., Norman E. Wallen, and Helen H. Hyun. 2012. *How to design and evaluate research in education*. 8th ed. New York: McGraw-Hill Humanities/Social Sciences/Languages.

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# Annotation

This diploma thesis deals with signalling nouns in selected study materials. First, it defines and illustrates what signalling nouns are, then it relates them to similar concepts related to signalling nouns, for example – vocabulary 3, general nouns, shell nouns, or carrier nouns. On their basis, various problems of signalling nouns are overcome. The aim of the practical part is to create an experiment testing students' ability to find and make use of signals to predict textual development. The experiment works with a text selected on the basis of preliminary analysis. In it, signalling nouns are described based on semantic and syntactic characteristics. Data gathered from the experiment is subsequently evaluated and made use of in grouping students depending on the ability to predict textual development.

## Key words

signalling nouns, experiment, prediction, text, reference

## Anotace

Tato diplomová práce se zabývá signálními podstatnými jmény ve vybraných studijních materiálech. Nejprve definuje a ilustruje, co signální podstatná jména jsou, poté je vztáhne k podobným konceptům, které jsou se signálními podstatnými jmény příbuzné. Jde například o tzv. – vocabulary 3, general nouns, shell nouns nebo carrier nouns. S jejich pomocí se práce vypořádává s problémy, které signální podstatná jména doprovází. Cílem praktické části diplomové práce je vytvořit experiment, který testuje schopnost studentů anglického jazyka najít a upotřebit signální podstatná jména na jejich základě předpovědět následující vývoj textu. Experiment pracuje s textem zvoleným v předběžné analýze. V něm jsou signální podstatná jména popsána ze syntaktického a sémantického hlediska. Sesbíraná data jsou následně vyhodnocena a upotřebena při rozřazení studentů do dvou skupin na základě schopnosti předpovědět textový vývoj.

## Klíčová slova

signální podstatná jména, experiment, předpovídání, text, reference

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# Introduction

Texts, in general, have a wide variety of tools that make them hang together. Such tools are either coherent or cohesive. All of them are used during reading; whether it concerns topical coherence or grammatical cohesion. The most known cohesive tools are connectives, pronouns, conjunctions, substitutions, or lexical cohesion which is the main concern in this thesis. Among lexemes binding texts together there is a group of lexemes called signalling nouns closer described by Flowerdew and Forrester (2015). In short, they are expressions with an indefinite meaning which are realised by a foregoing or subsequent stretch of text. An example of such word might be *problem* in a sentence – There was a serious *problem* with the computer. Whereby the meaning of *problem* is revealed later. The core interest of this thesis are signalling nouns which have their realisation placed further in the discourse as it is in the preceding example.

The main objective of this thesis is to conduct an experiment that tests students' ability to predict further development in the textual discourse. The aim is to prove the function and relevance of signalling nouns as an effective cohesive device used by students.

The first part is composed of a theoretical base that introduces signalling nouns as such and provides illustrative examples of their usage in discourse. Those examples exemplify functions of signalling nouns in connection to anaphoric, cataphoric, and exophoric referencing in discourse.

Two approaches for the description of signalling nouns were chosen as the most reliable in terms of their identification: syntactic and semantic classification. Classification based on semantics refers mainly to Schmid (1999) and Flowerdew and Forrester (2015) as they offer the most comprehensive categorisation of

concerned vocabulary into various groups. Both categorisations offer in-clause realisations and realisations within the sentence mainly, although admittedly the patterns are relevant to the cross-sentential occurrences. The ambiguity between the terms ‘cross-clauses’ and ‘cross-sentences’ is referred to in the chapter. Illustrations of cross-sentential references are shown upon gathered examples. The lexical realisations beyond the boundary of a sentence are also the main prerequisite for conducting the experiment.

The description of the signals involves a variety of problems which are dealt with in chapter 1.6. These problems include for example frequent unspecificness of the member that is referred to, homographs, and exophoric references.

Chapter 1.7. presents concepts related to signalling nouns serves as a partial solution to problems with signalling nouns. The similar concepts are titled general nouns, carrier nouns, vocabulary 3, shell nouns, and advance labels. All of these are predecessors of signalling nouns; therefore, their characteristics are used throughout the thesis as a comparison for possible ambiguities if the lexeme functions as a signal or not.

The practical part starts with a preliminary analysis of three different texts that could potentially be used as a source for the main analysis that follows. The objective of the preliminary analysis is to answer the first research question and that is:

- (1) Which corpus is the most suitable for the analysis?

For the purpose of answering the question, the preliminary analysis consists of locating signals in all three texts and subsequently describing their relevance to the aim of the thesis. Depending on the number of cataphoric signalling nouns (SNs), layout, and topical coherence one text is selected as the best possible option for

conducting the experiment. Hence, the main analysis uses a stretch of text from the chosen textual source.

Last part of the thesis attempts to answer the following research question:

- (2) How many students react to the signalling noun?
- (3) What is the agreement in predictions among students of bachelor and master study programs?
- (4) Which group is better equipped to recognize and use the signal in questions?

For this purpose, the main experiment presents all the possible occurrences of cataphoric signalling nouns and their description. Based on the description, an internet survey instructing students to form questions about the future development for the students was conducted. The results of the experiment provided answers for research questions (2) and (3). Lastly, the results were interpreted in the conclusion of the experiment and the overall score per student of bachelor and master study programs indicated an answer to research question (4).

# 1. Signalling nouns

Abstract nouns, shell nouns, advanced labels, and carrier nouns. All of these linguistic categories refer to a group of lexical items that bear yet another name – signalling nouns (or SNs). This chapter provides a concise explanation and description of signalling nouns in the English language. First, there will be a short definition as to what signalling nouns are, what their function is, how they are realised, and where can the reader find them in textual discourse. Subsequently, their reference will be commented upon in connection to prediction in textual discourse.

## 1.1. Signalling nouns definitions and characteristics

The scope of the research on signalling items made up to this day covers not only nouns as a word class in connection to signalisation but also other word classes such as verbs, adjectives, and adverbs (Flowerdew 2003, 332). Admittedly, classes such as verbs and adjectives are not as prevalent in the discourse and at the same time, connected to signalisation; thus, they are to be left out of this thesis, and only the determination of signalling nouns is going to be mentioned. While leaving out the classification of adjectives and verbs, the existence of concepts similar to signalling nouns must not be forgotten. Their relevance to the topic is vast since their existence has provided researchers with enough information to expand on their ideas and create the category of signalling nouns. Moreover, since the core items to be explored in this thesis are primarily signalling nouns, it is only meaningful to begin with a convenient comprehensive definition.

However, right at the beginning, as easy as it might seem, even finding one appears to be quite problematic. Flowerdew, in his article, describes signalling nouns in a concise definition as: “potentially any abstract noun, the meaning of which can

only be made specific by reference to its context” (329, 2003). Later on, an expanded definition can be found in his book, and it reads as follows: “Signalling nouns are abstract nouns which are nonspecific in their meaning when considered in isolation and which are made specific in their meaning by reference to their linguistic context” (Flowerdew, 2015). Nevertheless, even these two are quite too broad to fully embrace how this category could be described in an overarching way.

Previously mentioned definitions by Flowerdew are supported by the following quotation by Halliday and Hasan dealing with one of the similar concepts “... general nouns are very general in meaning, and therefore often interpretable only by reference to some element other than themselves, ...” (1976, 276) Although admittedly here the main focus is not put on signalling nouns but on a category called ‘general nouns’ the relationship between these two categories, based on the description, is undeniable.

The concept of ‘general nouns’ will later be described in greater detail in the chapter concerning itself with similar concepts to signalling nouns.

## 1.2. Illustration of the definition

To provide an illustration of signalling nouns Flowerdew first mentions some abstract nouns which are able to follow the function of signalling nouns, such as *problem, issue, situation, or matter* (2015, 3). Whereas in connection to shell nouns, Schmid provides other expressions such as *case, chance, fact, idea, news, point, problem, reason, report, situation, and thing* (2000, 16). One of these expressions overlaps with Flowerdew’s short list above; however, further, eight expressions overlap with expressions listed in a table (Tab. 1) below, which quite extensively illustrates signalling nouns often found in written discourse (2003, 335). Other



examples talked about in Flowerdew (2003) are *attitude, assistance, difficulty, endurance, process, reason, and result*.

*Table 1 - List of possible signalling nouns*

“accident, account, action, activation, activity, adaptation, adaption, advance, advantage, analogy, analysis, appearance, approach, argument, arrangement, aspect, association, assumption, attraction, basis, case, category, cause, change, characteristic, choice, circumstance, classification, coincidence, combination, comparison, complexity, composition, concept, condition, configuration, connection, consequence, consideration, constituent, context, content, contrast, controversy, converse, conversion, correlation, criterion, cycle, danger, description, detail, deviation, difference, difficulty, dilemma, discovery, discussion, distinction, divergence, diversity, division, effect, emphasis, endeavour, evidence, example, exception, exchange, explanation, explosion, fact, factor, feature, field, form, function, generalisation, idea, implication, indication, influence, instance, interpretation, item, kind, knowledge, manner, means, mention, method, modification, movement, objection, observation, occasion, operation, part, pattern, phenomenon, point, piece, position, prediction, principle, problem, procedure, process, progress, property, purpose, question, ramification, range, reaction, reason, regard, relationship, respect, result, role, scheme, section, selection, sequence, series, shape, shift, significance, similarity, situation, size, split, solution, sort, stage, state, statement, step, structure, studies, subject, success, suggestion, support, survey, system, task, technique, tenet, theory, thesis, thing, topic, treatment, trend, truth, type, uniformity, use, variety, view, viewpoint, way, work, zone” (Flowerdew 2003, 341)

As mentioned in the definition above signalling nouns can be realised by virtually any abstract noun. However, the usage of these expressions is not merely random. Henceforth, the writer does not use a random abstract expression to create a signalling noun and connects it to its reference; he has to choose one related to what is being referred to – either text-external or text-internal reference (Benninghoven 2018, 29). The reason is that signalling nouns illustrate the additional attitudinal and logical features in connection to the stretch of text they represent (Schmid, 2000). Flowerdew supports Schmid’s claim since he talks about the meaning of an abstract noun in current discourse. He uses terms such as ‘lexical specification’ or ‘lexical

realisation’ to illustrate the anchoring of these expressions to a specific location in the text. Further, he states, “The realisation is complementary: each affects the meaning of the other. Just as the lexical realisation provides the necessary specifics for the SN, the SN indicates how the realisation is meant to be understood in relation to the surrounding discourse” (Flowerdew 2015, 2).

- (1) *This theory leaves a number of **facts** unexplained. For example, starch is absent from the guard cells of certain plants; some guard cells lack chloroplasts but still open and close; and the stomatal movements of some plants may not necessarily be related to the time of day; ... (Flowerdew, 2003).*

The word *facts* in example (1) (marked in **bold** – this format, together with the subsequent underlining, is to be used throughout the thesis) acts as a signalling noun in this stretch of text. Without the information encapsulated in subsequent sentences, its meaning would remain unclear. However, this signalling noun’s realisation (underlined) provides the reader with enough information to decipher what the word *facts* in this particular place represents. The lexeme *facts* in such context could be replaced by another abstract noun, the denotation of which is similar to this one (Flowerdew 2015, 26). If it were replaced by, for example, *issues* it might be problematic because it denotes a different spectrum of references; therefore, the word *facts* fits the context, and lexical realisation or specification is thereby fulfilled.

- (2) *Thus the two long chromosomes are attached to different fibres of the spindle, as are the two short chromosomes. The **significance** of this will become clear later (Flowerdew 2003, 335).*

The reference or lexical realisation or specification of the lexical item *significance* is unspecified, which is visibly illustrated in example (2). The reader cannot decipher where it refers to, only to discover that it ‘will become clear later’; therefore, it is prospectively foreshadowed that a piece of information will appear later in the discourse. This aspect adds to the cognitive complexity of signalling

nouns since the reader is expected to remember this link between this signalling noun and its referent somewhere in the distance (Flowerdew 2003, 330).

- (3) *Internal fertilisation has two great **advantages**: [1] it is a surer method with better chances of sperm meeting eggs; [2] it means that the fertilised egg can be enclosed within a protective covering before it leaves the female's body ... (Flowerdew 2003, 334).*

The signalling noun *advantages* in example (3) is premodified by a numeral and an adjective in a positive form. The numeral 'two' provides information about how many advantages will be expected following the subsequent colon. In Tadros' classification, the numeral 'two' together with the numbering in parentheses is called *Enumeration*, and it is one of the categories she uses in her work to classify advanced labels, a concept related to signalling nouns (1994, 71) (closer described in chapter 1.7 Related concepts). Secondly, the adjective in a positive form indicates the nature of these advantages, which again helps the reader to create an expectation of what he or she will read in the text that follows; in other words – what is labelled in advance (Winter 1977, 23–24).

- (4) *Clinging to outmoded hypotheses is an occupational hazard in those branches of biology where it is difficult, perhaps impossible, to test predictions experimentally and thus settle the matter once and for all. Such is the **case** with palaeontology and certain branches of animal behaviour* (Flowerdew 2003, 334).

In example (4), the signalling expression *case* ensues its realisation. The lexical item encapsulates the stretch of discourse it stands for. The meaning of the lexeme *case* is established and the referent can be used further as a label for the stretch of text that it stands for.

All preceding examples illustrate the nature of what the definition describes. The vital aspect is their function in a written discourse which has been also partially described; however, is of primary importance in the next chapter.

### 1.3. Functions of signalling nouns in discourse

This chapter discusses the purpose and function of signalling expressions in textual discourse.

The most important functional aspect of signalling nouns is quite probably their ‘stand-in’ function. As Flowerdew puts it, signalling nouns “stand in for the kinds of complex notions typically expressed in full sentences or even paragraphs” (Flowerdew 2015, 2). He mainly speaks about stand-in function in connection to textual cohesion. Thus, they are one of the tools that determine whether the text is textually cohesive hence readable and understandable. This claim is supported by Halliday and Hassan, who claim that “... they (general nouns) require recourse to another item, that item must be located earlier within the same text; this means that they play a significant role in making a text hang together” (Halliday and Hassan 1976, 276). Pecorari adds that it requires cooperation of the writer and the reader. Since the function is not only tying the text together, but also creating new blocks of meaning in it (2014, 178).

Both these authors mention the item occurring in previous sentences. Which, besides stand-in function, does have a functional significance, and in Sinclair’s conception, it is called ‘encapsulation.’ The function is described as follows “each new sentence encapsulates the previous one by the act of reference”; further, it is stated that “the process of encapsulation ... reclassifies a previous sentence by ‘demoting’ it into an element of the structure of the new sentence” (Sinclair 2004, 58–59). Sinclair does not tie his argument to stretches of texts serving as referents specifically; however, anaphoric signalling nouns fully fit the hypotheses and therefore could be that element placed in the ‘new sentence.’ Admittedly, cohesion of this kind, total and explicit, requires individual inferences and judgment on the

readers' side, which requires a heightened cognitive ability of the reader (Sinclair, 2004).

Furthermore, regarding the notion of continuity in textual understanding, signalling nouns may indicate or be used as markers in text to foreshadow “what idea will be unpacked and explained in the upcoming text without the requirement of frequent repetition” (Flowerdew 2015, 3). This process referencing forwards in the conception of Sinclair is called ‘prospection.’ The relationship between the signalling noun and the further realisation is that of cataphoric. “Prospection occurs where the praising of a sentence leads the addressee to expect something specific in the next sentence” (Sinclair, 2004). The functionality of prospection is quite naturally tied to retrospection; however, prospection possesses greater importance since it exhorts the reader to read forward to be able to understand or guess the links made in the direction forward (Hoey 2001, 32). Since retrospective labels occur in places where the referent has already been uttered, prospective labels are made previously to the referred stretch of text they utter to (Sinclair, 2004).

As a consequence of the ‘stand-in’ function, whether it be prospection or retrospection, there are problems with pinning down what exact features of reference of these words are in question. Therefore, pinning down the exact amount of text in question is not only not possible on a mechanical or computerised level but also immensely demanding for a person with particular expertise in this field. On one hand, lemmas can be found with the help of computers, on the other hand, all other inflectional forms must be manually sought out in the textual discourse (Flowerdew 2003, 332).

Additionally, the operative scope of signalling nouns is either within the clause or realised across clauses when searching the reference. In across-clause realisations,

the reference is made anaphorically or cataphorically, depending on the direction in which the writer is referring. Within-clause realisations have the same possibilities. Except these, one more type exists, and that is an exophoric realisation which refers to something outside the written or spoken discourse – to a text produced previously or that is to be written. Some exophoric references exhort the reader to use their imagination or background knowledge to understand the meaning of the signal entirely (Flowerdew 2015, 7). This thesis focuses mainly on endophoric reference types and more specifically on those that are realised within the text that is being analysed.

To sum up, when realising signalling nouns that operate across clauses, it can be done so anaphorically (referring backwards) with the prospect of encapsulation. The second option is a cataphorical reference (referring forwards) with a prospective or predictive function. With these functions, the lexical realisation of signalling nouns is crucial with regard to anchoring it in the text in connection with its referent (Flowerdew, 2003).

Two examples (5), (6) and (7) were found using SketchEngine concordance tool – a corpus of English Web (2021). The word problem in the following stretch of text illustrates the cataphoric across-clause reference.

(5) *There were two main **problems**, however. The first was that I was too impatient to wait for the colours to dry so that they ran together. The other drawback was that each picture could only be painted once, so I couldn't experiment with colours as much as I liked (8bs.com, 2021).*

The anaphoric across-clause referent is realised in example (6) by the signalling noun *fact* while the referent is in the preceding sentence.

(6) *It also mentions, appropriately, the significance of Washington's decision not to make public the existence of the secret protocols of the Molotov-Ribbentrop Pact of 1939. This knowledge was available to Washington*

*almost immediately, but made public only in 1948. This **fact** surprisingly is neglected by number of historians dealing with WWII (hnn.us, 2021).*

Another interesting extract includes examples of both phenomena in one place.

- (7) *The biggest barrier to deploying networks is and always has been cost. Despite some improvements on best practices, Google Fiber learned very quickly that deploying fibre is an expensive proposition. Fixed wireless, while cheaper, also requires fibre to the tower and doesn't deliver the same quality level as fibre. Mobile wireless has never and likely will never be in the same class because of the technical limitations. The only real option is to focus on fibre with wireless for edge cases and the hardest to reach areas. Colorado provides some **source of inspiration** for how to tackle this **problem**. They provide grants and low-interest loans to cover deployment costs beyond what's within a margin of the industry average, around \$3500 per home (freeutopia.org, 2021).*

In more complex example (7), both cases of reference are present. The signalling noun *problem* is an anaphoric reference to the first sentence dealing with the costs of deploying networks. At the same time, in the same stretch of discourse as the previous SN, there is a combination of expressions – *inspiration* and *source* – which both cataphorically refer to the last stretch of discourse provided. At that point, their function is prospective. It is worth mentioning that Flowerdew uses the terms clause and sentence interchangeably; they both mean within the boundary of a sentence or beyond the boundary of a sentence.

To broaden the issue of the function of signalling nouns, according to Conte, talking about signalling noun phrases rather than signalling nouns is more practical. Even though she describes the category of general nouns, her view is rather practical. She talks about noun phrases containing a general noun and not just solely general nouns. The function of which is described as an anaphoric encapsulation; thus, cataphoric uses are omitted. The terminology which Conte uses is the same as Sinclair (2004) applies to the matter, and Conte's definition is concomitant with his subject. "Anaphoric encapsulation can be defined in the following way: it is a cohesive device by which a noun phrase functions as a resumptive paraphrase for a

preceding portion of a text. This portion of text (or segment) may be of various lengths and complexity – a whole paragraph or just one sentence (Conte 1996, 2).

The function described by Conte, Sinclair, or Flowerdew is one of the decisive parts when describing signalling nouns in the practical part. The following chapters define SNs from the point of view of syntax and semantics.

#### 1.4. Classification based on syntactic realisation

Signalling nouns normally do not stand alone in text, and their function would be incomplete if their grammatical features were left out since they function as a criterion that enables them to be identified in the text. Commonly, signalling nouns occur in definite and demonstrative noun phrases since they trigger the expectations on reader's side (Pecorari 2014, 181); they appear in the text in connection with proximal demonstratives *this* and *these*; they are pre-modified by quantifiers and are frequently realised in the subject position (Flowerdew 13, 2015).

##### **Definite noun phrases**

(8) *The third approach is based on the idea that resources and constraints for their use should be stored together as closely as possible. This means that we state directly in the resource description, for which group of students, which level of knowledge or for from which specific domain the resource is appropriate (2003.org, 2021).*

In example (8) found in the English Web corpus (2021) using the SketchEngine concordance tool, the signalling noun *idea* premodified by a definite determiner has the underlined reference. This reference is realised by complement clause – namely *that*-clause. Flowerdew also states other common complement clauses that occur in nominal noun phrases, and among those are nominal *wh*-



clauses, nominal *to*-clauses, and nominal prepositional clauses (2015, 17). In stark contrast, Hunston and Francis limit the number of complement clauses only to *that*-clause and does not mention *wh*-clauses, *to*-clauses, or prepositional clauses at all (2000, 185).

### Nominal *to*-clauses

- (9) *The editorial team also reserves the **right to make requisite changes to titles, subheadings, abstracts, and acknowledgments** (epw.in, 2021).*

### Nominal prepositional clauses

- (10) *Unless they are necessary for the **purpose of preventing or minimising harm or loss to some other person** (Flowerdew 2015, 15).*

### Nominal *wh*-clauses

- (11) *The media are also free to fulfil a vital oversight role and continue to shine a light on challenges and failings in society. Nonetheless, the **situation where only a few voices dominate is not desirable nor sustainable** (gov.za, 2021).*

Two of these examples were found in the English Web corpus (2021) using the SketchEngine concordance tool. Flowerdew's classification of definite noun phrases deals with signalling nouns in immediate proximity to them. In his book, it is later expanded upon by adding a linking verb 'be' between the signalling noun occurring in the subject position and the nominalisation, which takes the role of the subject complement. He states that expressions used as signalling nouns are often nominalisations and that they often, but not always, have a verbal counterpart. The most frequent exceptions to the claim are the lexical items *fact* and *idea*, which in fact do not possess a verbal counterpart (Flowerdew 2015, 17). Examples (10) – (14) illustrate the places where the linking verb 'be' is used between the SN and the realisation within the clause.

### SN + be + *that*-clause

- (12) *The **reason** is that it is not possible to explain adequately the photoresponse in the whole wavelength range of these films ...*

**SN + be + to-clause**

- (13) *If the angle of the new beam is different, the only **effect** is to shift the angle of the viewed image.*

**SN + be + wh-clause**

- (14) *...the first **question** I suppose is what is the law trying to achieve in relation prostitution?*

**SN + be + deverbal noun**

- (15) *A familiar **example** is the reaction of a basic chromate solution, which is yellow, with excess acid to form the oxobridged dichromate ion, which is orange.*

**SN + be + gerund**

- (16) *Another **possibility** is having an interaction between the frame and the infilling elements used to span from frame to frame.*

Admittedly, these patterns taken from (Flowerdew 2015, 18 – 19) are relatively stable in terms of the determination of signalling expression. Nevertheless, the number of signalling nouns in the text is much higher, not only fixated within the clause. Patterns that predominate are still anaphoric or cataphoric across-clause realisations than within-the-clause realisations. The overreliance on the mentioned patterns is thus unwanted since they would exclude expressions that do not fit and could not be counted as examples (Flowerdew 2015, 22–23). Therefore, it is meaningful to rely on prospection (Tadros uses the label ‘advance labelling’) and encapsulation as an interactive discourse tool that is paramount and enables the reader to decode the unspecified meaning with a reference in context (Sinclair 2004, 23).

**Proximal demonstrative *this* and *these***

It has been indicated that the connection of signalling items with proximal demonstratives (opposed to those distal ones – *that* and *those*) is a commonly used characteristic of signalling nouns (Ivanič 1991, 111). The examples might include expressions such as – *this fact, this problem* taken from example (6) and (7). Charles agrees with Ivanič’s statement and adds that proximal demonstratives serve as a vital characteristic of SNs (2004, 133).

(17) *In 1888, the policy of the unions was that "where women do the same work as men, they should receive equal pay." It was nearly another century before this **principle** became law (McDowall 2013,162).*

Illustratively, an excerpt (17) from the analysed piece of literature serves here for better understanding. The lexeme *this* premodifies the signalling noun *principle* to pinpoint it to the previously stated stretch of text in quotation marks. Omitting *this* would indeed tear the word from the intended reference since it has the necessary deictic function to point to the referred member (Benninghoven 2018, 32). Nevertheless, as Flowerdew says, “the pattern is ultimately too ubiquitous in other constructions to be used to effectively discriminate signalling items from other nouns” (Flowerdew, 2015). Despite the claim he adds it as a feature that is for SNs characteristic.

## 1.5. Classification based on semantic features

What constitutes a signalling noun is not only determined by the syntactic structures in which it is realised but also by the semantics of the abstract expressions themselves. Ivanič (1991) describes these as having both constant (context-independent) and variable (context-dependent) meaning, which is in agreement with Flowerdew (2015) and right from the beginning is a clear sign that occurrence of signalling nouns is rich, varied, and accurately determined only by a multitude of characteristic – including semantics.

Signalling nouns, as demonstrated with similar structures often find themselves realised as nominal groups made out of deverbal nouns (*belief, argument, approach*), deadjectival nouns, or gerunds as their heads (Vergaro 2017, 93). This agrees with Ivanič (1991) and Tadros (1994). There is a requirement too, to supplement the nominal groups with post-modification to complement the signalling noun and make it less abstract in the process. Namely, this includes patterns such as SN + *of* + deverbal noun/deadjectival noun/gerund:

- (18) *the possibility of a return to depression; the possibility of evaluating the model by investigation of the measurements; the allegations of police discrimination against black people*

The argument, therefore, prescribes signalling nouns equative relationship with the clause-like complementation which the *of*-phrases offer. Premodifiers on the one hand are mentioned, however, their relevance is only shown by the possibility of transforming the premodifier to the right of the expression, therefore, making a postmodification. On top of that, many premodifiers are not equative to the signalling noun but rather restrictive, whilst often creating multiple-word compounds which subsequently disqualify them from being counted as a signalling noun. (Flowerdew 2015, 57–58)

Even though semantic division based on semantic features was covered by Schmid (2000) who divided his shell nouns under headings – eventive, mental, linguistic, factual, and modal in this thesis will be focused on Flowerdew’s later developed classification to – acts, ideas, locutions, facts, modal facts, and circumstantial facts. Schmid’s classification will serve as a comparison of those two. Most of the examples gathered for the individual categories were found using the SketchEngine concordance tool. They come from a corpus EnglishWeb 2021.

### 1.5.1. Act

A group of expressions that are used to represent actions, events, and material changes in the world. They represent signalling nouns occurring in material clauses including human or nonhuman agents and happenings or outcomes. Typical signalling nouns in this category are – *reaction*, *experiment*, and *change* (Flowerdew 2015, 29). The cross-sentence realisation of the referent *changes* is illustrated by example (19).

- (19) *There were certain **changes** during the rule of Sultans Hamit and Resat. They extended equal rights to the Armenians, declaring that they would be equal to Muslims, like brothers. They passed a law lifting the tax imposed on them and made them equal to us (hnn.us, 2021).*

### 1.5.2. Idea

Group of nouns made out of expressions that in some way “represent conscious states and processes of sensing, thinking, and feeling” (Flowerdew 2015, 30). This statement agrees with Schmid claim who sums up that this covers all the “processes attributed to a person's mind” (2000, 184). This category includes nominalisations of otherwise verbal representations of mental processing – *assumption*, *prediction*, *belief*. On the other hand, nouns such as *theory*, *idea*, and *concept* also fall into this category despite not being derived from verbs. Halliday and Matthiessen claim that this group has to have a ‘human’ participant (‘sensor’) and the ‘phenomenon’ (‘the felt, thought, wanted or perceived’) (2004, 203) However, the sensor is often left out as the phenomenon is of primary concern.

- (20) *On a more serious note, one of the most common claims is that the planet isn't warming. This **belief** is possibly due to a miscommunication (wsm.ie, 2021).*
- (21) *We demonstrate that when the following **assumptions** are true, the navigational links can be filtered out. The connectivity in a small Web is high. Users have no significant bias in selecting paths (www2003.org, 2021).*

In Schmid's categorisation of mental shell nouns further categorisations exist dividing the category with respect to illocutionary uses or psychological-state uses, this, however, does not play such a crucial role and therefore only a list of talked about expressions is for this thesis sufficient: *point, idea, position, issue, theory, notion, thought, principle, rule, subject, image, myth, law, theme, concept, secret, scenario, wisdom, hypothesis, thesis, logic, topic, doctrine, teaching, maxim, stereotype, rationale, metaphor, axiom, dogman, credo, motto, and precept* (Schmid 2000, 189).

### 1.5.3. Locutions

Under the label *locutions*, there are verbs representing handling with language itself or, in other words – verbal activity. More specifically they consist of expressions representing the content of this activity – *question* in example (23), *discussion*, and *argument*. What also constitutes this category are so-called 'text' nouns. It is a small group of items called 'text nouns' represented by *paragraph, section* in example (22), *chapter*, or *paper*, which are taken as references to physical substances rather than stretches of language (Flowerdew 2015, 18). In Ivanič's work, text nouns are a category that, despite its signalling feature, refer to a physical text rather than particular chunks of it – such as clauses, sentences, or lexical items (Ivanič, 1991). Despite that, their relevance is questioned as they represent the physical or typographical layout of the text; however, they too carry out the signalling functions that is for this thesis paramount.

(22) *The following **section** provides support in determining when each role might be expected to act as a secondary owner (w3.org, 2021).*

(23) *How does such welfare provisioning influence livelihood strategies of labour embedded in global production networks and subject to flexibilisation? What are the new spaces of mobilisations that the regulatory imperatives open up? This paper addresses these **questions** through a microlevel study... (epw.in, 2021).*

#### 1.5.4. Facts

At this instance (examples 19, 20), the prime concern are signalling nouns which differ from the previous group in that the information about the world is not framed as a mental or verbal activity; however, stands for ‘abstract’ states of affairs and facts (Schmid 2000, 92). This group is typically realised with the syntactic structures, including nominal-that clauses, and includes expressions such as *thing*, *result*, and *example* (Flowerdew 2015, 31).

- (24) *After an entire hour passed, the analysis came to a **result**. The conclusion that was obtained was extremely simple, but it also provided a rough picture (buyvprx.com, 2021).*

Schmid again uses the same category but divides it into further subcategories depending on the usage. He talks about neutral uses for *thing*, *fact*, and *phenomenon*; causal uses for *reason*, *result*, *effect*, *link*, *connection*, and *compensation*; evidential uses for *evidence*, *proof*, and *sign*; comparative uses for *difference* and *similarity*; partitive uses for *aspect*, *part*, and *example*; and lastly for attitudinal uses for *problem*, *trouble*, *advantage*, *benefit*, *tragedy*, *shame*, *miracle*, and *sensation* (2000, 92).

#### 1.5.5. Modal facts

Facts affected by modality are, according to Flowerdew, a group of words lexemes “which represent facts about the world in terms of their probability, usuality, obligatoriness, inclination, and ability” (31, 2015). As he further speculates, they are particularly prominent in academic writing due to the frequent use of hedging in academic discourse. Signalling nouns showing typical signs of modality are *probability*, *possibility*, *responsibility*, and *likelihood*. Schmid categorises the group into deontic uses – *permission*, *task*, *necessity*; epistemic uses – *possibility*, *chance*,

*probability, reality*; dynamic uses – *ability, potential, opportunity, chance* (Schmid 2000, 235). The usage of modal fact signalling nouns is visible in the example (22).

- (25) *The organisation does not only have a **responsibility** to make profits, but it also has a **responsibility** for a fair distribution of profits and the other outcomes of the organisation among all persons (Schmid 2000, 235).*

#### 1.5.6. Circumstantial facts

Last category in this corpus is concerned with “manners of timing, means, manner, and condition,” which are pivotal for presenting states of affairs. Probes for distinguishing circumstantial facts are realised by questions – how, what, when, where, and why – which leads to expressions such as – *approach, way, and condition* (Flowerdew 2015, 32). Followingly, further groupings concerned with how they are used are indicated by Schmid where he splits this group into two categories of general circumstantial uses for shell nouns – *situation, position, and context*; the second category logically comprises specific circumstantial uses made out of – shell nouns concerned with place: *place, area, region, and spot*; time: *time, stage, moment, and period*; manner: *way* (example 26), *approach, method*; and lastly condition: *condition, and case* (Schmid 2000, 277).

- (26) *There are several **ways** to optimize your website. You can optimize it for the search engines to allow your website to rank higher or you can optimize it for your visitors to make sure that you provide the best possible user experience (www8.org, 2021).*

It is essential to state that these categories are not the only points to rely on. The presented classification in some cases might differ depending on the usage of the particular signalling noun in a clause.

### 1.6. Problems with signalling nouns

Due to their unspecificity and abstractness, there are numerous problems with signalling nouns for the reader and also for the analysis. Total and absolute



determination of these problems touching such an abstract category as signalling nouns is tricky to provide.

One overarching issue is their ‘cognitive complexity,’ which automatically excludes the audience that might find SNs too complex to be linked to their referent, thus making the writing more abstract and less engaging (Hoey 2001, 31). Because by turning an action or quality into a noun, the writer may obscure the agency or actor behind the action, making the text too abstract, which can distance the reader from the narrative or argument (Flowerdew 2015, 7–8). Not only an obscured argument is a problem, but also an additional density of texts. English has a high level of nominalisations; therefore, abstract expressions which realise SNs, make the text seem bigger than it is, which in some cases makes reading less clear and longer (Flowerdew 2003, 332).

SNs are something advanced readers are often used to and therefore find no real difficulty navigating during their English language usage. That might regard native speakers of English; nonetheless, even they might find their references rather complicated in some instances. Therefore, when considering non-native speakers, it is quite perplexing. The reason behind that lies in their cognitive complexity. The connection the reader has to make when seeing the signalling noun with the realisation provided further or earlier in the written discourse occurs very often during reading (Flowerdew, 2003).

Besides being complex, they are also abstract; therefore, when trying to picture a clear image of what the expression stands for, the reader might stumble upon various problems. One of which is that “the realisation of signalling nouns must be sought out both within and outside the clause in which they occur, as well as through mutual background knowledge” (Flowerdew, 2003). Not every reader has the same

amount of background knowledge of the particular issue concerned, and on top of that, it might be problematic at times to establish if they have found the intended reference.

First, it is necessary to examine the expressions assumed signalling nouns in this thesis. For it to cover the most frequently used expressions that fall under this category, it is necessary to exclude expressions that have the same form; however, they do not follow the same function. One of these non-signalling items in discourse is represented by homographs – words with the same spelling but not necessarily the same pronunciation or meaning. The core problem here is the meaning of such expressions (Flowerdew 2003, 332). This is best demonstrated by a pair of examples (27) and (28).

(27) *British history is a history of a variety of people inhabiting a variety of regions. In **fact**, all this variety is one of the reasons why the country's name is so ridiculously long: The United Kingdom of Great Britain and Northern Ireland (Lang 2006, 11).*

The lexeme *fact* in example (27) does not follow the same function as in the example here:

(28) *Electricity is used to drive the motor of an electric train, but inevitably some of the energy is lost at heat. This unavoidable **fact** is of great importance in biology (Flowerdew 2003, 330).*

In example (28), the abstract noun *fact* in the noun phrase is quite positively an example of signalling nouns. The reason is that its meaning is made specific by the stretch of discourse in the previous sentence, which is indicated by the demonstrative determiner which premodifies it (Pecorari 2014,183). Extract (27) presents the abstract noun *fact* is used in a phrase, which is considered a prefabricated pattern which does not have the same function (Flowerdew 2015, 59).

Another problem that makes signalling nouns hard to define and anchor is that they are not defined by the characteristic features of the noun that carries the

reference – but by their use. It lies in the speaker’s decision to create a noun with a signalling function with specific aims. “Right way of thinking about shell nouns is as particular types of uses of certain nouns, rather than *shell lexemes* in their own right (Schmid 2000, 13–14). This reliance on the usage and function of abstract nouns should, therefore, imply that all tables and lists provided in this thesis do not themselves serve as proof of being a signalling noun. All the listings exemplify signalling nouns only in combination with certain structural syntactic patterns discussed earlier in the thesis.

In example (28), the lexeme *fact* takes a premodification in the form of *unavoidable*, later described as somewhat characteristic for signalling nouns. “...anaphoric SNs are often premodified by a comparative adjective such as *same*, *similar*, or *different*, or by an adjective that attributes ‘importance’ to the SN (e. g. *important*, *main*, *basic*, *major*)” (Flowerdew 2015, 14) However, this characteristic is rather too broad to be exclusively discriminative for the class. The same problem arises when relying on syntactic tests. They have a prominent role when defining the realisations within the sentence. Nevertheless, they do not capture the full range of the category itself (Flowerdew 2015, 38).

Semantic categorisation is, at times, even more problematic. As shown in the chapter concerning semantic categorisation, a stable number of categories does not exist, and each author sees them from a different perspective. To exemplify, Ivanič’s work is not concerned with semantic categories per se, nevertheless uses throughout her work categories such as ‘text’ nouns and ‘metadiscursive’ nouns (1991, 98), although this could be barely counted as a categorisation. Schmid (2000) and Halliday and Matthiessen (2004) offer main yet not unitary categories. While Schmid offers six main groupings of nouns organised under: *eventive*, *mental*, *linguistic*,

*factual, modal, and circumstantial*, Halliday and Matthiessen, use only categories like *acts, locutions, ideas, and facts*.

These concessions or hesitations to strictly tie signalling nouns with one defining characteristic or grouping are somewhat understandable yet frustrating. Their listing and description should serve as a manual for the reader as a warning sign that emphasises that there is not one but a multitude of characteristic features which need to be considered when identifying and defining a signalling noun in discourse.

The similar concepts serve as a partial solution to possible ambiguities of SNs. They provide an overview of concepts that preceded SNs as an independent category.

## 1.7. Related concepts

When overcoming problems related to signalling nouns, it is important to demonstrate the way this concept has gradually evolved. As was previously mentioned, other concepts exist that, in terms of their characteristics, come extremely close to signalling nouns or precede their existence and therefore are presumably predecessors of SNs. It is, therefore, necessary to provide a general overview of these concepts to pave the way for signalling nouns and build up their relevance in these closely or distantly related yet quintessential categories.

### 1.7.1. General nouns

The first related concept is provided by Halliday and Hasan (1976). In their work, similar types of vocabulary are classified under the name ‘general nouns’ and also described in connection to textual or lexical cohesion. They approach this category in combination with grammatical cohesive devices such as ellipsis, reference, substitution, and conjunction. General nouns are deemed a borderline case between open-set vocabulary (lexical items) and closed-system vocabulary

(grammatical items) (Halliday and Hassan 1976, 274). In this matter, Vocabulary 3 shares the same characteristic (Winter, 1977).

Basic categorisation of this class is realised by subcategories named ‘human nouns’ for expressions such as – *person, people, man, woman, child, and boy*; ‘non-human animate nouns’ – *creature*; ‘inanimate concrete count nouns’ – *thing, object*; ‘inanimate concrete mass nouns’ – *stuff*; ‘inanimate abstract nouns’ – *business, affair, matter*; ‘action nouns’ – *move*; ‘place nouns’ – *place, spot*; ‘fact noun’ – *question, idea* (Halliday and Hassan 1976, 274). Concerning classification based on semantics, the writer or speaker almost exclusively takes a stance or attitude towards the reference. Not only does he do that by carefully choosing the type of vocabulary that fits the intended context but also with the help of attitudinal modifiers such as in examples – *the stupid thing, that dumb idea*. Flowerdew (2015) mentions frequent premodifications of signalling nouns with adjectives in superlative forms; however, here, it is apparent that with general nouns, the adjectives can take positive forms and work similarly. General nouns in Halliday and Hassan’s conception are also discussed in connection with pronouns. In their view, general nouns are more specific in meaning; hence their usage as a cohesive tool is more effective (Halliday and Hassan, 1976). Carrier nouns are also described as better cohesive links. They are open-system words, thus at times better identifiable with the reference. Although strictly speaking carrier nouns in Ivanič’s conception “lie somewhere on a continuum between open- and closed-system nominals” (Ivanič 1991, 112).

To describe syntactic features of general nouns, Halliday and Hasan specify that they function together with a definite article *the* or a demonstrative *this, that*, or plurals *these those* (274, 1976): as in *that idea* in example (29) found in English Web corpus (2021) using the SketchEngine concordance tool.

(29) *For those who saw the violence committed by Haitian slaves and free blacks as evidence of the tensions and dangers inherent in a biracial society, the Revolution promoted the notion that emancipation and emigration must be pursued in tandem. This idea was fairly widespread in white antislavery circles prior to 1833 when the newly-formed American Anti-Slavery Society proclaimed its opposition to black emigration (stanford.edu, 2021).*

Halliday and Hasan, in contrast with Flowerdew (2015), completely omit the predictive role of this category and only mention their anaphoric function since they state that “they (general nouns) require recourse to another item, that must be located earlier within the same text; and this means that they play a significant role in making the text hang together” (276, 1976). This statement shows the one-sided view of the problem, yet on the other hand, it still serves as an orientation tool to pinpoint signalling items in discourse and connect them with their deemed reference. Additionally, Benninghoven states that “In most cases the hyponym is mentioned first and the superordinate term is then used to refer to it anaphorically” (2018, 35). With this in mind, the referent is seen as superordinate to its reference.

### 1.7.2. Advance labels

Another subclass connected to the description of signalling nouns is carried out by Angelle Tadros in her work titled ‘Predictive categories in an expository text’ (Tadros, 1994). The name differs yet again, and ‘advance labels’ is being used. Directly from the name, it is apparent that this time it will not cover anaphoric reference mainly, but it will focus mainly on the opposite direction, which is the notion of prediction in textual discourse.

In her theoretical assumptions, Tadros mentions that there is a requirement for the reader and the writer to cooperate throughout the text in order to reach the stage of understanding of what is being written and what is being read. First, the writer embodies both the addresser and addressee to establish if the encoding process is effective. Only this enables us to predict what will be discussed in the textual

discourse ahead. Tadros calls it *prediction* and specifies the term when she says that it “refers to an interactional phenomenon – a commitment made by the writer to the reader, the breaking of which will shake the credibility of the text” (Tadros 1994, 70–71). further she elaborates that prediction functions as writer’s prospective device that gives him the ability to let the reader anticipate what they will read about further or what the expectations about what is going to be read are. To demonstrate what this notion represents in discourse, Tadros divides prediction into six categories. They are Enumeration, Advance Labelling, Reporting, Recapitulation, Hypotheticality, and Question. For the purpose of this thesis, only Enumeration and Advance Labelling will be discussed.

Enumeration comprises nouns labelled ‘sub-technical,’ their examples are – *advantages, reasons, aspects, and points*. Then another group is described as ‘discourse reference nouns’ – *examples, definitions, and classifications*. References concord with Flowerdew's description as textual and refer to other stretches of languages (2015, 18). Logically there is also an exact numeral – *two, three, four*, or an inexact – *a few, several, a number of*, which is demonstrated by examples (30) and (31).

(30) *The term ‘question of law’ is used in three distinct though related senses (Tadros 1994, 72).*

(31) *In addition to insurance, there are a number of ways by which risks can be reduced (Tadros 1994, 72).*

Now although these examples do not show the reference of these predictive members based on their realisation it is clear that they follow the function of signalling nouns as they are described by Flowerdew.

The Advance labelling category commits the writer to execute the discourse act indicated. This bears the highest relevance to signalling nouns from all the categories

mentioned. The resemblance to signalling nouns can be best demonstrated with example (32).

- (32) *This analysis leads us to make the important **distinction** between real income and money income. Money income measures a person's income in terms of some monetary unit, ...; real income measures a person's income in terms of the command over commodities which the money income confers (Tadros 1994, 73).*

### 1.7.3. Shell nouns

Another concept that precedes signalling nouns is described as 'shell nouns.' The categorisation is quite unspecific and is described on the basis of 'behaviour.' "Basically, these are nouns that require lexicalisation in their immediate context. ... The term lexicalisation ... means that a word such as *allegation*, *theory*, or *fact* is not used without some kind of expansion in the surrounding text, indicating what the allegation, theory, or fact is" (Hunston and Francis 2000, 186). The shell noun category is also discussed in Schmid's *English Abstract Nouns as Conceptual Shells*. He says that the function of shell nouns serves as a label for their content and an indicator of what they contain (Schmid 2000, 13). Their existence is discussed in connection to terms such as containment, signalling, pointing, and encapsulating. Whereby signalling has a clear linkage to anaphoric nouns and their linguistic signposting (Hunston and Francis 2000, 2). Strictly speaking, Schmid (2000) defines Shell nouns in connection with their usage and says that:

*"Shell nouns make up an open-ended functionally-defined class of abstract nouns that have, to varying degrees, the potential for being used as conceptual shells for complex, proposition-like pieces of information" (17).*

What is pivotal for this thesis is the term itself for which he proposes a rather more accurate name for this class 'use-as-shell noun' that underlines how the reader has to see this category – used as a shell or a signal. Vergaro and Schmid (2017) add



that there is not some unitary property that would classify a noun as a shell noun. They state that some have the potential, while others have a higher potential (93).

Shell nouns in Francis' conception are realised often in connection with that-clauses, which follow the noun:

(33) *I deny your **allegation** that he 'bullied staff and inmates, who all feared him.*

(34) *The discovery of twin pandas in Sichuan province has refuted the **theory** that only one of any pair of giant panda twins could survive.*

These examples stand in agreement with Schmid's grammatical patterns which are provided as prototypical of shell nouns.

(a) Determiner + (Premodifier) + Noun + post-nominal *that*-clause, *wh*-clause, or *to*-infinitive.

- *The (deplorable) fact that I have no money.*

(b) Determiner + (Premodifier) + Noun + *be* + complementing *that*-clause, *wh*-clause, or *to*-infinitive

- *The (big) problem was that I had no money* (Schmid 2000, 16).

Both of these patterns (a) and (b) are in agreement with Flowerdew's conception of signalling nouns (2015, 15). Where he offers the same sort of categorization together with other new constructions – namely with deverbal nouns in example (15), gerunds in example (16), and prepositional clauses in example (10).

The categorisation of this group of nouns is done in connection to the meaning of said category. Meaning which has common features can be divided into two major groups. The first group of nouns refers to something that is either written or spoken. To demonstrate what falls under this category there are expressions such as *accusation, charge, claim, comment, demand, information, message, point, question, remark, request, statement* (Hunston and Francis 2000, 186–187), whilst the second group refers to beliefs, ideas, wishes and thought processes. This category includes expressions such as *analysis, belief, concept, conclusion, decision, hypothesis, idea,*

*knowledge, notion, opinion, position, sense, standpoint, theory, thesis, view* (Hunston and Francis 2000, 186–187). The classification of shell nouns in Schmid’s conception is executed rather differently. He provides following division:

*Table 2 - Examples of possible shell nouns*

<b>Class</b>	<b>Classification</b>
Factual	fact, thing, point, problem, reason, difference, upshot
Linguistic	news, message, rumour, report, order, proposal, question
Mental	idea, notion, belief, assumption, aim, plan, decision
Modal	possibility, truth, permission, obligation, need, ability
Eventive	act, move, measure, reaction, attempt, tradition, trick
Circumstantial	situation, context, place, area, time, way, approach

Further characteristics of this group agree with Tadros (1985) and that is that they function as advance and retrospective labels and they need previously mentioned lexicalisation in their immediate co-text.

Specifically in connection with anaphoric and cataphoric references, Francis adds that “Where the label precedes its lexicalisation it can be termed an advance label, and where it follows the lexicalisation, it can be termed a retrospective label” (2000, 187). Advance labelling – this term being used by Tadros in connection with prediction – is clearly meant with the same intentions, contrary to the term retrospective label which Tadros does not mention at all.

(35) *I understand that approximately 12 percent of the population is left-handed. Why, then, should there be such a preponderance of right-handed golfers, which extends, I am informed, to a club level? In reply to that **question** a golfing colleague of mine offered two **reasons**. The first was that beginners usually start with handed-down clubs, which are usually right-handed. The second was that, for technical reasons, left-handed individuals make good right-handed golfers (Hunston and Francis 2000, 187–188).*

In example (35) it is clearly visible what is meant by advance and retrospective labels. Furthermore, it is observable that Tadros’ category ‘enumerables’ manifests itself here too. The lexical item *reasons* is premodified by a numeral two which

provides the reader with a piece of information as to how many reasons he should be expecting. Moreover, the stretches of text themselves are indicated by linking words (*the first* and *the second*) signalling the order of the individual *reasons* which are represented by that-clauses that follow them. Nevertheless, Hunston and Francis admit that some nouns exist that “typically are not followed by that-clauses but are used as labels (2000, 188) which makes this classification rather insufficient.

#### 1.7.4. Vocabulary 3

Yet another related concept in connection to lexical signalling is described and closely documented by a work called *A Clause-Relational Approach to English Texts: A Study of Some Predictive Lexical Items in Written Discourse* by Eugene O. Winter. The items which are again closely related to signalling nouns are called Vocabulary 3.

Vocabulary 3 in Winter’s conception is quite a broad category of vocabulary and it is worth stating that not only nouns are considered here but also other word classes – namely adjectives and verbs. For the purpose of this thesis only information concerning nouns will be commented upon.

Furthermore, it would perhaps be meaningful to provide information about vocabulary 2 and 1. However, they are not of primary concern to this thesis; hence a short commentary should be sufficient. Vocabulary 1 consists of expressions connected to subordination such as *after, because, in order to/that, provided that, when, where, which*. Vocabulary 2 comprises expressions connected to sentence connection such as *in comparison to, in contrast to, furthermore, in other words, thereby, therefore* (Winter 1977, 14–16).

The primary function of all of those three types of vocabulary is in the cognitive process called clause relation – where two or more sentences stand in

connection in order to meaningfully communicate with the recipient. However, the function of signalling is connected to the third category above all. The term *signalling* is here replaced by a different formulation and that of *signposting*, hereby defined as “the presence of one of its items in a particular sentence can *signpost* what kind of information is to be presented in the sentence or sentences which immediately follow it. Such a signposting function will be called anticipation” (Winter 1977, 3).

Winter describes Vocabulary 3 items as being able to refer in either or both directions in the context. Particularisation of reference is being labelled as lexical realisation, which in itself organises the text in connection to the so-called greater context. This is done either internally, within the sentence, or retrospectively, in the previous clauses. There are also instances where there is no immediate lexical realisation in the bordering sentences. In such cases, this open-ended detail had to have its lexical realisation released either in preceding sentences or ones that follow it, or it is considered as “known” – representing the exophoric reference (Winter 1977, 81).

The anticipatory process takes into consideration the context that is to come. Either anticipatory (cataphoric) or retrospective (anaphoric) features are required for Vocabulary 3 to be able to function and form context, therefore, function in clause relations. If they do not possess these kinds of functions then they are inadequate as information. To sum up, the expressions which have a signposting function or some kind of anticipatory behaviour serve as members of the Vocabulary 3 category (Winter 1977, 57, 9).

In specific examples, such items as: *fact, example, reason, case, cause, effect, explanation, manner, result, state, and way* are mentioned. Admittedly, the

expressions from verb and adjective word classes were excluded because they are not the primary focus here. Winter further describes that their realisation is usually as a subject or an object of a clause and is frequently premodified, modified, or postmodified. Thus, premodification in some cases is a valid indicator of logical relations with respect to the prediction (Winter 1977, 23, 73). Vocabulary 3 is often syntactically realised by *wh*-clauses and *that*-clauses (Winter 1977, 39). When choosing the “right” abstract nouns the writer is largely dependent on the intended lexical realisation and therefore, since language contains an extensive number of synonyms, picking such an item is to some extent writer’s own will – of course, provided that it fits the word’s sense relation (Winter 1977, 51, 60).

To summarise the main ideas of Winter’s text. Anticipation plays a major role in textual prediction in combination with Vocabulary 3 (Winter 1977, 67). In terms of reference Vocabulary 3 must have a certain contextual function and the rule for it is quite simple to follow, “if the item does not refer back in the technical sense ... then it has to refer forward” (1977, 70) Furthermore, Winter talks about the strong connection of Vocabulary 3 to sentence connectors comprising the Vocabulary 2 group. Nevertheless, logically this case of prediction talks only about in-clause realisations.

Lastly, Winter claims that Vocabulary 3 is a closed-system vocabulary and the reason behind this classification is that Vocabulary 3 requires lexical realisation. “Relation of reference between it and the open-ended lexical choices of its two members” (Winter 1977, 87)

#### 1.7.5. Carrier nouns

Same as Flowerdew specifies signalling nouns as abstract nouns Ivanič does the same with carrier nouns. Followingly, carrier nouns are also distinct by being

able to carry a specific meaning otherwise called more elegantly variable meaning within their context together with the dictionary or constant meaning; they are not only context-dependent but also have specific discourse functions (Ivanič, 1991, 93).

*Table 3 - Examples of possible carrier nouns*

*idea, fact, example, element, factor, aspect, cause, reason, effect, explanation, result, criticism, difficulty, difference, advantage, benefit, comment, view, opinion, interpretation, principle, justification, purpose, intention, aim, function, question, issue, decision, problem, solution, feature, thing* (Ivanič 1991, 96)

The listing of such expressions is, however, not sufficient even though it clearly shows illustrates open-system vocabulary the relevance of which will have become apparent in subsequent paragraphs. One of the closer described characteristics is that of carrier nouns being countable and abstract nouns. Countable abstract nouns are often described as being able to refer to several sentences or clauses at once (Ivanič 1991, 100–111). On one hand, this characteristic includes such expressions as: *component, element, aspect, area,* and *feature* being described as metaphorical expressions of concrete nouns; but on the other hand, it does not include the word *difficulty* which can be used as carrier noun in countable or uncountable instances.

The second characteristic talks about so-called ‘container sentences’ and they are very similar to Flowerdew’s syntactic realisation. In Ivanič’s conception, characteristics of container sentences are used to determine whether a noun acts as a carrier noun – the implication is that most of them operate in such sentences. In simple words these are the clausal or sentential realisations of signalling nouns or in this case carrier nouns. Forms that follow this function include nominalisations such as that-clauses (serving as a complement clause to carrier nouns – *explanation, criticism, difference,* and *principle*), to-clauses (commonly occurring with CNs –

*purpose, aim, function, and solution*), and wh-question clauses (with CNs – *questions* and *issue*) where the carrier noun either precedes the nominalization or vice versa (Ivanič 1991, 101–102); as demonstrate the following examples found in the English Web corpus (2021) using the SketchEngine concordance tool.

(36) *The **purpose** of the study is to shed light on the values and principles that have guided the evaluation and assessment of the quality of early childhood education and care in the Nordic countries: Denmark, Finland, Iceland, Norway, Sweden (dcu.ie, 2021).*

(37) *The real **question** is not whether most Americans disagree with Trump's "America First" national security policy but, rather, what they are willing to do about it (hnn.us, 2021).*

(38) *The **explanation** is that it only takes a small minority of those committed to a vision to engage many followers in battle (brow.on.ca, 2021).*

*Purpose, question, and explanation* in examples (37–39) serve as the carrier noun, and the nominalisation that follows the process verb ‘is’ is therefore represented by the rest of the clause.

In terms of semantic description, Ivanič claims that because the meaning of carrier nouns is not self-contained, they, to a certain extent, resemble pronouns while being more informative and versatile (1991, 103–107). The claim is supported by Benninghoven, who describes pronouns as being more general and therefore harder to connect with the referent at times (2018, 34). At the same time there is a dictionary definition that represents the constant meaning of carrier nouns, while the variable meaning is anchored either endophorically within the text or exophorically outside of the text.

Furthermore, in connection to anaphoric and cataphoric references Halliday and Hassan’s ideas are considered. Ideas that the readers need first to recognize the signal and then, in their head, realise that it is a sort of presupposition of something that has gone before, whether in the immediately preceding sentence or in one that

was released earlier (Halliday and Hassan 1976, 14). A function that is crucial for this thesis, however, is the cataphoric one. Ivanič (1991) simply states that “...their variable meaning can be found in a subsequent clause. They act as an instruction to search for information of a particular type” (104).

Carrier nouns can stand-in for an exophoric reference that requires readers’ background knowledge (it is often considered general knowledge) to come up with a suitable interpretation. Possibilities for interpretation are often narrowed down with the help of modifiers and determiners to the carrier nouns, which often accompany them. Admittedly, there are instances where the knowledge might not be considered general but rather far more specific to a certain location or current circumstance; in that case, the writer assumes the existence of the reader’s knowledge and relies heavily on it for them to be able to decode the meaning of the carrier noun (Ivanič 1991, 107).

The problem with the exophoric reference, therefore, arises when a significant amount of time passes from the time when the reference is made. From that moment the information once falling under the label ‘general knowledge’ might be considered quite a ‘specific knowledge’ which may obscure the meaning of the whole communication (Ivanič 1991, 107).

Overall problems with carrier nouns lie in determination of whether a word constitutes a carrier noun. Ivanič claims that the most reliable way to distinguish carrier nouns is if the expression is abstract, countable, and occurs in container sentences and lists words such as *expectation*, *reason*, *fact*, *purpose*, and *difficulty* together with their plural forms. These are later described as being somewhat prototypical of the matter. Expressions *period* and *item* have both constant and variable meanings, however, they are usually not able to supplement a clause, and



their reference is either connected to prepositional phrases or various noun phrases. Admittedly, Ivanič classifies them as carrier nouns despite not having full clauses as referents (Ivanič 1991, 110—111). Another not-so-clear-cut category is so-called ‘text’ nouns. They account for expressions such as *chapter*, *passage*, *section*, *quotation*, and *conversation*. The reference here is rather of a physical format than the content of a language. Nevertheless, in terms of their key features, they shall be handled as carrier nouns (Ivanič 1991, 110)

(39) *Japanese newspapers, for reasons stated in the preceding **paragraph**, have their hands full under present arrangements (mansell.com, 2021).*

In example (39), found using Sketch Engine concordance tool, it is apparent what the key feature of ‘text’ nouns is. Ivanič (1991) describes it as “recalling or reviewing the preceding text which is typographically delimited by indentation” (110).

To conclude this subchapter, carrier nouns frequently operate in container sentences where they function within the sentence, notwithstanding the fact that they encapsulate whole stretches of discourse across clauses. In fact, the scope of the reference goes from single words to phrases to whole sentences or even stretches of discourse. Ivanič links their reference to events, processes, actions, and portions of ongoing discourse. The essential indicator of their context-dependency is if they are accompanied by markers of definite reference, nevertheless, again even this fact does not lessen the importance of contextuality when interpreting them.

## 2. Practical part

This part of the thesis applies theoretical research in a practical way to authentic textual materials. It begins with a preliminary analysis which decides which corpus is the most suitable for the main analysis. The method and materials are outlined in the following subchapter. The main analysis works with a text excerpt from the chosen corpus and comments on the individual occurrences of signalling nouns. The text is then divided into individual loci which are then put to test to a group of students. The test shows if the students are able to formulate a question aimed in a prospective direction, which will be answered in the following part; therefore, predict what is coming ahead. The gathered questions are going to be divided into groups according to their meaning and evaluated depending on the connectedness to the signalling nouns in the text. In the last part, students' answers are going to be divided into groups and commented upon whether the year of study influences the ability to adequately identify and make use of signalling nouns in discourse or not.

### 2.1. Preliminary analysis

This part of the thesis talks about the realisation of SNs in authentic textual materials. The relevance of this analysis is for choosing the right material (and eliminating the other two possible ones) for the main analysis in the subsequent chapter. The criterion for choosing the best option is a high occurrence of cataphoric signalling nouns which will then serve as viable options for the experiment.

The course of this preliminary analysis will be as follows. First, there will be a concise description of the materials and methods that were chosen for the analysis itself. In the subsequent chapter, there is an evaluation of the quantity of signalling

nouns in relation to each of the texts analysed and there is also a qualitative description of said examples in relation to the research. It is followed by a short commentary on the individual examples that are to justify the analysed lexemes as they fall functionally into the signalling nouns category.

### 2.1.1. Materials and methods

The preliminary research is based on three different excerpts from three different corpora. The first one is a textbook that is relevant for students of the English language at the Technical University of Liberec (TUL) and covers the contents of courses that are based on it – *British History for Dummies* (323 – 324); later referred to as Text 1. The second one is a textbook constructed in a similar way and used too due to its relevance to the course – *Illustrated History of Britain* (162 – 163); later referred to as Text 2. The difference between these two and reasons behind their choice is because of their dissimilar style in which they are written. The first one is truly unacademic (and perhaps more likable with today's readership) and the second one bears a much more formal style of writing. Lastly, the analysis of these two corpora will be accompanied by an academic article with a similar subject matter, which will undergo the same type of analysis (2 – 4); later referred to as Text 3. The choice of this article was purely based on the similarity of the topic to the one in the chosen textbooks. It serves as a comparison to those two mentioned corpora to establish the best choice of a corpus for the main analysis. All the excerpts chosen for the analysis were taken from the source based on the layout of the text in relation to the topic and division into paragraphs. If the subchapter or thematically coherent unit ends the excerpt ends too.

In terms of the analysis, the work of Flowerdew (2003) and his conception of signalling nouns will be taken as a primary source. He makes it clear, together with

Winter (1977), Tadros (1985), and Ivanič (1991) that abstract nouns fulfilling signalling (admittedly different names were used – such as signposting) function are prevalent in academic discourse hence in literature or materials used on an academic ground (Ivanič 1991, 113). In other words, their relevance in academic discourse is caused by the range of their references.

First, passages from the mentioned corpora will be extracted and analysed with the purpose to pinpoint the location of individual SNs and their lexical realisation. The determination of which expression falls into which SN category will be mainly dependent on Flowerdew’s definitions and categorisation. In equivocal cases, the realisation will be supported by definitions and examples used with related concepts namely – General nouns (Halliday and Hassan, 1976), Advance labels (Tadros, 1994), Shell nouns (Schmid, 2000), Vocabulary 3 (Winter, 1977), or Carrier nouns (Ivanič, 1991). Since mainly on their basis signalling nouns as an independent category was created. The key feature of this analysis is to distinguish if the realisation is beyond the boundary of a sentence not just a clause and that the lexical realisation is a cataphoric one.

### 2.1.2. Quantitative results

*Table 4 - Number of SN occurrences and types of references in analysed texts*

	<b>Cataphoric SN references</b>	<b>Anaphoric SN references</b>	<b>Exophoric SN references</b>	<b>Mixed SN references</b>
<b>Text 1</b>	3	1	1	1 (Ana. + Cata)
<b>Text 2</b>	4	2	3	1 (Ana. + Cata)
<b>Text 3</b>	5	0	0	0

In Text 1 there is a lower amount of cataphoric signalling expressions required for the main analysis with respect of the topically connected textual unit. The assumed reason behind that lies in the form in which the analysed part of the book is

written. The authors of *British History for Dummies* used in large sections of the book quite an unacademic language and since SNs are frequently used in the academic world their incidence was infrequent. The research therefore corresponds with the theoretical assumptions (Ivanič, 113) The occurrence of SNs in Text 2 was more frequent than in Text 1. The higher frequency of SNs is arguably caused by the style in which *Illustrated History of Britain* is written. In the last Text 3 the number of individual examples is the same as it is in Text 2. This is quite understandable since academic articles have a larger number of signalling expressions than textbooks used as course literature (Flowerdew 2003, 331). What is one more interesting aspect to comment on is the non-existence of exophoric references in Text 3. Their absence in Text 3 and high occurrence in Text 2 is presumably caused due to the choice of material. History textbooks rely heavily on the possession of background knowledge of the topic and the higher the level of background knowledge is, the better the comprehension of the material (Ivanič, 1991).

### 2.1.3. Qualitative results

In the Text 1 the lexical realisation is made mainly within the clause. In two examples (1 and 2), described closer below, form and lexical realisation are commented upon. First (1) is a purely anaphoric occurrence, and second (2) is a combination of those two. The last example (3) commented upon has its realisation beyond the boundary of a sentence. What is worth mentioning is that the first text offers always only a limited number of expressions that have signalling properties. The reason for this is that signalling serves as one of the cohesive devices used, as previously said, on an academic level. And the chosen corpus supplies this function with chapters and subchapters which bind the text together in the same way cohesive devices do and therefore do not need as many other tools. Subsequently, Text 1

communicates with the reader directly illustrated by this example: “Most books tell you that women didn’t have the vote...” (British History for Dummies, 328). The pronoun *you* in the corpus could be supplied by construction with the help of nominalisation – with the help of signalling nouns.

All the examples analysed from Text 2 function as across-clause/sentence realisations of signalling nouns (4, 5, and 6), while one of which is a combination of both across-clause and within-clause realisation – the signalling expression fulfils a stand-in function for a preceding lexeme within the clause while simultaneously cataphorically referring to a stretch of text in the following sentence (4). Besides endophoric references, which the text has seven in total, there are three exophoric references that rely on the reader’s knowledge of the concerned issue.

Lastly, Text 3 offers five examples of signalling nouns in total with two extra borderline cases. In those five instances, four of them are cataphoric references that refer to information within the clause/sentence and only one has its referent in the subsequent sentence. The first two examples committed upon (7 and 8) represent the cataphoric lexical realisations within the clause/sentence, and example (9) has got one specificity to it and that is the division of sentences with the help of a colon.

#### 2.1.4. Discussion of examples (illustrating the results)

The purpose of the following section is to illustrate the individual occurrences of signalling nouns in various types of texts. The first stretch of text is an excerpt from a course book called *British History for Dummies*, the second publication that was used bears the title *Illustrated History of Britain*, and lastly a part from an academic article was used (see Appendix A). All of those excerpts are connected through their topic. Furthermore, there will be a justification for why these particular occurrences find themselves in specific places in a sentence. The singular reasons

may vary due to the various ways in which signalling nouns are categorised. In most cases, the individual signalling nouns are listed in some lists according to their occurrence in discourse. In the chapter dealing with the definition of signalling nouns earlier in the thesis, one such list by John Flowerdew is cited as a reliable source. Another reason might be because they find themselves in some structure that is quintessential for the realisation of such nouns. Lastly, they can be a part of a similar concept that relates quite closely to signalling nouns in terms of realisation in discourse, type of vocabulary, or function in discourse.

#### TEXT 1

(1) *Yet in the 1910s, these ladies were precisely the ones who started smashing windows and heckling government ministers and generally behaving in a most un-ladylike way.*

One reason why the lexical item *way* is possible to classify as a signalling noun is that it is listed in Flowerdew's list of signalling nouns in a book corpus (2003, 341). In addition, Tadros uses it in her work in connection to the category of 'enumerables.' Followingly, is this SN premodified by an adjective in superlative which is used by Flowerdew (2015) as one characteristic that co-occurs with SNs. The reference itself is anaphoric and is realised with 'smashing windows and heckling government ministers' within the sentence.

(2) *The Suffragettes staged demonstrations and bombed postboxes, and went on hunger strike in prison; the authorities used force-feeding – and **that tactic** isn't forcing your mouth open for a spoonful of casserole, it means ramming a rubber tube up your nose and pumping liquidised food down it.*

The lexical item in the example above *tactic* has got a signalling function even though it is not listed in Flowerdew's list of SNs. However, it appears as one of the examples in his book. In example (2) It has a 'stand-in' function for the expression 'force-feeding'. Nevertheless, it is premodified by a proximal demonstrative 'that' which is used as one of the characteristics in his work about SNs. The SN is a part of

Gerund + be + SN pattern. Reference to this lexical item is realised within the clause. In general, that could be said about the majority of signalling expressions. Across-clause realisations are rarer more important with respect to topical or textual prediction. In terms of stand-in function the reference is anaphoric and realised by the lexical item ‘force feeding’ and in connection with signalling the reference is cataphoric ascribing the SN *tactic* the meaning through ‘ramming a rubber tube up your nose and pumping liquidised food down it.’

(3) *But women were needed in other ways, too. In 1916 the government introduced conscription, so women had to replace the men in the factories and on the land.*

In contrast to the first usage of this SN, it possesses a cataphoric reference in this case. It foreshadows the manner in which women were needed. The reference lies across clauses – namely in the following clause. The word *ways* in this context in connection with its premodifier *other* signals that even before this there were some *ways* in which ‘women were needed’ and that is put into contrast with these foreshadowed *other ways*.

## TEXT 2

(4) *By 1850, wife beating had become a serious social **problem** in Britain. Men of all classes were able to take sexual advantage of working women.*

The lexeme *problem* has a ‘stand-in’ function for the preceding stretch of text represented by ‘wife beating’. Admittedly, the full realisation of this signalling noun is premodified by *a serious social*. *Serious* frames the problem to a certain scale of *problems* in the same way as *social* restricts it only to certain areas. The ‘stand-in’ function is realised within the clause and the cataphoric reference of the signalling noun stretches across clauses.

(5) *After 1870 **the situation**, particularly for middle class women, began to improve. Women were allowed to vote and to be elected to borough or county*



councils. A very small number started to study at Oxford and Cambridge in separate women's colleges.

In extract (5) lies a signalling noun without any significant premodification in the first sentence. Nevertheless, it possesses a definite article thereby making us aware that a connection with the previous paragraph exists there. In this case, *the situation* is connected to the previous example number four dealing with the SN *problem*. Arguably these expressions in this context overlap and the *problem* preceding *the situation* is later moderated to stick to the conveniences of formal writing. *The situation* in this instance could be talked about as a cataphoric signalling noun whereby its reference would lie in subsequent two sentences. However, for the reference to be strictly tied to this the *situation* must 'begin to improve' as it indicates the sentence concerned.

(6) The liberation of women took other forms. They started to wear lighter clothing, shorter hair and skirts, began to smoke and drink openly, and to wear cosmetics.

In extract (6) the signalling noun is realised by the plural noun *forms*. The signal stretches across clauses whereby the reference lies in the subsequent sentence – thereby it is to be considered an across-clause realisation. The piece of lexis is premodified by the adjective *other*, in the same way as it is in example number (3), which prompts the reader to think and links the piece of lexis to preceding stretches of text where '*liberation of women*' is talked about.

### TEXT 3

(7) ...the authors develop a theoretical construct in which there are two types of individual measures for the anti-racism norm. In particular, there is an external motivation to control prejudice and not be perceived as racist, and an internal motivation to uphold unbiased views of racial groups.

The lexical item *types* is premodified by a numeral *two* which is a prospect made by the writer to list them in the following sentences. However, this case is

particularly interesting because of the plurality of signalling expressions in close proximity. The signal *types* works together with the signal *measures* and develops it further. The writer, therefore, proclaims the number of types of measures and the premodification ‘individual’ accentuates that they are in fact separate in their form. As Flowerdew says, “It is often the case that a single stretch of text acts as the specifics for multiple SNs, and it is also common for groups of SNs to overlap. Sometimes the lexical realisation of one SN will contain within it another SN” (53, 2015).

(8) *The major **takeaway** is that women are more likely than men to be motivated to control prejudice, and that this internal motivation accounts for the gender gap in voting for radical right parties.*

The word *takeaway* is followed by a verb *to be* and a conjunction *that* and is, therefore, a member of a pattern extracted from Flowerdew (2015): SN + be + that. It counts in the within-clause realisation. The premodification with the word ‘major’ puts an emphasis on the signalling item *takeaway*, while the definite

(9) *In particular, the authors argue that there are **two gendered differences** in the sociopsychological literature: 1.) Men have a generally lower sensitivity to social cues, which means they are more likely to vote for stigmatised parties. 2.) In comparison, women have a greater concern with social harmony, which means they are less likely to vote for extreme parties.*

In Tadros (1994) and in Flowerdew (2015, 20) appears a pattern with SNs connected to apposition. In their works it is (talking about written texts) indicated by punctuation as it is in the example above. Therefore, the expression *differences* has the ‘stand-in’ function.

### 2.1.5. Conclusion of the preliminary analysis

In conclusion, Text 1 despite its typographical properties and informal language would be a suitable candidate for the analysis, however, the number of required cataphoric signalling nouns is insufficient and the predictability of discourse

would be in this case problematic. It would be possible to use it for an identical experiment, however, there would have to be significant differences in portions of the textual material for its execution and presumably, there would have to be more parts of the experiment since the original text is highly segmented. The reader would have to obtain ten or more pages of the original text or take part in more than one experiment that is topically coherent. However, because of the frequent recurrence of headings and subheadings even the formation of the experiment would be problematic. The features of the *British History for Dummies* show that the textbook uses predominantly language with unacademic features, and also because of that it was ruled out of the possible analysis.

Text 3 – the academic article – on the other hand, has many cataphoric SNs, yet they are mostly realised within the sentence which is not suitable for the main analysis. It was included alongside the textbook excerpts as a viable option, but since the aim is also connected to pedagogical practicality, a textbook format was seen as the best corpus to analyse. Text 2 in terms of its typographic layout, formal writing style, and a high number of cross-sentential references is therefore ideal for the main analysis and for the experiment.

## 2.2. Main analysis of the textbook excerpt

After careful consideration with regard to the aim of this thesis the final text for the main analysis is taken from the textbook *Illustrated History of Britain* by David McDowall. It will first serve as material for finding signalling nouns in it and secondly as a corpus for the experiment testing identification and usability of signalling nouns by university students.

### 2.2.1. Materials and methods

The text excerpt is taken from the *Illustrated History of Britain* pages 144 to 150. The order and form of the text are unchanged. The one key factor for choosing this text was the high frequency of signalling expressions and the second reason was the layout and the infrequent division into subchapters. For better suitability of the text, it had to be undivided by many subheadings and not fragmented into many sections.

The procedure of the experiment is going to be carried out in the same manner as the preliminary analysis. The procedure will be as follows. After several occurrences of relevant signalling nouns in this textual excerpt, the discussion of these examples will follow. The not-so-important ones are going to be concisely described and based on their unfitting features excluded from the research. All the important aspects of said expressions will be considered and ten of them will be chosen for the research among students with regards to their functionality and usability towards the prediction of text content.

These ten expressions are going to be used in an experiment carried out in the form of an internet survey. First, the textual excerpt is going to be segmented into individual parts. In the survey the text starts and whenever there is a signalling expression the text finishes. Readers are then instructed to form a question that will

be prospectively answered in the subsequent part. The intended ‘target’ expression which should be used in the question directly is the signalling expression or the noun phrase in which it is used.

However, since the survey works with open questions, it is improbable that the respondents are going to ask them with the exact same expression, thus the various forms are going to be accepted as they are ‘asking about the same thing.’ These forms include questions that use synonymous expressions instead of signalling nouns, short questions without the signalling expression but with a correct interrogative pronoun, questions with grammatical or spelling mistakes, and other forms with various lengths and question forms. The focus is thereby on the meaning primarily.

After gathering all the recorded questions, each of them is going to be categorized into groups according to its meaning as explained in the previous paragraph. So that the category is seen as a group, there have to be two or more questions with the same or very resembling meaning. If there is only one question aimed in a different direction than the others, it is sorted under the label ‘various other questions (no common theme)’. If there are responses that are in an indicative or imperative form (or nonsensical answers – just one letter for example), they are recorded as ‘unsuitable answers.’ After creating the categories, the data from the research are going to be visualised by means of graphs showing the incidence of different types of answers.

The charts are then followed by a concise commentary on the gathered data. The commentary includes some examples of the recorded data. The individual ability, or lack thereof, of using the signalling noun in a question format, is going to be compared with the presuppositions in the theoretical part.

Lastly, two groups of students are going to be created, based on their year of study. The first group is made of those who study bachelor studies and the second group is going to be those who study master studies. They are to be evaluated based on success rate when creating the question in connection with the signalling noun. The reason for this is to establish if advanced reading skills or year of study is a decisive factor that plays a significant role to be able to see and use signalling nouns to predict a textual development in advance.

### 2.2.2. Discussion of examples

For better orderliness, the heading of the text was kept. What follows is a text excerpt followed by discussions of examples and an interpretation of result with individual loci used in the experiment.

(Extract 1)

#### **Queen and monarchy**

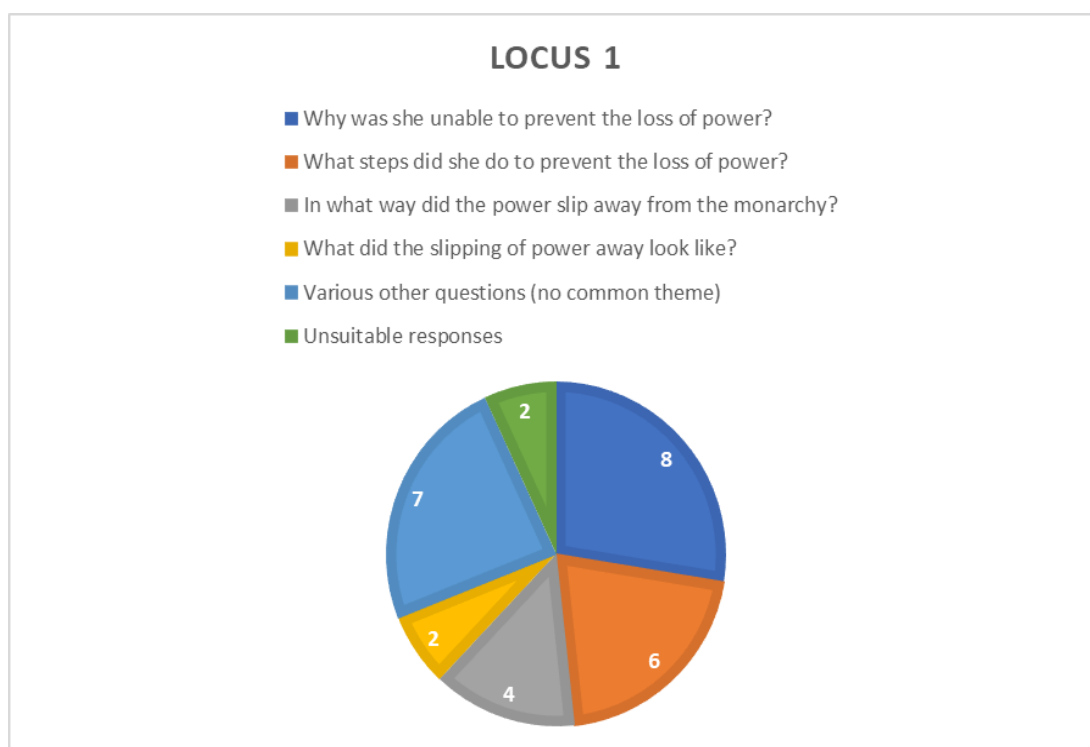
(a) *Queen Victoria came to the throne as a young woman in 1837 and reigned until her death in 1901. She did not like **the way (Locus 1)** in which power seemed to be slipping so quickly away from the monarchy and aristocracy, but like her advisers she was unable to prevent it. Victoria married a German, Prince Albert of Saxe-Coburg, but he died at the age of forty-two in 1861. She could not get over her sorrow at his death, and for a long time refused to be seen in public.*

(b) *This was **a dangerous thing (Locus 2)** to do. Newspapers began to criticise her, and some even questioned the value of the monarchy. Many radicals actually believed the end of monarchy was bound to happen as a result of democracy. Most had no wish to hurry this **process**, and were happy to let the monarchy die naturally. However, the queen's advisers persuaded her to take a more public interest in the business of the kingdom. She did so, and she soon became extraordinarily popular. By the time Victoria died the monarchy was better loved among the British than it had ever been before.*

## Locus 1

The expression *way* in extract 1 paragraph (a) could be classified as a signalling noun because of the following reasons. It is premodified by a definite article and postmodified by a complementary nominal prepositional clause introduced by *in*. The specification by the definite article indicates one specific reference and the postmodification narrows down closer the possible reference number. In consideration of semantics, *way* could be seen as a circumstantial fact categorised under the label *manner* – because it signals how/in what way ‘the power seemed to be slipping away from her’.

Graph 1 - Types of questions in Locus 1



The experiment focused on prediction, however, showed that the main focus here is not the ‘how did it happen/how did the power slip away’ but rather ‘why was she unable to prevent the loss’ with eight questions aimed in this direction out of 29 recorded answers. Six respondents were focused on ‘which steps did she (the queen) make to prevent her power from slipping away from her.’ These two groups were the

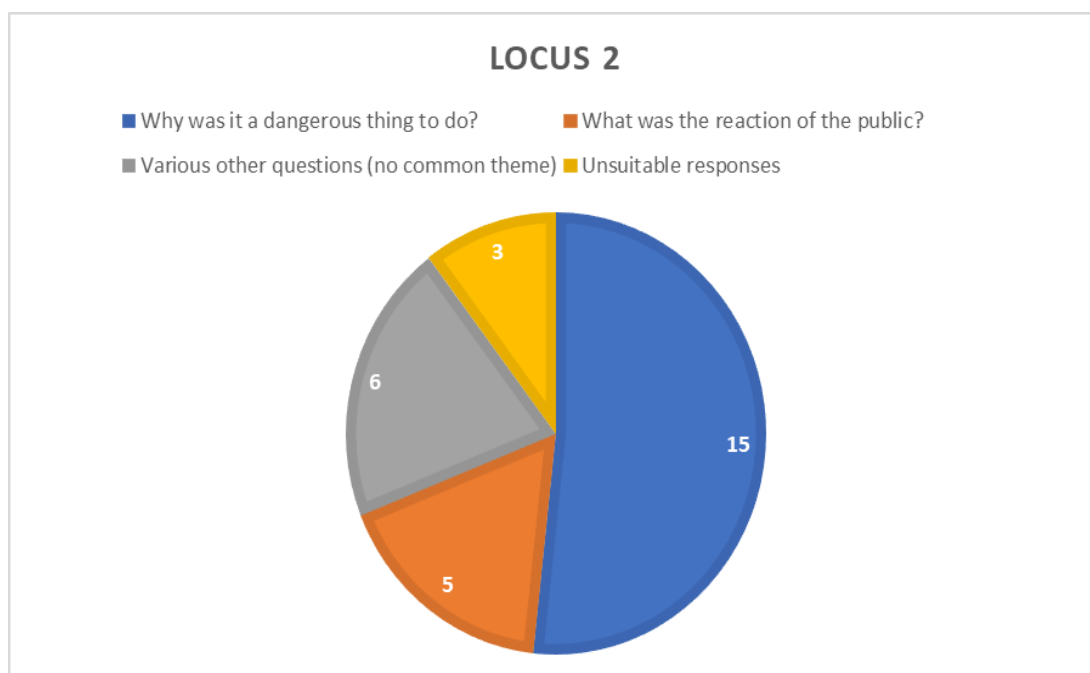
most numerous. Only two responders were influenced by the signalling noun *way* and asked, ‘what did the slipping look like’ therefore, asked about the manner in which it happened. Three further questions were aimed at the power and monarchy in general and not at the queen. This part also generated many dissimilar questions to the mentioned concordances among the responses. They were for example ‘what was her next move; what happened next; how did she rule’ and so on. Locus 1, therefore, was not confirmed to function as a signal in a way that would make the reader predict its realisation.

#### Locus 2

The lexeme *thing* in extract 1 paragraph (b) has got multiple reasons as to why it could be counted among signalling nouns. Flowerdew (2015, 31) lists it as one right at the beginning of his book. In Schmidt’s semantic categorisation it falls into the neutral category (together with *fact*, *phenomenon*), while Halliday and Hassan (1976) put it in the ‘inanimate concrete count nouns’ category. Admittedly here is where the views upon the problematics differ. If it were concrete in meaning it could be automatically excluded, however, in this context it has abstract properties specified by a premodification ‘this’ that ties it closer to the context, thus having a cohesive function. The logical signal is therefore ‘why was the *thing* (the absence from the public eye) dangerous?’. The clause starts with the demonstrative pronoun which is also an index that serves for recognition of SNs. One other logical question is why was it a *dangerous* thing. The premodification, thus, serves as a specifier of the signal and has no restrictive properties. At this point, it is possible to assume that the premodifier is going to be the centre of attention in relation to the prediction of subsequent discourse.



Graph 2 - Types of questions in Locus 2



In the research, out of 29 responses, 15 were aimed in the direction of the signalling noun and asked something in the sense of ‘*Why was it dangerous?*’ or ‘*Why was it a dangerous thing to do?*’. The key for the question formation was to indicate the signal *thing* or the modification *dangerous*. Five other responses were aimed in a different direction and asked about the public’s reaction. ‘*What did the hiding cause in the society?*’ or ‘*How did the public react to the Queen’s absence?.*’ However, six other questions were not topically heterogeneous and were aimed in various directions. The rest of the responses were not counted since they were not questions. In this case, the majority of students were able to adequately react to the signal provided and logically ask for a future reference. A smaller number of students prospectively seek relevant information yet they aim not at the Queen (why was it dangerous for her) but rather at the society (what did her hiding change) in it – Locus 2 thus successfully functions as a signal.

Both the preceding examples are included in the questionnaire as their properties are in accordance with the aim of this thesis. Contrary to that, anaphoric

signalling item *processes in* extract 1 paragraph (b) encapsulates the preceding stretch of text realised by ‘the end of monarchy’. Premodifier *this* has got a deictic function to point backwards and indicates an anaphoric reference. On top of that, it is listed in Flowerdew’s list (2003) of signalling expressions in a book corpus. Semantically it would fall under the ‘act’ category which comprises expressions dealing with material changes in the world. Nevertheless, despite having the properties of signalling nouns, its form and function is not in accordance with the research.

(Extract 2)

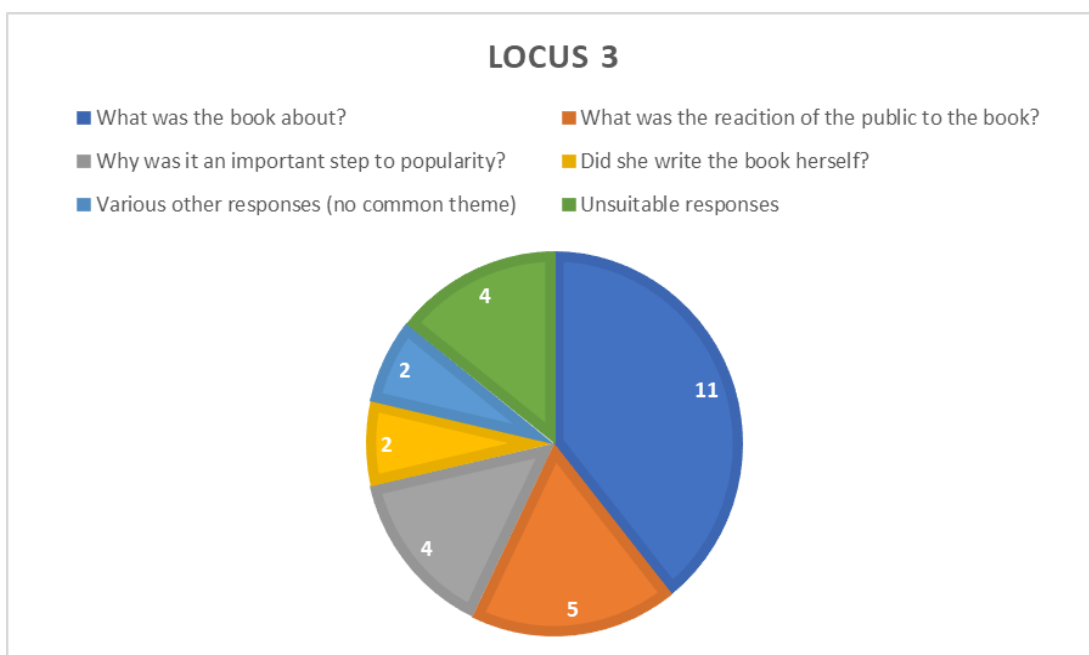
(a) *One important step back to popularity (Locus 3) was the publication in 1868 of the queen's book **Our life in the Highlands**. The book was the queen's own diary, with drawings, of her life with Prince Albert at Balmoral, her castle in the Scottish Highlands. It delighted the public, in particular the growing middle class. They had never before known anything of the private life of the monarch, and they enjoyed being able to share it. She referred to the Prince Consort simply as "Albert", to the Prince of Wales as "Bertie", and to the Princess Royal as "Vicky". The queen also wrote about her servants as if they were members of her family.*

(b) *The increasingly democratic British respected the example of family life which the queen had given them, and shared its moral and religious **values**. But she also touched people's hearts. She succeeded in showing a newly industrialised nation that the monarchy was a connection with a glorious **history**. In spite of the **efforts** of earlier monarchs to stop the spread of democracy, the monarchy was now, quite suddenly, **out of danger (Locus 4)**. It was never safer than when it had lost most of its political power. "We have come to believe that it is natural to have a virtuous sovereign," wrote one Victorian. Pure family morality was an **idea** of royalty that would have been of little interest to the subjects of earlier monarchs.*

Lexeme *step* in extract 2 paragraph (a) is listed in Flowerdew’s list of signalling nouns in the book corpus (Flowerdew, 2003). The abstractness of this expression is clarified by the premodification by *important* which is described as being characteristic for SNs (Flowerdew 2015, 14). Another premodification with the numeral ‘one’ classifies it into Tadros’ *Enumeration* category giving the reader the possibility to predict the number of these *steps* ‘back to popularity’ that the reader is going to find later in the text (Tadros, 1994). In the view of syntax, it falls into the pattern SN + be (was) + deverbal noun. The pattern itself would most probably have the realisation included within the sentence, which in this case is partially true. The reader discovers that the ‘one important *step* back to popularity’ was ‘the publication ... of the queen’s book’; however, to fully understand the realisation, there must also be the question: ‘why was the publication of the book an important step back to popularity?’ In that case, the whole paragraph serves as an answer.

### Locus 3

Graph 3 - Types of questions in Locus 3



Locus 3 showed a wide spectrum of questions aimed in a different direction than anticipated. The original assumption was that the largest number of respondents

are going to aim at the noun phrase ‘*an important step*’ as it was described in the previous paragraph above the graph. Admittedly, the original question in the theoretical assumption ‘why was the publication of the book an important step back to popularity’ is to a certain extent tied to the largest portion of questions aimed at the book and its contents – 11 questions in total. Five questions sought the reaction of the public. The core question, foreshadowed by the signalling noun, was, however, ‘why was in an important step back to popularity’ which was asked by four readers only. The assumed reason for such a low incidence of direct is the length of the question and its complexity too. The conclusion thereby is that the *important step back to popularity* is in fact the content of the book which was asked about by a significant number of respondents.

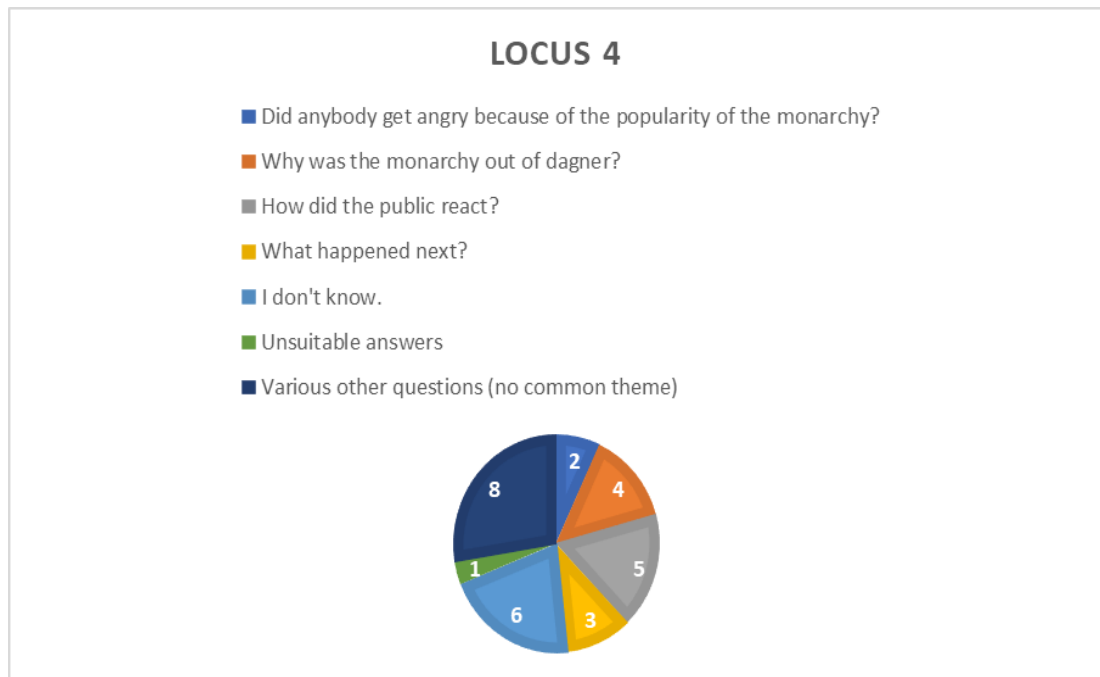
The next three in extract 2 paragraph (b) expressions could be considered signals. The expression *values* in this case has a stand-in function for a multitude of expressions. It is a clear exophoric reference. The premodifications *moral* and *religious* are there to illustrate the manner of these values. The reference is exophoric and the referred lexical realisation is not included in the corpus. *History* premodified by ‘glorious’ refers to the monarchy’s past and thus functions exophorically. Last but not least *efforts* finds its realisation in ‘to stop the spread of democracy’, however, again it is unknown what the actual *efforts* are, thus it could be argued that the reference is partially cataphoric, with the reference in the sentence concerned, but also exophoric in a manner of speaking.

Locus 4

The lexeme *danger* in extract 2 paragraph (b) included in Flowerdew’s (2003) list of common SNs provides an endophoric reference forwards – it is a cataphoric reference. In previous examples ‘dangerous’ premodified a signalling noun and was

of primary concern – serving at that point together with the noun itself as a signal. This example, however, part of a noun phrase including ‘out of’, is a suitable example to make use of in the experiment.

Graph 4 - Types of questions in Locus 4



Locus 4 indicated a place where the reader does not make homogenous types of questions. There was a notable intersubjective agreement in questions aimed at the public’s reaction where the readers asked questions such as ‘was she ever criticised because of this?’ or ‘did British people appreciate the monarchy because of this?’. The assumed centre of attention ought to be the signal *danger* or rather the whole noun phrase *out of danger*. Only four respondents asked questions such as ‘why was the monarchy out of danger?’ ‘why was it not in danger?’. The largest portions visualised in the graph were heterogeneous questions with various topics. In the whole research, this is also the place where the largest number of responders answered ‘I do not know’. The reason for this is perhaps because the signal is this time in a prepositional phrase and on top of it not at the beginning or end of a

paragraph. The assumption behind the recognition of said signal is, because of above stated reasons, compromised.

(Extract 3)

### **Queen and empire**

(a) *Britain's empire had first been built on trade and the need to defend this against rival European countries. After the loss of the American colonies in 1783, the **idea** of creating new colonies remained unpopular until the 1830s. Instead, Britain watched the oceans carefully to make sure its trade routes were safe, and fought wars in order to protect its "**areas of interest**" (Locus 5). In 1839 it attacked China and forced it to allow the profitable British trade in opium from India to China. The "Opium Wars" were one of the more shameful **events** in British colonial history.*

(b) *After about 1850 Britain was driven more by fear of growing European competition than by commercial **need**. This led to the taking of land, the creation of colonies, and to colonial wars that were extremely expensive. Fear that Russia would advance southwards towards India resulted in a disastrous war in Afghanistan (1839–42), in which one army was completely destroyed by Afghan forces in the mountains. Soon after, Britain was fighting a war in Sindh, a part of modern Pakistan, then another against Sikhs in the Punjab, in northwest India.*

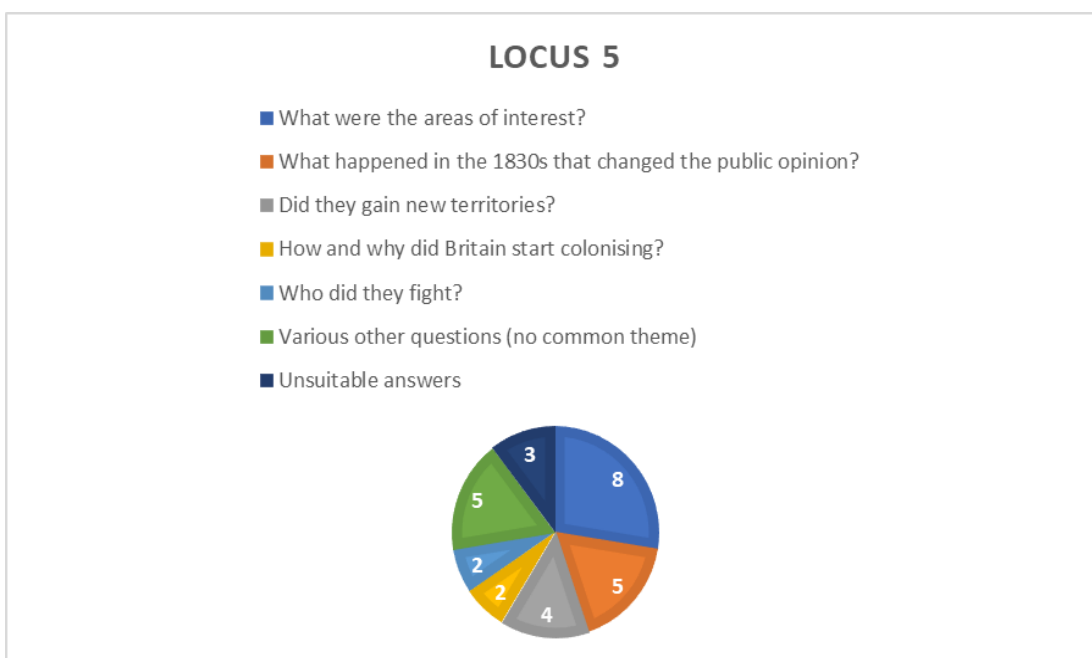
(c) *The Russian danger also affected south Europe and the Middle East. Britain feared that Russia would destroy the weak Ottoman Empire, which controlled Turkey and the Arab countries. This would change the balance of power in Europe, and be a danger to Britain's sea and land routes to India. When Russia and Ottoman Turkey went to war Britain joined the Turks against Russia in Crimea in 1854, in order to stop Russian expansion into Asiatic Turkey in the Black Sea area.*

(d) *It was the first, and last, time that newspapers were able to report freely on a British war without army control. They told **some unwelcome truths (Locus 6)**; for example, they wrote about the courage of the ordinary soldiers, and the poor quality of their officers. They also reported the shocking **conditions** in army hospitals, and the remarkable work of the nurse Florence Nightingale.*

## Locus 5

There could be speculation about which of the lexemes in extract 3 paragraph (a) should be taken as SNs. Flowerdew (2015) speaks about whole noun phrase structures which are composed of two expressions both of which could individually function as an SN. In this context, however, one is the main one and the other one develops the preceding one. *Interest* develops *areas* in a way that restricts it to only some particular destinations. Furthermore, two interesting aspects of this noun phrase are the quotation marks surrounding both of these expressions. Contextually they must be understood in the form of irony, therefore flipping the intended cataphoric reference around and foreshadowing the opposite. All of these steps are quite necessary to be able to successfully come up with a relevant prediction.

Graph 5 - Types of questions in Locus 5



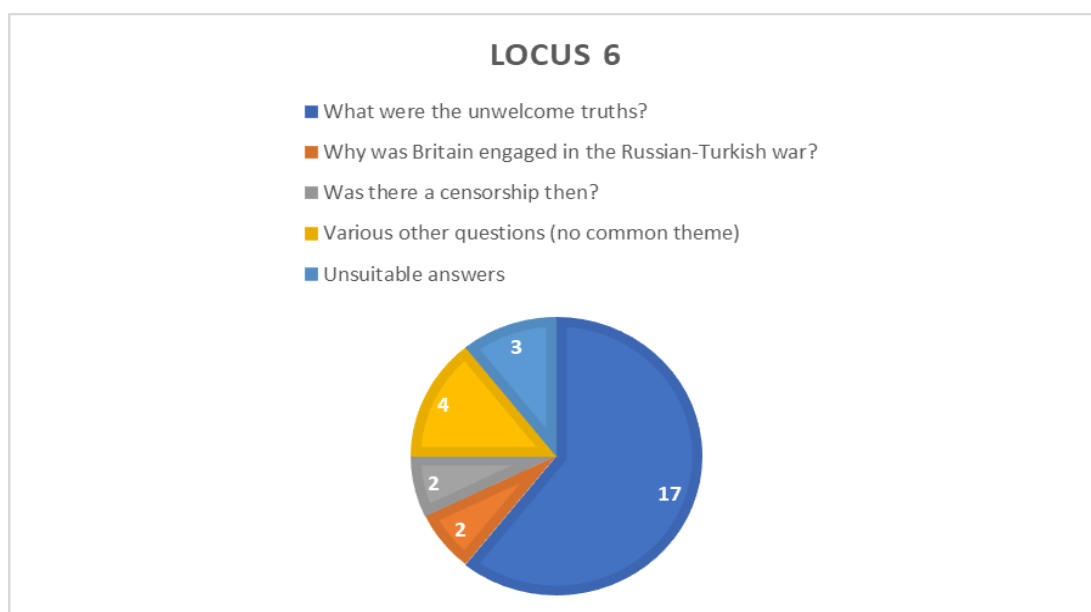
Locus 5 showed a higher incidence of questions aiming at the “areas of interest” – ‘what were the areas of interest.’ Eight responders asked questions such as ‘what were the “areas of interest”?’ ‘which areas of interest did Britain have?’. Second largest group with five respondents answered with ‘what happened in the 1830s?’ or ‘why did the public opinion change in the 1830s?’. The responses are not illogical at this place since in the preceding sentence the lexeme *idea* complemented by an of-phrase is also a signal. However, it is realised within the clause by the of-phrase. Locus 5 was on that account more successful in forming a question with direct usage of the SN together with its premodifier than Locus 4.

#### Locus 6

Premodified by ‘unwelcome’ and ‘some’ the lexeme *truths* acts in extract 3 paragraph (d) as a signalling noun. One premodification serves to foreshadow the number of those said *truths* and the adjective *unwelcome* modifies the SN and describes the nature of these truths. *Truth* falls into Flowerdew’s modal fact category (2015, 31), and in Schmid’s categorisation it is additionally characterised by having an epistemic use (2000, 235). Now, in this thesis, the key expressions find their realisations across clauses. In this particular case, it is noteworthy that *truths* lie in a place at the end of a clause end of which is marked by a semicolon. In case there was a simple colon it would be irrelevant with respect to realisation across clauses, however, a semicolon has in this case closer properties to a full stop rather than a simple colon. Therefore, this example is going to be used in the questionnaire.



Graph 6 - Types of questions in Locus 6



In the research, the majority of respondents – 17 in total – asked the same type of questions in Locus 6. Some were direct ‘which unwelcome truths were told?’ and other questions were rather more complex, yet with the same aim ‘what information was published that the British government did not want people to know?’ The lexeme *truth* was classified as a signal and the research confirmed its predictive properties. Other responses were represented in minority and aimed at censorship in media and armed conflict in a Russian-Turkish war, however, their incidence is not striking in any way. The agreement in answers with respect to the signalling noun is at this point comparable to Loci 8 and 10. These are the loci with the highest intersubjective agreement among the respondents.

An interesting example of an exophoric reference offers the signal *conditions* in extract 3 paragraph (d) referring to the common knowledge of the reader. The premodification *shocking* might presumably refer to insufficient hygiene, unqualified staff, insufficient funds or hospital material, inhumane treatment of patients. Admittedly, exophoric references, however interesting, are not going to be used in the research.

(Extract 4)

(a) *In India, the unwise treatment of Indian soldiers in British pay resulted in revolt in 1857. Known in Britain as the "Indian Mutiny", this **revolt** quickly became a national **movement** against foreign rule, led by a number of Hindu and Muslim princes. Many of these had recently lost power and land to the British rulers. If they had been better organised, they would have been able to throw the British out of India. Both British and Indians behaved with great violence, and the British cruelly punished the defeated rebels. The friendship between the British and the Indians never fully recovered. A feeling of distrust and distance between ruler and ruled grew into the Indian independence movement of the twentieth century.*

(b) *In Africa, Britain's first interest had been the slave trade on the west coast. It then took over the Cape of Good Hope at the southern point, because it needed a port there to service the sea route to India.*

(c) *Britain's interest in Africa was increased by reports sent back by European travellers and explorers. The most famous of these was David Livingstone, who was a Scottish doctor, a Christian missionary and an explorer. **In many ways (Locus 7)**, Livingstone was a "man of his age". No one could doubt his courage, or his honesty. His journeys from the east coast into "darkest" Africa excited the British. They greatly admired him. Livingstone discovered **areas** of Africa unknown to Europeans, and "opened" these **areas** to Christianity, to European ideas and to European trade.*

(d) *Christianity too easily became a tool for building a commercial and political empire in Africa. The governments of Europe rushed in to take what they could, using the excuse of bringing "civilisation" to the people. The rush for land became so great that European countries agreed by treaty in 1890 to divide Africa into "areas of interest". By the end of the century, several European countries had taken over large areas of Africa. Britain succeeded in taking most.*

(e) *In South Africa, Britain found that dealing with other European settlers presented new **problems (Locus 8)**. The Dutch settlers, the Boers,*

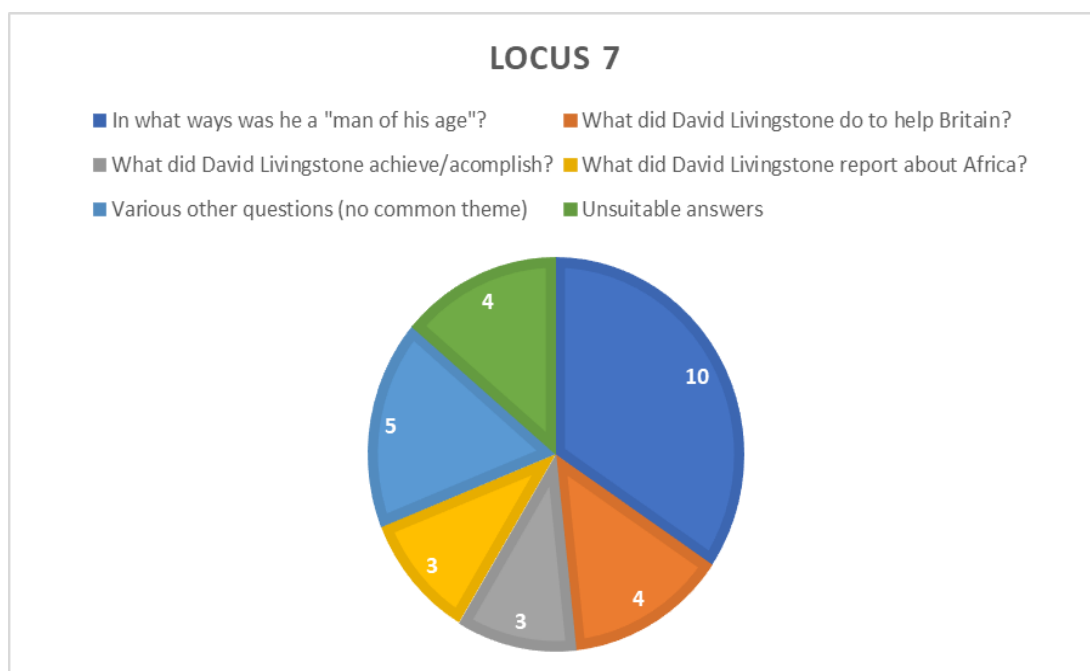
*fought two wars against the British at the end of the century, proving again, as the Crimean War had done, the weaknesses of the British army. The Boers were defeated only with great difficulty.*

*This revolt* and *a movement* in extract 4 paragraph (a) are anaphoric occurrences of signalling nouns. The syntactic pattern in question is: this + SN + (premodification) + verb. The realisation finds itself within the clause. Both these signals have the same realisations – that being “Indian mutiny”.

#### Locus 7

What on the other hand is relevant and somewhat even prototypical for the category is the signalling noun *ways* in extract 4 paragraph (c). At first glance it could resemble a prefabricated pattern (Flowerdew, 2015) which uses abstract nouns that could be looked upon as SNs, however, they are not. Although in this case it arguably is used as an SN. ‘Many’ foreshadows the plurality of *ways* though not specifying it. The reference, in this case, is represented by the *ways* which are typical for a “man of his age”. Therefore, qualities such as – courage, honesty, journeys from the East coast into the “darkest” Africa, discovery of areas of Africa and opening them to Christianity – could be included. The semantic classification would place the expression into the circumstantial fact category and with Schmid’s shell noun semantic division it could be placed into not general but specific circumstantial uses dealing with manner.

Graph 7 - Types of questions in Locus 7



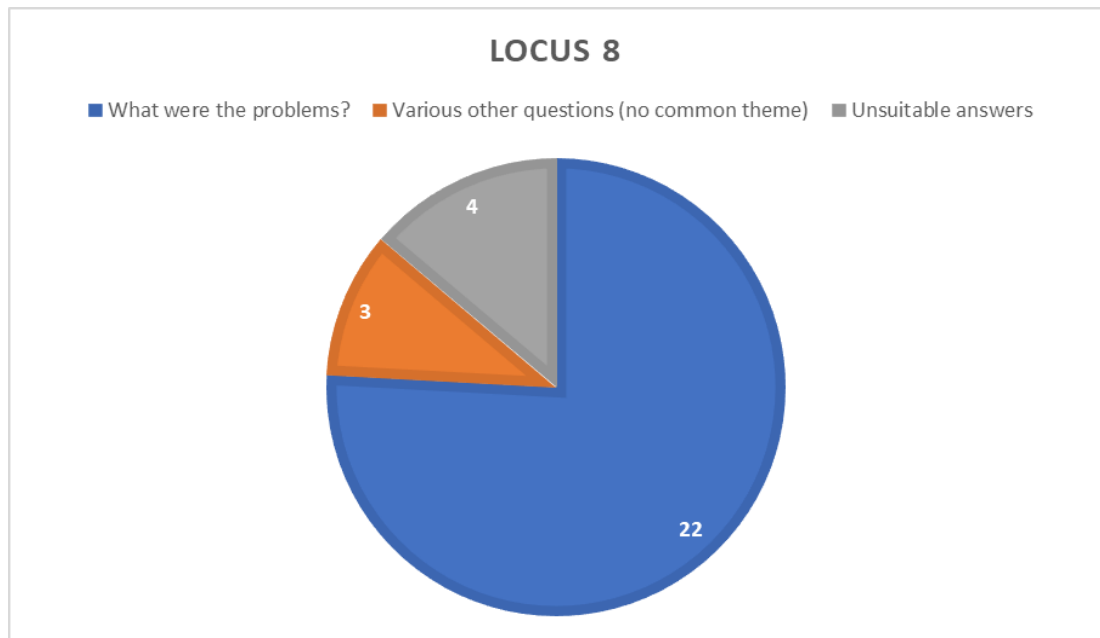
Locus 7 showed that the signalling noun *way* was correctly identified by ten respondents out of 29 recorded answers. The agreement at this point is lower than at Locus 6. It could be caused by the place in a sentence where the SN is placed. With Locus 6 and 8 for example the SN is placed at the end of a stretch of text presented to the students, however, here it is at the beginning. The recorded questions used this lexeme in the variations of the question and, in some cases, a different abstract expression supplemented the function of the lexeme *ways*. The examples of questions are ‘in which ways?’, ‘how/why was he a man of his age?’, ‘in which aspects?’. Other responses asked about ‘what did David Livingstone do’ – asked by four responders. While three formed a similar type of question only aimed at what he accomplished or achieved. Admittedly all of these responses could, based on their meaning, be tied to the ‘in what ways’ therefore asking about the same thing.

#### Locus 8

The lexeme *problem* in extract 4 paragraph (e) is one of those signalling nouns which is somewhat prototypical for the subject. Flowerdew uses it in both of his

publications (2015 and 2003). In Schmid's semantic categorisation, it would fall under 'fact' signalling nouns describing abstract states, affairs, and facts (Schmid, 2003). Functioning as an unspecified object in the sentence gives the reader the signal to predict that the *problems*, based on the previous information in the sentence, are going to refer to interpersonal conflicts; presumably conflicts involving weapons.

Graph 8 - Types of questions in Locus 8



Locus 8 showed an overwhelming ability of the readers to identify the signalling noun and ask questions about it. From the total number of 29 respondents 22 formed questions such as 'what problems was Britain facing in North Africa?', 'what kind of problems?', 'which problems with European settlers were there?'. Questions which were various in their topics were for example guessing the problems 'such as who the territory will belong to?' or guessing the reasons for the conflict 'is the next part going to be about greed and reasons why there were conflicts with the settlers?'. This locus 8, therefore, showed an almost total concord on what the signalling item prospectively foreshadows.

(Extract 5)

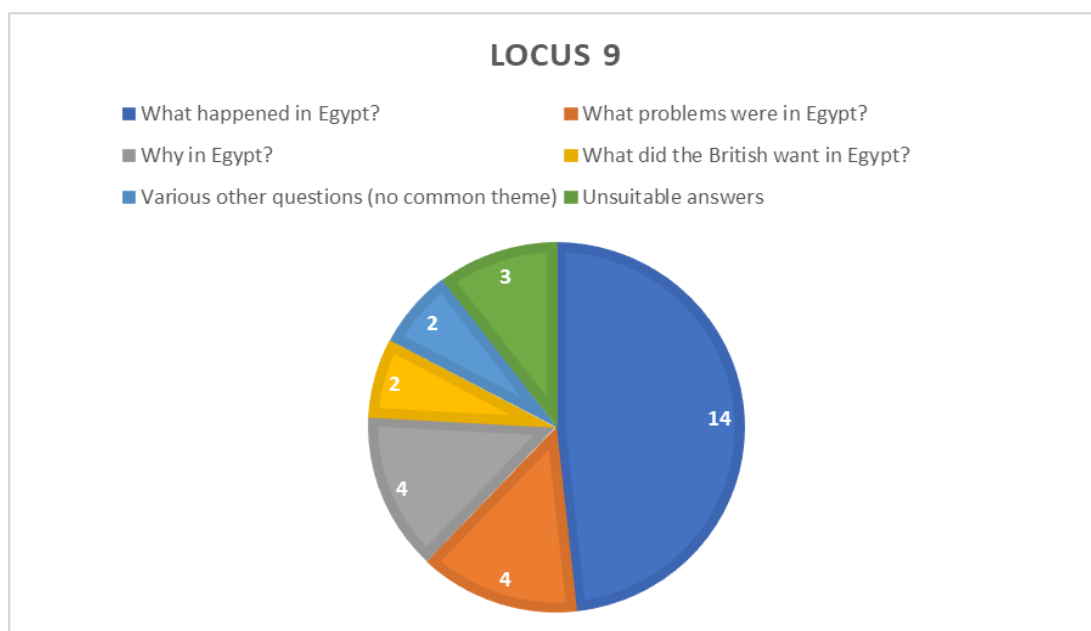
(a) *The real problems of British imperial ambition (Locus 9), however, were most obvious in Egypt. Britain, anxious about the safety of the route to India through the newly dug Suez Canal, bought a large number of shares in the Suez Canal company.*

(b) *When Egyptian nationalists brought down the ruler in 1882, Britain invaded "to protect international shipping". **In fact**, it acted to protect its imperial interest, its route to India. Britain told the world its occupation of Egypt was only for a short time, but it did not leave until forced to do so in 1954. Involvement in Egypt led to invasion and takeover of Sudan in 1884, a country two-thirds the size of India. Like other powers, Britain found that every area conquered created new **dangers** which in turn had to be controlled. In all these countries, in India, Africa and elsewhere, Britain found itself involved in a **contradiction** between its imperial **ambition** and the liberal **ideas** it wished to advance elsewhere. Gladstone's **view** that "the foreign policy of England should always be inspired by a love of freedom" seemed to have little place in the colonies. In the twentieth century this contradiction was a major reason for the collapse of the empire.*

Locus 9

The noun phrase *the real problems of British imperial ambition* in extract 5 paragraph (a) is connected to the previous occurrence realised by the same lexeme *problems* (in Locus 8), this time, however, premodified by the adjective 'real' and postmodified by an of-phrase. The premodification could be seen as something describing the importance of the signal. Flowerdew speaks about it as one of the marks of SNs (2015, 14). The reference is cataphoric, aiming at the quarrel about the Suez Canal elaborated upon in the subsequent paragraph. Reference is made across clauses, thus making it relevant for the research. The assumed question is 'which problems were there?' or 'which problems were in Egypt?' or even 'what were the problems of the British imperial ambitions?'

Graph 9 - Types of questions in Locus 9



Initially it could seem that only four of the 29 respondents asked the questions in connection with the signal *problems* ‘what problems were in Egypt’ as in aforementioned theoretical assumption, however, in Locus 9 an overwhelming majority formed a question ‘what happened in Egypt’ which does not use the signal specifically yet it is implied. These categories could therefore be considered as one since the response or textual realisation is the same. Locus 9 could therefore be compared to Locus 7 where the signal is also implied with plurality of answers. In conclusion 18 responses in total are influenced by the signal.

*In fact*, in extract 5 paragraph (b) is not an SN or a noun phrase containing SN. This phrase is a member of prefabricated patterns presented by Flowerdew. Some further examples of this phenomenon include: in relation to, as a matter of fact, in addition to, on the contrary, with a view to, at the same time (2015, 59).

Seemingly cataphoric signalling noun *dangers* in extract 5 paragraph (b) could be described in the same way as the previous one. It is premodified by *new* foreshadowing that, based on the context, colonised countries were in some way resistant towards colonisation itself. The cataphoric referencing might be questioned

at this point and rightfully so. The anticipatory effect is there yet the prospect of finding the lexical realisation is not satisfied. Therefore, it must be categorised as an exophoric reference. The reader has to find the answer to the question “Which dangers were created?” elsewhere.

(Extract 6)

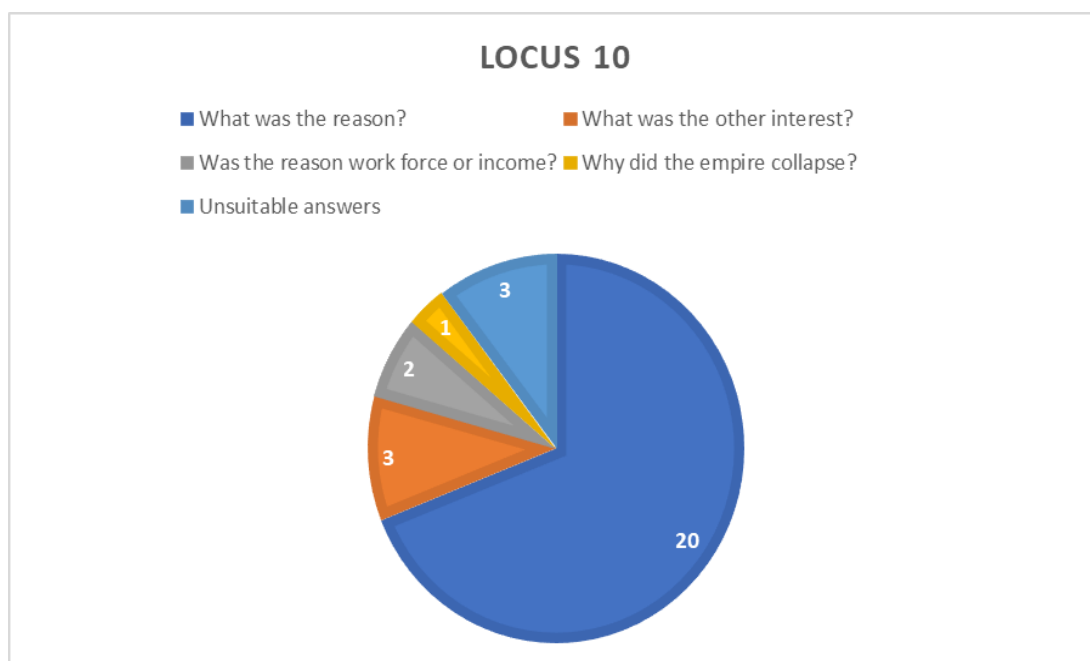
(a) *There was **another reason (Locus 10)** for the interest in creating colonies. From the 1830s there had been growing concern at the rapidly increasing population of Britain. A number of people called for the development of colonies for British settlers as an obvious solution to the **problem**. As a **result**, there was marked increase in settlement in Canada, Australia and New Zealand from the 1840s onwards. The settlers arrived to take over the land and to farm it. In all three countries there had been earlier populations. In Canada most of these were pushed westwards, and those not killed became part of the "white" culture. In Australia British settlers killed most of the aboriginal inhabitants, leaving only a few in the central desert areas. In New Zealand the Maori inhabitants suffered less than in either Canada or Australia, although they still lost most of the land.*

Locus 10

The topic sentence uses signalling noun *reason* in extract 6 paragraph (a) in a syntactic pattern involving there + to be + (premodification) + SN + nominal prepositional clause. In view of syntax, it is unquestionably a SN. The premodifier *another* binds it to Tadros' Enumeration of advance labels (Tadros, 1994). In view of related concepts to the problematic of this thesis *reason* is a somewhat prototypical carrier noun, vocabulary 3, and form a semantic point of view factual shell noun in a casual manner of usage.



Graph 10 - Types of questions in Locus 10



Similarly, as it is with Locus 8, Locus 10 shows that the signal was successfully identified and used in a prospective question in 20 out of 29 responses. This particular spot also showed remarkable unity in question formation since the most numerous group asked questions such as ‘what was the other reason for creating colonies?’, ‘what is the other reason?’. The second most numerous group of respondents uses the lexeme *interest* instead of the lexeme *reason*, which could be considered homogeneous with respect to the lexical realisation. The last group of valid responses was making concrete predictions of the reasons.

One further SN from extract 6 paragraph (a) includes the lexeme *problem* which functions as an anaphoric reference to ‘the rapidly increasing population of Britain’. The definite article ties it retrospectively to the context. Although the referencing is made across clauses it is not of major concern in this research.

A cataphoric reference made within the clause shows the lexeme *result* in extract 6 paragraph (a). Preceded by an indefinite article ‘a’ marking only one *result* in a number. Refers to the ‘increase in the settlement in Canada, Australia, and New

Zealand from the 1840s onwards.’ The nuances between usability of across clauses and within clauses realisations are becoming clearer with each example. Prospection visibly functions only across clauses (Sinclair, 1984). The same goes for a different terminology describing the same matter – advance labelling.

(Extract 7)

(a) *The white colonies, unlike the others, were soon allowed to govern themselves, and no longer depended on Britain. They still, however, accepted the British monarch as their head of state. The move towards self-government was the **result of trouble** in Canada in 1837. A new governor, Lord Durham, quickly understood **the danger** that Canada might follow the other American colonies into independence. His report established the principle of self-government, first for the white colonies, but eventually for all British possessions. It prepared the way from empire to a British "Commonwealth of Nations" in the twentieth century.*

(b) *By the end of the nineteenth century Britain controlled the oceans and much of the land areas of the world. Most British strongly believed in their right to an empire, and were willing to defend it against **the least threat**. This state of mind became known as Jingoism, after a famous Music Hall song of 1878:*

*We don't want to fight, but, by jingo if we do, We've got the ships, we've got the men, we've got the money too.*

(c) *But even at **this moment** of greatest power, Britain had begun to spend more on its empire than it took from it. The empire had started to be a heavy load. It would become impossibly heavy in the twentieth century, when the colonies finally began to demand their freedom.*

Within the clause anaphoric reference of the lexeme *result* which is complemented by an ‘of’ phrase ‘of troubles in Canada in 1937’ leads the reader to

another signal – *troubles* in extract 7 paragraph (a). In this case, the information is once again outside of the text and therefore rely on readers’ preexisting knowledge.

Because of its complexity, it is noteworthy to at least mention this example. The noun phrase *the least threat* in extract 7 paragraph (b) is not further discussed and the SN is used only rhetorically. Less experienced reader could view it as a prospect to an actual threat but in actuality it describes the state of mind of the ‘most British (people)’ and their patriotic ideas about their country.

In extract 7 paragraph (c) *this moment* has an anaphoric function, yet the realisation in previous paragraphs is less clear. Proximal demonstrative pronoun *this* could indicate a certain proximity of the *moment* in the preceding paragraphs, however, most probable is an exophoric reference or partially the introductory sentence of the previous paragraph: ‘By the end of the nineteenth century Britain controlled the oceans and much of the land areas of the world.’

### 2.2.3. Discussion of results

The objective was to compare two groups of students based on the level of study they find themselves at and the capability of recognising and making use of the signal. The agreement of students is indicated by an overall score per person in the last row of each table in the preceding chapter (Tab. 6–15 in Appendix B). As the results demonstrate, a general agreement in questions is attributed to MA students with 6:4 with the highest score gained in individual loci; in three of them in a significant amount.

Loci 2, 6, 8, and 10 have revealed that out of 29 students, more than half of the respondents were capable of finding and using the signalling noun. In Locus 2, that was 15 students; in Locus 6, it was 22 students; in Locus 8, it was 22 students; and lastly, Locus 10 had 20 students correctly reacting in accordance with the signal.

These were also the places where the clause containing the signalling noun was located at the end of the presented text excerpt. Conversely, in Locus 4, where the signal was similarly located, only four students formed a question with an appropriate reaction in its direction. In the same way, Locus 8 ended up where only eight students correctly reacted to the signal.

The most visible contrast can be seen in a significant amount in loci 2, 9, and 10, here the difference in results is significantly in favour of MA students – Locus 10 (13.74 vs. 16.83), Locus 9 (7.78 vs. 9.67), and Locus 2 (8.6 vs. 10.2). These were also places where the signal was generally the most frequently identified and used in prospective questions. In contrast to that, the results of Locus 8 were in favour of the bachelor students. Same as Locus 8, Locus 6 had the most significant difference in results in favour of bachelor students.

The ability to use the signal in questions (in Tab. 5 below) offers the data of prospective questions reacting to the cataphoric signal and asking about further development in the text. Results per each locus are indicated by the highlighted questions in Appendix B. The overall results are 64.4 to 61 per person in favour of bachelor students.

*Table 5 - Overall results of all responses aiming at the SN*

<b>Level of study</b>	<b>Overall score of questions reacting at the signal</b>	<b>Result (per one person)</b>
Bachelor	1481	64.4
Master	365	61

The level of agreement in asking questions about text development is fractionally in favour of MA students, whereas bachelor students show a slightly better ability to react to signalling nouns.

The preceding statement discloses the most significant drawback of this study and the questionability of the results, which is most certainly the number of respondents to the experiment. Out of 743 students who obtained the materials for the experiment, only 29 were willing to participate. The number is thus unequal, which might admittedly have an effect on the results.

The study implies that since MA students had a better agreement in the similarity or sameness of the questions and they exhibited almost an equivalent result in the ability to use signalling nouns in questions, their efforts would be more successful if they had more participants in the experiment. The ideal number of respondents would be 25 students from bachelor studies and 25 from master studies. That way, the overall results of the experiment would be more comparable and representative.

### 3. Conclusion

This thesis aims to test students' abilities recognising signalling nouns in text and subsequently, with their help, ask prospective questions about further development. For this purpose, four main research questions were stated and needed to be answered:

- (1) Which corpus is the most suitable for the analysis?
- (2) How many students react to the signalling noun?
- (3) What is the agreement among students of bachelor and master study programs?
- (4) Which group is better equipped to recognize and use the signal in questions?

The research was carried out in three phases. Initially, there was a preliminary analysis which indicated which of the three possible corpora to choose from. The options were *British History for Dummies*, *Illustrated History of Britain*, or an academic article all serving as study materials at a university. The preliminary analysis of these three corpora has shown that based on the highest frequency of cataphoric signalling nouns, with their realisation beyond the boundary of a sentence, and the infrequent segmentation of the text *Illustrated History of Britain* served as the most suitable corpus to use in the experiment.

Secondly, in order to use the text to test the students, an analysis of the chosen corpus was carried out. The individual occurrences of signalling nouns were described either from the syntactic or semantic view or both, and predictions were made upon the respondents' questions. Followingly, prescribed methods generated relevant questions; however, there was a changing number of invalid responses too. Hence, this is the number that might have impacted the results.

The first gathered data from the research have shown that some chosen loci generated more unified questions than others. This suggests that the signal's location and form might affect its function and usability. Nevertheless, from the frequent agreement in students' questions, it is apparent that they play a significant role as a cohesive device and that a large number of students are able to use them effectively.

The agreement among students in the research suggests that MA students have more unanimous expectations towards future development. They show a higher ability to ask questions with a similar or the same meaning. Admittedly, as it was indicated in the discussion of results, the number of respondents was unequal; therefore, an equal number of students would be more expedient for the sampling.

In conclusion, signalling nouns prompt students to form questions that aim at ensuing stretches of text – in other words – at the lexical realisation of SNs. Consequently, their function as a cohesive device is visible in the study results. The overall result, which indicates the ability to use the signal in questions, is to an extent in favour of bachelor students. However, it is considerably influenced by the lack of MA students participating in the experiment. For this reason, a more extensive sampling pool would be necessary to conduct this type of research with more exact results.

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## 5. Appendices

### Appendix A – Excerpts of the analysed corpora

Text 1 (Dummies)	Text 2 (Illustrated H.)	Text 3 (academic)
<p>If anyone knew how to behave properly, surely it was nice middle-class ladies having tea parties and asking the vicar if he'd like more sugar. Right? Yet in the 1910s, these ladies were precisely the ones who started <u>smashing windows and heckling government ministers</u>, and generally behaving in a most <b>un-ladylike way</b>. And all this bad behaviour was in the cause of Votes for Women.</p> <p>Most books tell you that women didn't have the vote because men thought they were too hysterical or too easily swayed to be trusted with the responsibility, but, as with most things, the suffrage issue wasn't anywhere near that simple. For one thing, most men still didn't have the vote either, and for another, not only did women have the vote, but they were being elected in large numbers – in every sort of local election taking place. People had every reason to expect that the vote in Parliamentary elections would be next, if the women and their supporters kept the pressure up. Instead, Mrs Emmeline Pankhurst's Suffragettes seized the headlines by heckling Cabinet ministers at public meetings and getting themselves arrested. The Suffragettes staged demonstrations and bombed postboxes, and went on hunger strike in prison; the authorities used <u>force-feeding</u> – and <b>that tactic</b> isn't forcing your mouth open for a spoonful of casserole, <u>it means ramming a rubber tube up your nose and pumping liquidised food down it</u>. Force-feeding is a form of torture. But by the time war broke out in 1914, all the <b>efforts</b> of the Suffragettes had failed. The government was set against votes for women, and that was that.</p> <p>....</p> <p>The Suffragettes also helped <b>the war effort</b>. <u>They organised a campaign of</u></p>	<p>A man thought of his wife and daughters as his property, and so did the law. It was almost impossible for women to get a divorce, even for those rich enough to pay the legal costs. Until 1882, a woman had to give up all her property to her husband when she married him. And until 1891, husbands were still allowed by law to beat their wives with a stick "no thicker than a man's thumb", and to lock them up in a room if they wished. By 1850, <u>wife beating</u> had become <b>a serious social problem</b> in Britain. <u>Men of all classes were able to take sexual advantage of working women</u>. Women were probably treated worse in Britain than in any other industrialising European country at this time.</p> <p>After 1870 <b>the situation</b>, particularly for middle class women, began to improve. <u>Women were allowed to vote and to be elected to borough or county councils. A very small number started to study at Oxford and Cambridge in separate women's colleges</u>. But while they were allowed to follow the same course of study as men, they could not receive a degree at the end. Middle-class women became increasingly determined to have equal rights.</p> <p>Working-class women were more interested in their legal rights concerning working conditions, and they found support in the trade union movement. In 1888 <b>the policy of the unions</b> was that "<u>where women do the same work as men, they should receive equal pay</u>". It was nearly another</p>	<p>Recent research on the gender gap in voting for radical right parties, or any extreme parties, is that the gender gap persists because women and men differ in their propensity to violate social norms. Broadly, Ivarsflaten et al. (2010) argue that in Western European immigration politics debates, an anti-racism norm might exist. Positing a new way of thinking about measuring attitudes towards immigration, the authors develop a theoretical construct in which there are <b>two types of individual measures</b> for the anti-racism norm. In particular, <u>there is an external motivation to control prejudice and not be perceived as racist, and an internal motivation to uphold unbiased views of racial groups</u>. The study by Ivarsflaten et al. (2010) was conducted in Norway and the authors found that both types of the anti-racism norm were related to anti-immigrant attitudes. How does the Ivarsflaten et al. (2010) study on the anti-racism norm relate to gender and radical right voting? Hartevelde and Ivarsflaten (2016) conducted a study that explored voting for the radical right British National Party, Sweden Democrats, and Norwegian Progress Party in order to further investigate <b>the connection</b>. The authors find that women are more likely to vote for a radical right party if it has a "reputation shield." That is, women are less likely to vote for parties that are seen as too extreme, and more likely to cast a vote for a party that does not have a neo-Nazi past or current social stigma. The major <b>takeaway</b> is <u>that women are more likely than men to be motivated to control prejudice, and that this internal motivation accounts for the gender gap in voting for radical right parties</u>. Since radical right parties are caught up in conflicts related</p>

<p><u>handing out white feathers for cowardice to young men out of uniform</u> – even if it transpired they were soldiers home on leave or in essential war work at home. But women were needed in <b>other ways</b>, too. In 1916 the government introduced conscription, so <u>women had to replace the men in the factories and on the land</u>. To everyone’s surprise – including their own, sometimes – women showed they could run machinery or drive tractors just as well as men. The work was dangerous, too: In munitions factories, you could be arrested just for carrying a match – hundreds of women were killed in accidents. (Lang 2006, 328)</p>	<p>century before <b>this principle</b> became law. Female membership of the unions increased, but it was not always easy to persuade working men to respect the equal rights of their wives, particularly in times of unemployment.</p> <p>In 1897 women started to demand the right to vote in national elections. Within ten years these women, the "suffragettes", had become famous for <b>the extreme methods</b> they were willing to use. Many politicians who agreed with <b>their aims</b> were shocked by their <b>violent methods</b> and stopped supporting them. However, if they had not been willing to shock the public, the suffragettes might not have succeeded.</p> <p>The war in 1914 changed everything. Britain would have been unable to continue the war without the women who took men's places in the factories. By 1918 29 percent of the total workforce of Britain was female. Women had to be given the vote. But it was not until ten years later that the voting age of women came down to twenty-one, equal with men.</p> <p>The liberation of women took <b>other forms</b>. <u>They started to wear lighter clothing, shorter hair and skirts, began to smoke and drink openly, and to wear cosmetics</u>. Married women wanted smaller families, and divorce became easier, rising from a yearly average of 800 in 1910 to 8,000 in 1939. Undoubtedly many men also moved away from <b>Victorian values</b>. Leading writers like D. H. Lawrence, Aldous Huxley, James Joyce and Virginia Woolf <u>freely discussed sexual and other sensitive matters</u>,</p>	<p>to discrimination and prejudice, women do not view these parties as a legitimate option in the electoral market. On the other hand, we know that across the board women when compared to men support radical right parties at much lower rates. Therefore, a large-N analysis is needed to fully explore the topic behind distinguishing between voting within the radical right party family. A recent study on women’s propensity to control prejudice is Hartevelde et al. (2017). The study explored 28 European countries using the Comparative Study of Electoral Systems data between 1996-2011. The motivating <b>theory</b> was that <u>gender socialisation is different for women and men</u>. In particular, the authors argue that there are <b>two gendered differences</b> in the sociopsychological literature: <u>1.) Men have a generally lower sensitivity to social cues, which means they are more likely to vote for stigmatised parties. 2.) In comparison, women have a greater concern with social harmony, which means they are less likely to vote for extreme parties</u> (Hartevelde et al. 2017, 3-6). Hartevelde et al. (2017) major <b>finding</b> was that <u>men are more likely to vote for parties that are socially stigmatised or ideologically extreme: a finding</u> that is strong even when controlling for similar socio-demographics and political attitudes. In sum, women are far less likely to violate societal norms and cast a vote for far left and far right parties. Given this most recent <b>research</b>, one might expect that the effects of variables correlated with radical right vote choice would be different for women and men. (Hansen, 2019)</p>
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	<p>which would have been impossible for earlier generations.</p> <p>Once women could vote, many people felt that they had gained full and equal rights. But there was still a long battle ahead for equal treatment and respect both at work and at home. <b>The struggle (refers to the previous paragraphs describing how women gained their rights)</b> for full women's rights is one of the most important events in recent British social history, and its <i>effects</i> continue to be felt. (McDowall 2013, 162-163)</p>	
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## Appendix B – Results for each locus

Table 6 - Locus 1 results

Locus 1	Why was she unable to prevent the loss of power?	What steps did she do to prevent the loss of power?	In what way did the power slip away from the monarchy?	What did the slipping of power away look like?	Various other questions (no common theme)	Unsuitable responses
Number of students who Asked the question	8	6	4	2	7	2
Bc./Mgr.	5   3	6   0	4   0	0   2	7   0	1   1
“Agreement score” Bc. group vs Mgr. group	40 vs 24	36 vs 0	16 vs 0	0 vs 4	7 vs 0	1 vs 1
Overall score	100 vs 29					
Overall per person	100:23 vs 29:6 4.35 per person vs 4.83 per person					

Table 7 - Locus 2 results

Locus 2	Why was it a dangerous thing to do?	What was the reaction of the public?	Various other questions (no common theme)	Unsuitable responses
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Number of students who asked the question	15		5		6		3	
Bc./Mgr.	12	3	2	3	6	0	2	1
“Agreement score” Bc. group vs Mgr. group	180	45	10	15	6	0	2	1
Overall score	198 vs 61							
Overall per person	198:23 vs 61:6 8.6 vs 10.2							

Table 8 - Locus 3 results

Locus 3	What was the book about?		Did she write the book herself?		Why was it an important step to popularity?		What was the reaction of the public to the book?		Various other questions (no common theme)		Unsuitable responses	
Number of students who asked the question	11		2		4		6		2		4	
Bc./Mgr.	9	2	2	0	4	0	4	2	2	0	2	2
“Agreement score” Bc. group vs Mgr. group	99	22	4	0	16	0	24	12	2	0	2	2
Overall score	147 vs 36											
Overall per person	147:23 vs 36:6 6.39 per person vs 6 per person											

Table 9 - Locus 4 results

Locus 4	Did anybody get angry because of the popularity of the monarchs?	Why was the monarchy out of danger?	How did the public react?	What happened next?	Various other questions (no common theme)	I don't know	Unsuitable answers
Number of students who asked the question	2	4	5	3	8	6	1

<b>Bc./Mgr.</b>	0	2	4	0	4	1	2	1	8	0	5	1	0	1
<b>“Agreement score” Bc. group vs Mgr. group</b>	0	4	16	0	20	5	6	3	8	0	5	1	0	1
<b>Overall score</b>	55 vs 14													
<b>Overall per person</b>	55:23 vs 14:6 2.39 vs 2.33													

Table 10 - Locus 5 results

<b>Locus 5</b>	<b>What were the areas of interest?</b>		<b>Who did they fight?</b>		<b>What happened in the 1830s that changed the public opinion?</b>		<b>Did they gain new territories?</b>		<b>How did Britain start colonising?</b>		<b>Various other answers (no common theme)</b>		<b>Unsuitable answers</b>	
<b>Number of students who asked the question</b>	8		2		5		4		2		5		3	
<b>Bc./Mgr.</b>	7	1	2	0	0	1	2	2	2	0	4	1	2	1
<b>“Agreement score” Bc. group vs Mgr. group</b>	56	8	4	0	0	5	8	8	4	0	4	1	2	1
<b>Overall score</b>	78 vs 23													
<b>Overall per person</b>	78:23 vs 23:6 3.39 vs 3.83													

Table 11 - Locus 6 results

<b>Locus 6</b>	<b>What were the unwelcome truths?</b>		<b>Why was Britain engaged in the Russian-Turkish war?</b>		<b>Was there a censorship then?</b>		<b>Various other answers (no common theme)</b>		<b>Unsuitable answers</b>	
<b>Number of students who asked the question</b>	17		2		2		4		3	
<b>Bc./Mgr.</b>	15	2	1	1	1	2	4	0	2	1

<b>“Agreement score” Bc. group vs Mgr. group</b>	255	34	2	2	2	4	4	0	2	1
<b>Overall score</b>	265 vs 41									
<b>Overall per person</b>	265:23 vs 41:6 11.5 vs 6.8									

Table 12 - Locus 7 results

<b>Locus 7</b>	<b>In what ways was he a “man of his age”?</b>		<b>What did David Livingstone do to help Britain?</b>		<b>What did he achieve/explore/accomplish ?</b>		<b>What did David Livingston report?</b>		<b>Various other responses (no common theme)</b>		<b>Unsuitable answers</b>	
<b>Number of students who asked the question</b>	10		4		3		3		5		4	
<b>Bc./Mgr.</b>	7	3	2	2	3	0	3	0	5	0	3	1
<b>“Agreement score” Bc. group vs Mgr. group</b>	70	30	8	8	9	0	9	0	5	0	3	1
<b>Overall score</b>	104 vs 39											
<b>Overall per person</b>	104:23 vs 39:6 4.52 vs 6.5											

Table 13 - Locus 8 results

<b>Locus 8</b>	<b>What were the problems?</b>		<b>Various other questions (no common theme)</b>				<b>Unsuitable problems</b>	
<b>Number of students who asked the question</b>	22		3				4	
<b>Bc./Mgr.</b>	18	4	2		1		3	1
<b>“Agreement score” Bc. group vs Mgr.</b>	396	88	2		1		3	1



<b>group</b>						
<b>Overall score</b>	401 vs 90					
<b>Overall per person</b>	401:23 vs 90:6 17.43 vs 15					

Table 14 - Locus 9 results

<b>Locus 9</b>	<b>What happened in Egypt?</b>		<b>What did British want in Egypt?</b>		<b>What problems were in Egypt?</b>		<b>Why in Egypt?</b>		<b>Various other questions (no common theme)</b>		<b>Unsuitable answers</b>	
<b>Number of students who asked the question</b>	14		2		4		4		2		3	
<b>Bc./Mgr.</b>	10	4	2	0	4	0	4	0	1	1	2	1
<b>“Agreement score” Bc. group vs Mgr. group</b>	140	56	4	0	16	0	16	0	1	1	2	1
<b>Overall score</b>	179 vs 58											
<b>Overall per person</b>	179:23 vs 58:6 7.78 vs 9.67											

Table 15 - Locus 10 results

<b>Locus 10</b>	<b>What was the reason?</b>		<b>Was the reason manpower and income?</b>		<b>What was the other interest?</b>		<b>Why did the empire collapse?</b>		<b>Unsuitable answers</b>	
<b>Number of students who asked the question</b>	20		2		3		1		3	
<b>Bc./Mgr.</b>	15	5	2	0	3	0	1	0	2	1

<b>“Agreement score” Bc. group vs Mgr. group</b>	300	100	4	0	9	0	1	0	2	1
<b>Overall score</b>	316 vs 101									
<b>Overall per person</b>	316:23 vs 101:6 13.74 vs 16.83									