



**A CORPUS-BASED STUDY OF ENGLISH SYNONYMS:  
UNEXPECTED, UNFORESEEN, AND UNANTICIPATED**

**BY**

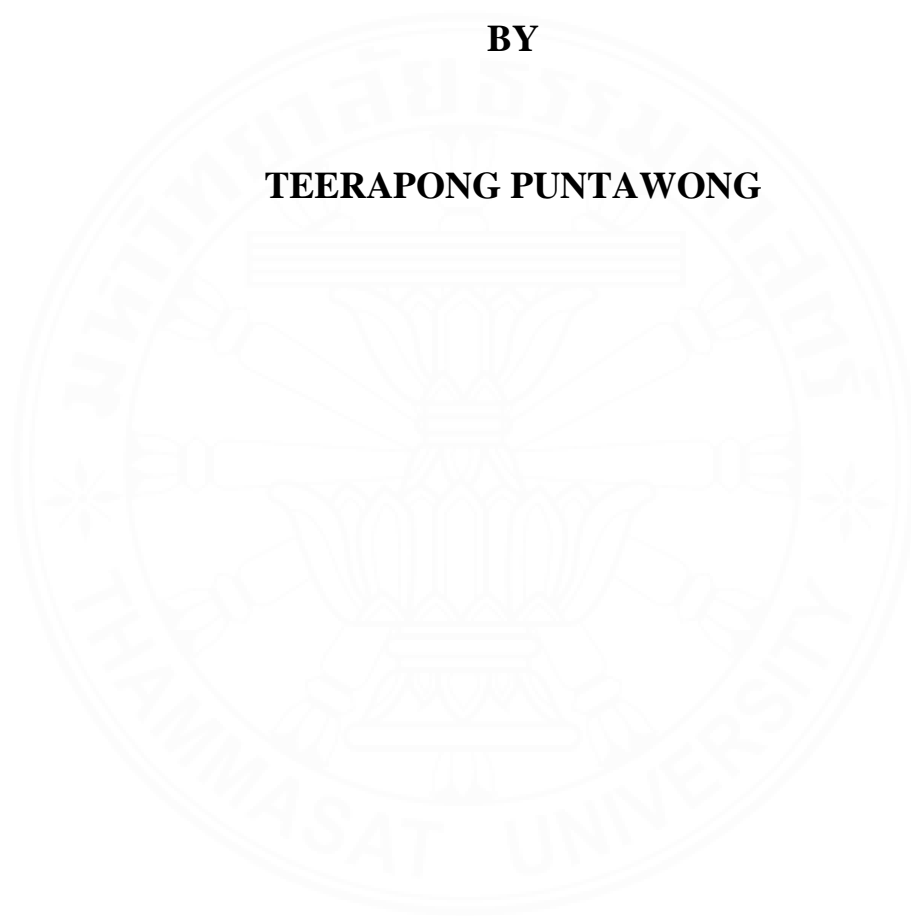
**TEERAPONG PUNTAWONG**

**AN INDEPENDENT STUDY SUBMITTED IN PARTIAL  
FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE  
OF MASTER OF ARTS IN ENGLISH LANGUAGE TEACHING  
LANGUAGE INSTITUTE  
THAMMASAT UNIVERSITY  
ACADEMIC YEAR 2022**

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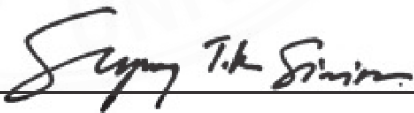
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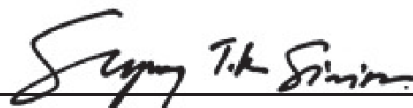
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## ABSTRACT

This study aims to distinguish three English synonyms, i.e., *unexpected*, *unforeseen*, and *unanticipated*, in terms of their meanings, noun collocates, and degrees of formality. Definitions and sample sentences were collected from Longman Dictionary of Contemporary English. In addition, frequencies of synonyms, noun collocates, and their distributions in eight discourse genres were investigated through the Corpus of Contemporary American English (COCA). The data were analyzed quantitatively and qualitatively. Although the three synonyms share the same core meaning, it was found that they cannot be used interchangeably in every situation. Firstly, the analysis of collocation revealed that they can co-occur with nouns referring to an event or an outcome. In particular, however, *unexpected* often co-occurs with nouns referring to a person and an emotion, while *unforeseen* and *unanticipated* do not. Secondly, the analysis of degrees of formality suggested *unanticipated* has the highest degree of formality because the word is most frequent in a formal context, followed by *unforeseen* and *unexpected* respectively.

**Keywords:** synonyms, collocation, genre, corpus, COCA

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Teerapong Puntawong

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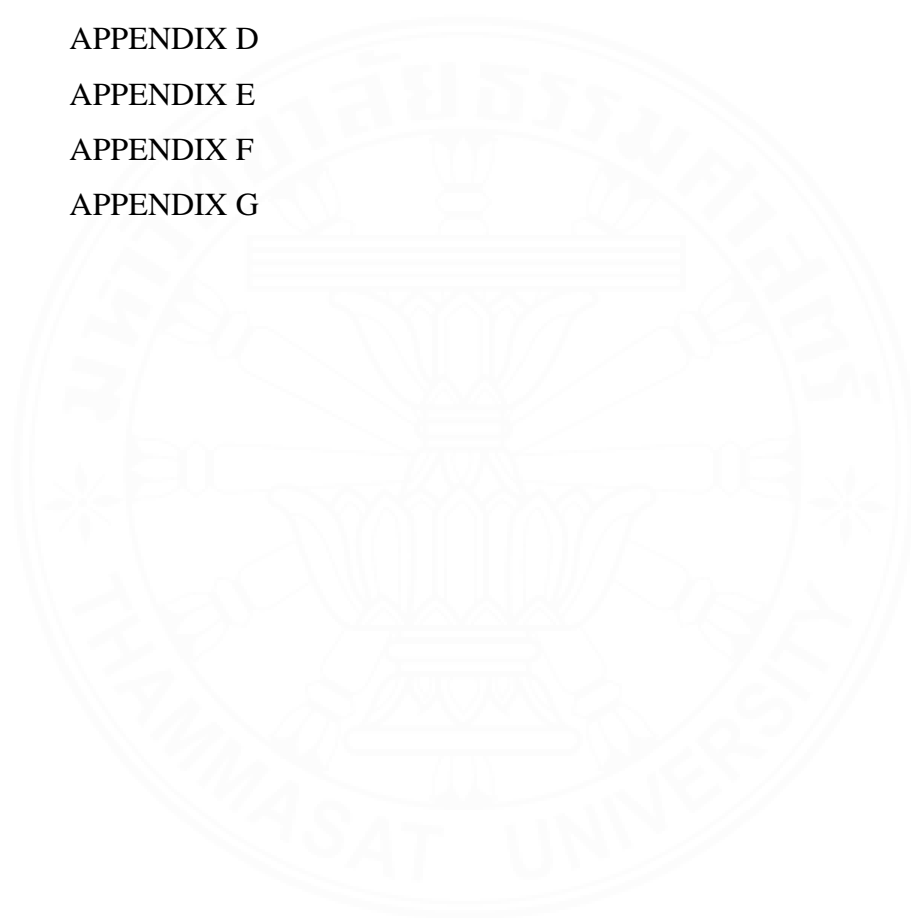
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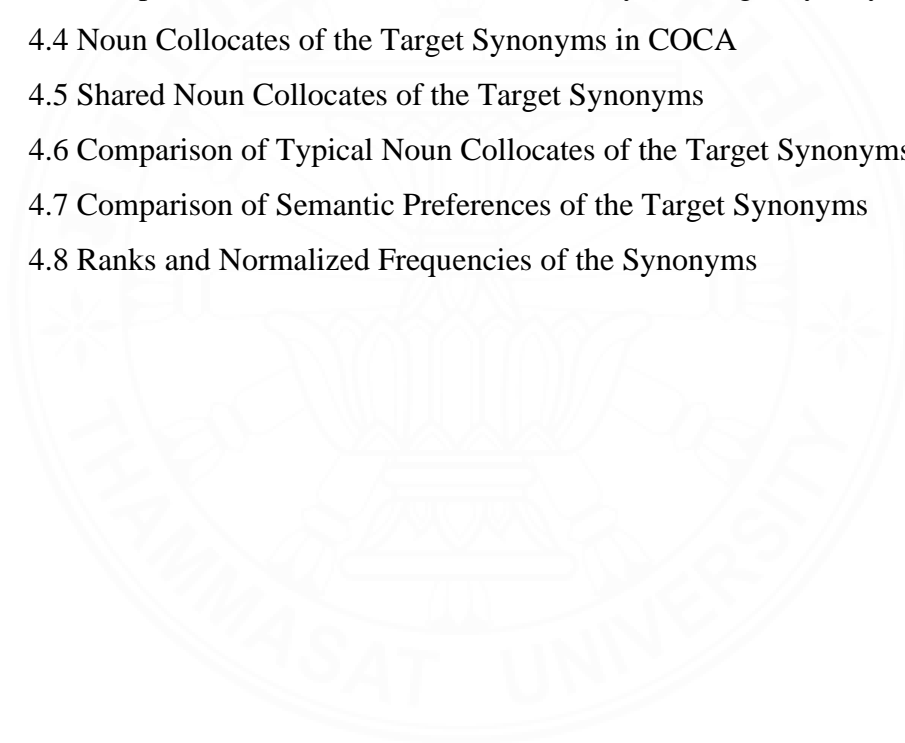
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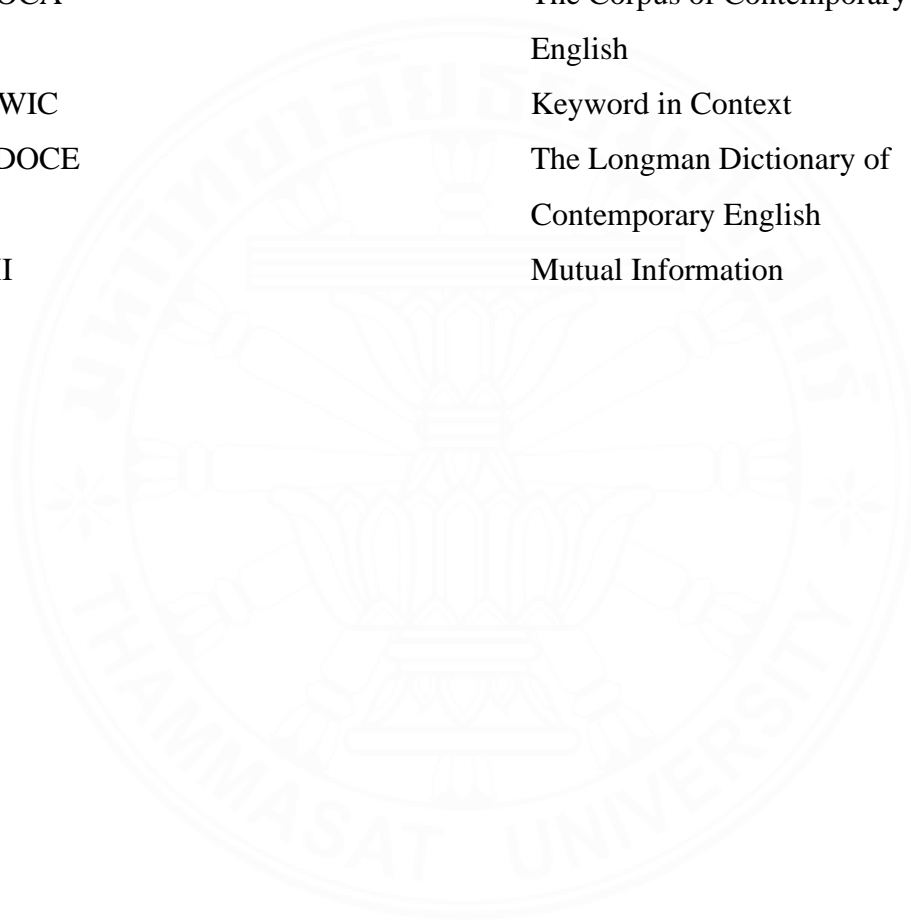
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## LIST OF ABBREVIATIONS

<b>Symbols/Abbreviations</b>	<b>Terms</b>
AWL	Academic Word List
BNC	The British National Corpus
COCA	The Corpus of Contemporary American English
KWIC	Keyword in Context
LDOCE	The Longman Dictionary of Contemporary English
MI	Mutual Information



# CHAPTER 1

## INTRODUCTION

### 1.1 Background of the Study

In vocabulary learning, English learners are challenged not only by the enormous vocabulary size, but also the pervasiveness of English synonyms (Edmonds & Hirst, 2002). According to Laufer (1990), synonymy is one of the factors that reduce learners' chances of vocabulary acquisition. Synonyms are words that have a similar meaning, and it was suggested by Webb (2007, p.122) that "learners are more likely to confuse words that are similar in meaning than words that do not have close semantic links." One of the contributing factors making them more difficult to learn is that they may not always have the same collocates (Laufer, 1990). For instance, some synonyms such as *strong* and *powerful* can be used with the same collocate e.g., *strong argument* and *powerful argument*, but not with others e.g., it is more common to say *strong tea* than to say *\*powerful tea*. Similarly, it is more common to say *a powerful engine* than to say *\*a strong engine*. In addition, *a strong man* does not exactly convey the same meaning as *a powerful man*. It can be said that understanding word meaning constitutes only partial knowledge about a word, but it is not sufficient for effective use and communication.

Apart from the examples above, *unexpected*, *unforeseen*, and *unanticipated* are synonyms that may also cause confusion for English learners. In English users' views, *unexpected*, *unforeseen*, and *unanticipated* appear to convey the same core meaning, leading to the generalization that the three words can be used interchangeably in every context (Blum & Levenston, 1978). Collins Dictionary (n.d.), indicates *unexpected* and *unforeseen* as one of the 4,000 and the 10,000 most commonly used words, respectively. In addition, Longman Dictionary of Contemporary English indicates *unanticipated* as a member of the Academic Word List (Coxhead, 2000). The indications suggest that *unexpected* is more commonly used among English learners than both *unforeseen* and *unanticipated*, while it is more common to see *unanticipated* appear in academic texts than the other synonyms. It appears that the dictionaries cannot satisfactorily indicate when the synonyms can or cannot substitute for one another.

However, to be effective English communicators, learners should be able to make decisions on the appropriate word choice in a given context.

There have been studies that investigated noun synonyms e.g., *purpose*, *goal*, and *objective* (Lertcharoenwanich & Phoocharoensil, 2022); verb synonyms e.g., *persist* and *persevere* (Phoocharoensil, 2021) and adjective synonyms e.g., *quick* and *fast* (Aroonmanakun, 2015); *appropriate*, *proper*, and *suitable* (Petcharat & Phoocharoensil, 2017); *far*, *distant*, and *remote* (Thongpan, 2022). However, a study of the distinction between *unexpected*, *unforeseen*, and *unanticipated* has not been conducted. This led to a preliminary study by consulting a few English dictionaries. The researcher noticed the words contain relatively similar definitions, but were not used in the same register, and they had different collocations. As a result, this study aims to apply corpus linguistic techniques, e.g., concordance, collocation, and semantic category, to examine the similarities and differences between *unexpected*, *unforeseen*, and *unanticipated* in terms of their meanings, noun collocates, and degrees of formality.

## 1.2 Research Objective

The study aims at identifying the similarities and differences between the three synonyms *unexpected*, *unforeseen*, and *unanticipated* in terms of meanings, noun collocates, and degrees of formality.

## 1.3 Research Question

What are the similarities and differences between the synonyms *unexpected*, *unforeseen*, and *unanticipated* in terms of meanings, noun collocates, and degrees of formality?

## 1.4 Definitions of Key Terms

The key terms and their definitions are presented in this section.

### 1.4.1 Synonyms

The term ‘synonym’ comes from Greek roots *syn* ‘alike’ and *onym* ‘name.’ (Murphy, 2010, p. 110). It refers to words that share a similar core meaning or words that are synonymous. Nevertheless, synonyms are neither entirely identical nor

completely interchangeable. *Strong* and *powerful* appear to have the identical meaning as in *strong argument* or *powerful argument*. However, they can only be used with specific nouns such as *strong tea* or *a powerful engine*. Additionally, *a strong man* is different from *a powerful man* (Laufer, 1990).

#### 1.4.2 Denotative meaning

Denotative meaning or denotation is a term used to describe the literal meaning that a word has, such as definitions of words provided by dictionaries.

#### 1.4.3 Connotative meaning

Connotative meaning or connotation is an associative or implied meaning that a word has, apart from its denotative meaning. Words that denote the same thing, such as *cat*, *feline*, and *kitty*, may connote different meanings as illustrated below.

- (1)
  - a. A *feline* jumped out of the tree.
  - b. A *cat* jumped out of the tree.
  - c. A *kitty* jumped out of the tree.

(Murphy, 2010, p. 33)

In (1a), *feline* has more emphasis on a scientific image and less on a domesticated cat, while *kitty* in (1c) has the connotation of being small and pretty attached to it. It can be said that words which are synonymous may have different connotation (Jackson & Amvela 2007). Pairs of synonyms which differ in connotation include *push* – *shove* (connotes roughness or haste); *clever* – *cunning* (involves being tricky); *well-known* – *notorious* (being famous for something bad); or *use* – *exploit* (use something or someone unfairly).

#### 1.4.4 Collocation

Collocation is a tendency for two words to be found together, or in close proximity. It is possible that *classroom* and *students* tend to occur in the same context. In addition, collocation also refers to a combination of two words or more, such as *heavy rain* and *make a decision* (Liu, 2014). Moreover, collocations are able to appear as strings of up to 6 words known as formulaic language, such as *I don't know*, *the end*

*of the, it has been shown that, and from the point of view of* (O’Keeffe, McCarthy & Carter, 2007)

#### **1.4.5 Noun Collocate**

Noun collocates can be identified in the combinations between adjective + noun (a quick meal); noun + noun (hand gestures); noun + verb (a dog barks); and verb + noun (commit a crime).

#### **1.4.6 Semantic preference**

Semantic preference refers to a co-selection of one word with another word due to a shared semantic field. Discussed by Stubbs (2001: 89–95), *undergo* was shown to be used together with words belonging to two sets of semantic fields including *medicine* (e.g., *treatment, hysterectomy, and surgery*) and *changes* (e.g., *changes, and transformation*).

#### **1.4.7 Semantic prosody**

Semantic prosody refers to “a consistent aura of meaning with which a word is imbued by its collocates” (Louw, 1993, p. 157). In other words, (a) meaning is said to derive from a string of words or a phrase rather than from a single word (Hunston, 2002); (b) negative or positive connotation can be revealed by the meaning imparted by a word and its collocates (Partington, 1998). To illustrate this point, negative prosody can be observed from verbs such as *commit* and *cause* and their co-occurring noun collocates. The verb *commit* alone appears neutral; however, the verb is typically associated with words that have negative connotation as in *commit murder, commit crime, or commit suicide*. Likewise, the verb *cause* frequently occurs with nouns with unfavorable sense as in *cause pain and cause inflation*. In contrast, the verb *provide* shows a positive prosody, such as *provide information and provide services*.

#### **1.4.8 Degrees of formality**

There are English words which are more frequently used in writing while others are more frequently used in speaking. If a word appears more frequently in formal written or spoken discourses, it is recognized as a word with higher formality (e.g.,

research articles, news articles, official documents, or public speaking). In contrast, a word with lower formality will appear more frequently in informal written or spoken discourses which can be observed by uses of contractions, personal pronouns, or slang (e.g., text messages, personal emails, or casual conversations). Formal and informal discourses, in which a target word appears, can also refer to text types or genres.

### **1.5 Scope of the Study**

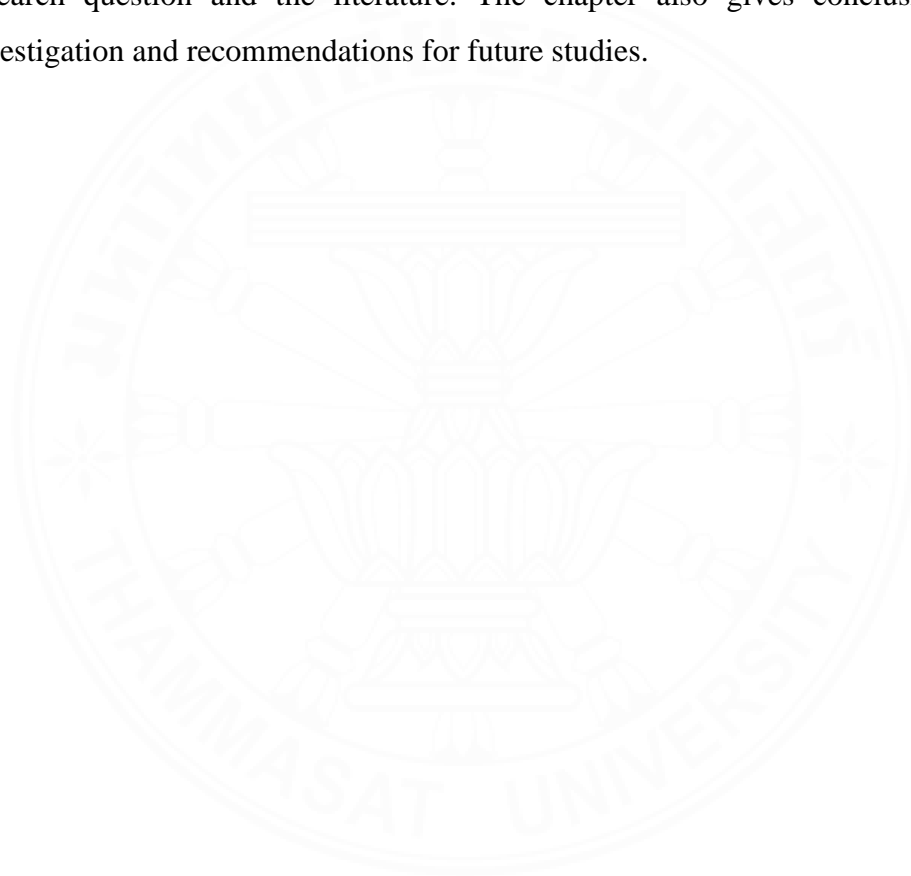
The study investigates similarities and differences between the three synonymous adjectives: *unexpected*, *unforeseen*, and *unanticipated* in terms of their meanings, noun collocates, and degrees of formality. The sources of data include (a) the Longman Dictionary of Contemporary English and (b) the Corpus of Contemporary American English (COCA). The time period of the data collection was March 2023.

### **1.6 Significance of the Study**

Word meaning and word use are the most important and difficult aspects of learning vocabulary (Liu, 2014). Knowing many words will be advantageous for all English learners because they can recognize word meanings, allowing them to understand or discuss a wide range of topics. However, using them appropriately implies knowledge beyond recognition of meaning. To illustrate this point, Nation (1990, p.31 as cited in Zimmerman, 2014) noted that learners should know the following aspects about a word (a) if a word has more than one meaning, (b) if a word has typical collocations, or (c) if a word is used in formal or informal situation. In other words, attention should be paid to both vocabulary size and vocabulary knowledge for they have vital roles in effective communication. Nevertheless, Thai learners usually overemphasize the expansion of their vocabulary size over understanding details about each word e.g., memorizing as many words with similar meaning or synonyms as they can. When it comes to choosing the right word in a given situation, learners produce odd utterances because there are gaps in their word knowledge e.g., learners say *\*fragile feelings* instead of *delicate feelings*. Learners should be able to distinguish synonyms in terms of meaning and usage. Therefore, this study will emphasize the importance of expanding vocabulary knowledge of each synonym through the corpus-based investigation of their meanings, collocates, and degrees of formality.

### **1.7 Organization of the Study**

The study consists of five chapters. Chapter 1 introduces the background of the study, the research objective and the research question, the definitions of the key terms, the scope, and the significance of the study. Chapter 2 reviews relevant theories including the framework for distinguishing the target synonyms as well as previous studies. Chapter 3 describes the way the data are collected and analyzed. In Chapter 4, the results are presented. Lastly, Chapter 5 discusses the results in relation to the research question and the literature. The chapter also gives conclusions of the investigation and recommendations for future studies.



## CHAPTER 2

### REVIEW OF LITERATURE

#### 2.1 Synonyms

##### 2.1.1 Definitions of English Synonyms

Murphy (2010) defined synonyms as words that share the same meaning. However, Schmitt (2000, p. 1) gave a slightly different definition as ‘words that have approximately the same meaning’. Based on the two slightly different definitions, there are two types of synonyms: *strict synonyms* and *loose synonyms*.

##### 2.1.2 Types of English Synonyms

**2.1.2.1 Strict Synonyms.** With the former definition given by Murphy (2010), if word ‘x’ can substitute for word ‘y’ and vice versa in all contexts, without changes in any aspects of meaning, they can be identified as strict synonyms (also referred to as absolute synonym). Jackson and Amvela (2007) commented that having a pair of strict synonyms is not economical since there would be too many words for the same thing. In this scenario, one of the words has to change its meaning to some degrees, or its use will fade. The following are examples of strict synonyms: *culver (pigeon); divers (various); dorp (village); erst (formerly); fain (willing); levin (lightning); trig (neat); warrener (gamekeeper); wight (human being); and yare (readily)* (Jackson & Amvela, 2007, p. 109). Obsolete words which were no longer used were replaced by words in the brackets which are used in modern days. Thus, the probability that two words have the identical meaning is small (Edmonds & Hirst, 2002; Jackson & Amvela, 2007; Liu, 2014; Murphy, 2010; Schmitt, 2000).

**2.1.2.2 Loose Synonyms.** Loose synonyms, also referred to as near-synonyms are words that can be used interchangeably in some but not all contexts, and this type of synonym is more common in the English language (Schmitt, 2010). Due to this fact, it can be concluded that most synonyms in language are near synonyms (Edmonds & Hirst, 2002; Liu, 2014). Jackson and Amvela (2007, p. 109) illustrated the phenomenon with verb synonyms *find* and *discover*.

(1) Lydia *found/discovered* the ball behind the garden shed.

(2) Marie Curie *discovered* radium in 1898.

(3) Franz *found* it easy to compose sonatas.

(Jackson & Amvela, 2007, p.109)

They explained that one synonym may substitute for another synonym as long as their meaning overlaps, as seen in (1). However, it may not be possible for two synonyms to replace each other where they do not share the same semantic area, as seen in (2), where discover means ‘to be the first one to come across something’ and in (3) where find means ‘to experience something in some way’.

### 2.1.3 Differentiating Synonyms

We saw earlier that synonyms are not identical, as in the case of verb synonyms *find* and *discover* in 2.1.2.2. We can use the following criteria: collocations, degrees of formality, and/or syntactic behavior to compare and distinguish synonyms of the same group (Edmonds & Hirst, 2002; Jackson & Amvela, 2007; Liu, 2014; McCarthy & Carter, 1997; Murphy, 2010). The summary of criteria is presented in Table 2.1.

**Table 2.1**

*Criteria for Distinguishing English Synonyms*

Criteria	Examples of synonyms
Collocation	<i>task – job</i> (Edmonds & Hirst, 2002) a daunting <i>task</i> *a daunting <i>job</i>
Degrees of formality	<i>start – begin</i> (McCarthy & Carter, 1997) <i>Start</i> appears in similar frequency in both speaking and writing, while <i>begin</i> appears more in writing. <i>uterus – womb</i> (Murphy, 2010) <i>uterus</i> – medicine genre; <i>womb</i> – literature genre
Syntactic behavior	<i>give – donate</i> (Edmonds & Hirst, 2002) Nadia <i>gave</i> the Van Gogh <i>to</i> the museum. Nadia <i>gave</i> the museum the Van Gogh. Nadia <i>donated</i> the Van Gogh to the museum. *Nadia <i>donated</i> the museum the Van Gogh.

**2.1.3.1 Collocation.** Below, are some of the scholars who have defined collocation and its significance to lexical studies.

Timmis (2015, p. 24) refers to collocation as a combination of two lexical words often found together, or in close proximity. Collocation is also viewed as a pattern of a partnership between a word with other words. The regular pattern influences language users to produce common collocations, idiomatic expressions, and chunks (O’Keeffe et. al., 2010). From Table 1, despite the fact that *task* and *job* share a similar meaning, we can state that *task* collocates with *daunting*, while *job* does not.

Additionally, collocation is described by Sinclair (2004) as the co-selection of words in which meaning is created through the combinations of the co-selected words. Cheng (2012) examined the meaning of *impending* together with its semantic environment. It was found that the meaning of *impending* is associated with lexical items within a specific semantic field. Under the examination, *impending* suggests something unpleasant and unwelcoming that is soon to happen. As a result, there is a significant tendency that *impending* collocate with nouns, such as *catastrophe*, *death*, *disaster*, *doom*, *illness*, *nightmares*, and *scandals*. The co-selection, as illustrated by Cheng, refers to *semantic preference*. In lexical studies, semantic preference is usually analyzed in conjunction with collocations to investigate subtle synonym differences (Szudarski, 2018 as cited in Phoocharoensil, 2021).

Schmitt (2010) noted that collocations were described to be a type of formulaic language as they do not behave as single words but rather occur in multiple word units. More specifically, they form prefabricated expressions and chunks. They are important in communicative functions when we consider their pragmatic value e.g., to facilitate social interaction (*nice weather today*), to provide discourse cohesion (*on the other hand*, *in summary*, or *as a result*), to maintain conversations (*How are you?*, *see you later*, or *you’re welcome*), or to show evidence (*it has been showed that*, or *research results indicate that*). In more fluent language users, chunks are ready for use and require little effort to be produced.

**2.1.3.2 Degrees of Formality.** The degree to which a word is perceived as more or less formal is relative to the context in which it is used. Liu (2014) elaborated this point by saying that one of the two words which share the same meaning may be used

with more formality than the other word. Pairs of synonyms which differ in degrees of formality are provided in Table 2.2. Alternatively, one of the pair may be used in slang or colloquial English while the other is used in standard English as seen in Table 2.3.

**Table 2.2**

*Examples of Word Pairs with Different Degrees of Formality*

Less formal	More formal
archer	toxophilite
argument	disputation
die	decease
give up	renounce
praise	eulogy

(Jackson & Amvela, 2007, p. 111)

**Table 2.3**

*Examples of Word Pairs in Standard English and Colloquial English*

Standard English	Colloquial English
astonished	gobsmacked
destroy	zap
drunk	sloshed
prison	clink
steal	nick

(Jackson & Amvela, 2007, p.111)

**2.1.3.3 Syntactic Behavior.** According to Edmonds and Hirst (2002), synonyms of the same group may differ in syntactic subcategorization. For example, verb synonyms *give* – *donate*. *Give* may subcategorize NP and PP in (1) or NP and NP in (2). *Donate* only subcategorizes NP and PP in (3). In contrast, its subcategorization of NP and PP in (4) results in ungrammaticality.

(1) Nadia gave [NP the Van Gogh] [PP to the museum].

(2) Nadia gave [NP the museum] [NP the Van Gogh].

(3) Nadia donated [NP the Van Gogh] [PP to the museum].

(4) \*Nadia donated [<sub>NP</sub> the museum] [<sub>NP</sub> the Van Gogh].

(Edmonds & Hirst, 2002)

## 2.2 English Corpora and Synonym Investigation

An English corpus is an electronic collection of written or spoken English texts (O’Keeffe et. al., 2010) equipped with powerful search engines. It can be useful in a linguistic study that requires authentic language data.

In the study of synonymy, corpus queries can generate information about each synonym which includes the common collocations that it co-occurs with and the degree of formality that it has (Liu, 2014).

### 2.2.1 Study of Collocation

Among the measurements of collocational strength provided by a corpus, frequency and MI score are commonly used to generate a collocate list. The frequency indicates the number of instances the two words occur together, while MI score or MI value indicates the non-randomness with which two words are associated (Hunston, 2002). According to Cheng (2012) and Hunston (2002), an MI score of 3 or higher is required for the collocational strength to be significant. However, Schmitt (2010) argued that it is possible to be misled by a word pair with a higher MI score without assessing its frequency because word pairs with low frequency can have remarkably high scores of MI. Thus, the frequency and the MI score of each pair should be assessed as to whether to include it in a collocate list.

### 2.2.2 Study of Degree of Formality

The range of a target word or how well the word is distributed across text types as well as frequencies of the target word are the two measurements that can be used to identify its degree of formality. To illustrate this point, *in contrast* appeared 77.38 times per million words in the academic text, but it only appeared 2.67 times per million words in the spoken text. This clearly shows that the use of *in contrast* is most prominent in academic writing (Liu, 2014). From the example, the frequencies can be interpreted that *in contrast* is used in a more formal context.

## 2.3 Related Studies on Distinguishing English Synonyms

### 2.3.1 Adjective Synonyms

**2.3.1.1 Quick and Fast.** Applying semantic categories, Aroonmanakun's study of adjectives *quick* and *fast* (2015) showed *quick* collocates with a noun expressing an action as in quick answer, quick guide, and quick call while *fast* collocates with a noun expressing movement and speed as in *fast charger, fast delivery, fast fashion, fast car, fast boat, fast computer, and fast internet.*

**2.3.1.2 Appropriate, Proper, and Suitable.** Petcharat and Phoocharoensil (2017) examined three adjective synonyms: *appropriate, proper, and suitable.* They investigated the meanings, degree of formality, collocations, and grammatical patterns of the target synonyms using dictionaries and concordance lines of each word from the Corpus of Contemporary American English (COCA). It was suggested that the synonyms share the same core meaning, but their detailed meanings, degree of formality, collocation, and grammatical structures are different. The study further investigated common noun collocates by grouping synonyms i.e., *appropriate-proper, appropriate-suitable, proper-suitable, and appropriate-proper-suitable.* It was revealed that *appropriate* appears to be closer to *proper* than to *suitable* as a result of the larger number of noun collocates the two words shared.

**2.3.1.3 Far, Distant, and Remote.** Thongpan (2022) distinguished three synonymous adjectives *far, distant, and remote.* The analysis involved degrees of formality and collocations. *Distant* and *remote* were reported to be used in similar formality due to the similar distributions in the written genres (fiction, magazine, and academic texts), while *far* was reported to be used more frequently in formal and informal English than *distant* and *remote.* However, its distribution in academic texts was the lowest. Thus, *far* is commonly used in spoken English rather than written English. Furthermore, frequencies, supplemented by collocational strengths (MI values) was applied to identify collocational similarities and differences among the three words. *Far* shared the least number of collocations compared to its synonyms, indicating *far* cannot be used with a wider range of nouns as *distant* and *remote* can. More distinctions can be observed when noun collocates were grouped based on their

semantic properties. The co-selection due to semantic preferences revealed the three synonyms cannot be used interchangeably. For example, *distant* was shown to associate with time, spatial elements, place, kinship, sound, measurement of distance, while *far* was shown to associate with directions and places. Lastly, *remote* can associate with electronic devices and places.

### 2.3.2 Noun synonyms

**2.3.2.1 Purpose, Goal, and Objective.** *Purpose*, *goal*, and *objective* were studied by Lertcharoenwanich and Phoocharoensil (2022). Similar to Thongpan's investigation (2022), degrees of formality indicated by distribution across eight text types, and verb and adjective collocates were used as the criteria. The study revealed situation where one of the criteria was not effective in distinguishing synonyms. Out of eight genres, the synonyms most frequently appeared in academic texts, indicating they convey the same degree of formality. However, collocations and semantic preference were found to be effective criteria. The different number of collocates, with which each synonym is associated, suggested that the synonyms are not interchangeable. For example, *purpose* has the smallest numbers of verb and adjective collocates while *goal* and *objective* share more verb and adjective collocates. It can be said that a closer relationship can be observed between *goal* and *objective* than between *purpose* and either of the nouns. The verb and the adjective collocates were grouped by their semantic relations with the synonyms. The findings suggested that *goal* and *objective* share a closer meaning. *Goal* and *objective* can be referred to as the result that is intended to be achieved in a time frame, while *purpose* appeared to express an intention to accomplish something.

### 2.3.3 Verb synonyms

**2.3.3.1 Advise, Recommend, and Suggest.** Phitayakorn (2016) distinguished the three verb synonyms with the focus on grammatical patterns and collocation. The researcher manually searched for possible grammatical patterns from Longman Dictionary and the British National Corpus.

The three verbs shared four grammatical patterns namely (a) advise/ recommend/ suggest + somebody, (b) advise/ recommend/ suggest + something, (c)

advise/ recommend/ suggest that + subj.+ modal verb + V.inf, and (d) advise/ recommend/ suggest that + subj. + v. (subjunctive). However, each verb was found to have more distinctive grammatical patterns of its own. To illustrate, *recommend* and *suggest* can precede either *somebody* or *something* while *suggest* appears to take *something* as an object rather than *somebody*. It was also interesting to see combinations of verb + preposition in order to deliver different messages. For example, ‘recommend/ suggest for’ directs at the speaker him/herself as in “*Which type of oil do you recommend for my car?*” while ‘recommend/ suggest to’ applies to the listener as in “*Students are recommended to make an appointment with a counselor.*”

**2.3.3.2 Persist and Persevere.** Two synonymous verbs *persist* and *persevere* were studied by Phoocharoensil (2021). The study highlights the effectiveness of using collocations in conjunction with semantic preference/prosody and grammatical pattern to discriminate two near synonyms. *Persist* was revealed to collocate with up to 20 subject noun collocates belonging to four semantic fields e.g., beliefs, sociocultural problems, health problems, and disaster. *Persevere* was reported to collocate with nouns belonging to contexts of Christianity, powerful countries, and ideology. The semantic prosodies of *persist* and *persevere* were also different in the sense of meaning. The prosody in which *persist* is used connotes an unfavorable sense, while the prosody of *persevere* does not. Moreover, concordance lines revealed that *persist* and *persevere* are used in different grammatical patterns. The frequencies that *persist* is used intransitively exceeds those being used transitively. The verb also preceded prepositional phrases beginning with *in* or *with* while its synonym does not. In contrast, *persevere* is more likely to be used as a transitive verb even though it was indicated as an intransitive verb in dictionary.

**2.3.3.3 Ask, Beg, Plead, Request, and Appeal.** Five synonymous verbs including *ask*, *beg*, *plead*, *request*, and *appeal* were studied by Phoocharoensil (2010) in terms of connotative meanings, collocation, grammatical patterns, and degrees of formality.

The researcher was able to identify the degree of formality that each synonym has. For instance, *ask* tends to be used in informal situation because it co-occurs with

nouns that do not express formality e.g., *people, children, the private sector, the market makers, the board, the crew, followers, the government, manufacturers*. Higher formality can be observed with *request* and *appeal* which co-occurs with nouns expressing higher degrees of formality e.g., *shareholders, the authority, the police, the supreme court of justice, the judges, the High Court, or the House of Lords*.

Furthermore, the researcher investigated concordance lines of each synonym for grammatical patterns. It was found that the synonyms did not share the same grammatical patterns. It is most noticeable in the co-occurrence of a verb and object required by the verb. For example, in case of *request* and *ask*, it is only grammatically correct if we *request something* or *ask somebody for something*. In case of *plead* and *ask*, both *plead* and *ask* require preposition *for* if the object is unanimated. However, *plead* requires preposition *with* if its object is a person. It is also a case that *ask, beg, plead* and *request* may precede that-clause while *appeal* cannot.

To conclude, previous studies on distinguishing English synonyms have taken advantage of frequently used techniques, notably, collocations and degrees of formality. Both techniques are supported by quantitative data, namely, distribution in English text types, collocational frequencies, and their MI values, which help the researchers compare and contrast near-synonyms with higher reliability. In terms of collocation, it can be supplemented with semantic preference, to see the way meaning is created and to see certain restrictions among near synonyms. In addition, the researchers can use their syntactic knowledge to scrutinize concordance lines in which the target synonyms appear, and to see how lexical item, grammatical patterns, and meanings are connected. However, different grammatical patterns are more distinctive in verb synonyms, compared to adjective or noun synonyms.

## CHAPTER 3

### RESEARCH METHODOLOGY

This chapter covers the following topics: (1) research instrument (2) data collection and (3) data analysis.

#### 3.1 Research Instrument

There are two research instruments in the study.

##### 3.1.1 *The Longman Dictionary of Contemporary English (LDOCE)*

LDOCE was consulted to investigate similarities and differences among target synonyms *unexpected*, *unforeseen*, and *unanticipated*. The dictionary is supposed to provide definitions, collocation, and degrees of formality of each synonym.

LDOCE is supported by Longman Corpus Network with a total of 330 million words, as a result, the information about a word can be considered representative of the real language use. Moreover, we can learn more about a word with LDOCE's various symbols and labels as shown in Figure 1.

#### Figure 1

*Symbols in LDOCE*



In Figure 1, LDOCE uses three red circles to indicate whether the word is a member of core vocabulary, with three red circles indicating it is used in high frequency, two red circles indicating it is used in medium frequency, and one circle indicating it is used in lower frequency.

LDOCE marks words that are more important for effective verbal and written communication with symbols W1, W2, and W3 for words that are in the top 1000, 2000, and 3000 most frequent words in written English and S1, S2, and S3 for the top 1000,

2000, and 3000 most frequent words in spoken English. In Figure 1, S3 indicates *anticipate* is among the top 3,000 most frequent words in spoken English while W3 indicates *anticipate* is among the top 3,000 most frequent words in written English.

The other symbols found in Figure 1 are AWL and SYN. AWL indicates the word entry belongs in the Academic Word List (Coxhead, 2000) and it more frequently appear in academic texts than in everyday English. SYN shows dictionary users what words are synonymous with the searched word.

### ***3.1.2 The Corpus of Contemporary American English (COCA)***

Additionally, in research by Davie (2020), the Corpus of Contemporary American English (COCA) was consulted for meanings, noun collocates, and degree of formality because of two reasons. Firstly, it was suggested that corpora provide more information in the study of synonyms (Aroonmanakun, 2015; Cheng, 2012; Liu, 2014; Petcharat & Phoocharoensil, 2017; Phoocharoensil, 2010). Secondly, at the time of the study, it was the largest online corpora of English, compiling more than 1 billion words. It covers spoken and written language from spoken, fiction, magazines, newspapers, academic texts, TV and movie subtitles, blogs, and other web pages. In recent years, using a huge corpus like COCA has been a common practice in studies of synonyms (Aroonmanakun, 2015; Lertcharoenwanich & Phoocharoensil, 2022; Petcharat & Phoocharoensil, 2017; Phoocharoensil, 2021; Thongpan, 2022).

## **3.2 Data collection**

To investigate similarities and differences among *unexpected*, *unforeseen*, and *unanticipated*, the Longman Dictionary of Contemporary English and the Corpus of Contemporary American English are the sources for language data. The following sections discuss the ways in which data can be obtained from both sources.

### ***3.2.1 Data from LDOCE***

To obtain data from LDOCE, one of the target words will be entered into the search box. Data that will be collected from the dictionary include (a) word definition, (b) sample sentences, and (c) degrees of formality indicated by symbols in the

dictionary such as *S1-S3*, *W1-W3*, and *AWL*. The same procedure will also apply to the other target synonyms.

### **3.2.2 Data from COCA**

The following data will be collected from COCA.

**3.2.2.1 Word information.** WORD page in COCA allows its users to access information of a target word including its definitions, frequency, collocates, and distribution across the eight main genres. The definitions and frequency will be collected from this page.

**3.2.2.2 Collocates.** COLLOCATES page reports noun, adjective, verb, and adverb collocates that typically occur with the target word. The collocates can be sorted by their frequencies and filtered by MI score threshold.

Jackson and Amvela (2007) suggested that “collocation most clearly occurs between words in specified syntactic relations such as Adjective + Noun (red + wine)” (p. 131). Therefore, noun collocates will be selected because the three target synonyms are adjectives.

Moreover, Hunston (2002) pointed out that it is essential to use statistical measurements to reliably observe the probability that two words frequently co-occur or are used together as lexical chunks. Among the most commonly used measurements are frequency and MI score which indicate degrees of collocational strength between co-occurring words (Phoochareonsil, 2021).

A total of 30 noun collocates of each synonym will be manually selected. The selection involves two criteria. First, noun collocates appear in the top-30 frequency. Second, their MI-scores, which is indicative of correlational strength, must be equal to 3 or higher (Hunston, 2002 and Cheng, 2012). In the case that a noun collocate is revealed to be a proper noun, it will be eliminated. Because the targets synonyms are adjectives, they can modify a noun in two manners: as an attributive adjective preceding the noun or as a predicative adjective following the noun. The noun collocates that are preceded by the adjectives will also be eliminated and replaced by a lower ranking noun collocate.

**3.2.2.3 Genres.** Word information in COCA are also classified into eight different balanced sections which include TV/Movie subtitles, spoken, blogs, web, fiction, magazine, newspaper, and academic. CHART page displays two types of frequencies. They include the frequencies that the target word appear in the different genres and the frequencies that the same word appear per million words or the normalized frequencies in the different genres. Although COCA contains a balance of written and spoken genres, the eight sections vary in sizes. Therefore, the normalized frequencies will be consulted when comparing the frequencies from sections of different sizes.

**3.2.2.4 Clusters.** Since collocation are able to appear as strings of up to 6 words (O’Keeffe, McCarthy & Carter, 2007), CLUSTERS page will be used to observe and record how frequently each synonym is used as a prefabricated language.

### 3.3 Data Analysis

#### 3.3.1 Analyzing Meaning

The definitions of the synonyms extracted from both LDOCE and COCA will be compared to observe the central meaning shared by the synonyms.

In addition, since a word’s meaning derives from a string of words rather than from a single word (Hunston, 2002) and it is imparted by the word and its collocates (Partington, 1998), the synonyms and their associated noun collocates will be analyzed for any possible connotations.

#### 3.3.2 Analyzing Noun Collocates

The collocate lists of the synonyms will be compared. The comparisons include *unexpected – unforeseen; unexpected – unanticipated; unforeseen – unanticipated*, and *unexpected – unforeseen – unanticipated*. The comparisons will show similarities and differences among the synonyms in terms of collocation.

Furthermore, the extracted noun collocates will be classified into themes according to their semantic preferences. The themes will help further reveal which pairs of synonyms are more similar or more different (Lertcharoenwanich & Phoocharoensil, 2022; Petcharat & Phoocharoensil, 2017).

Frequencies in which any of the synonyms form a prefabricated language will also be considered regarding whether the target synonyms are interchangeable. This is because it is possible that one synonym is more prominent than others when used in a string of words.

### ***3.3.3 Analyzing Degree of Formality***

Firstly, examples of use and symbols provided in the dictionaries will help distinguish the synonyms' degrees of formality. The synonyms will be arranged from the word with highest formality to the word with the least formality. Secondly, normalized frequencies across eight genres in COCA of each synonym will be used to identify its degree of formality. A word is considered informal if it appears more frequently in informal genres such as TV/Movie and Spoken, but it is considered more formal if it occurs more frequently in Academic. However, it is also possible for such a word to be used in both formal and informal contexts such as Newspaper, Magazine, and Web.



## CHAPTER 4

### RESULTS

This chapter presents findings on meanings, noun collocates, and degrees of formality of each synonym.

#### 4.1 Meanings

*Unexpected, unforeseen, and unanticipated* were identified as loose synonyms because it was found that *unexpected, unforeseen, and unanticipated* share the same core meaning e.g., *not expected, or not anticipated*, as shown in Table 4. However, their uses are different. According to the definitions from LDOCE and COCA presented in Table 4.1, it is indicated that the meaning and use of *unexpected, unforeseen, and unanticipated* are often associated with unwanted situations, or something that happened too quickly to be prepared for as in (1), (2), and (3). However, it was observed from LDOCE that the meaning and use of *unexpected* and *unforeseen* can also associate with feelings and experiences about an event as in (4) and (5).

- (1) There have been **unexpected delays** on the freeway because of an accident.
- (2) These actions may have **unforeseen consequences**.
- (3) The managers also had to live with **unanticipated consequences** of their way of handling the problems and mistakes of less-experienced subordinates.
- (4) He greeted me with **unexpected warmth**.
- (5) I had met Hugo at a party and **unforeseen** and overwhelming **emotions** had consumed me.

(LDOCE)

**Table 4.1***Summary of Definitions from LDOCE and COCA*

Synonyms	Source	
	LDOCE	COCA
<b>Unexpected</b>	Something that is surprising because you were not expecting it.	Not expected or anticipated; happening or coming quickly and without warning; not planned
<b>Unforeseen</b>	An unforeseen situation is one that you did not expect to happen	Not anticipated, happening, or coming quickly and without warning
<b>Unanticipated</b>	An unanticipated event or result is one that you did not expect; SYN. unforeseen	Not anticipated

## 4.2 Noun Collocates

Noun collocates of the target synonyms were collected from two sources: LDOCE and Collocate page in COCA in order to compare similarities and differences among the synonyms in terms of noun collocate.

### 4.2.1 Noun Collocates from LDOCE

Sample sentences found in LDOCE were used to identify noun collocates of *unexpected*, *unforeseen*, and *unanticipated*. The nouns which were modified by the target synonyms were extracted and presented in Table 4.2.

**Table 4.2***Noun Collocates of the Target Synonyms in LDOCE*

Synonyms	Noun collocates
<b>unexpected</b>	danger, dive, effect, occurrence, position (location or condition), results, source, strategy, warmth
<b>unforeseen</b>	breakdowns, changes, circumstances consequences, delays, difficulty, emotions, events, situation
<b>unanticipated</b>	consequences, costs, events, interaction, obstacles, results, ways

Noun collocates of each synonym were compared in order to identify contexts in which two or more synonyms can be used interchangeably. For this reason, the synonyms were put into three pairs: unexpected – unforeseen; unexpected – unanticipated, and unforeseen – unanticipated as shown in Table 4.3.

**Table 4.3**

*Comparisons of Noun Collocates Shared by the Target Synonyms*

<b>Synonyms</b>	<b>Shared noun collocates</b>
<b>unexpected - unforeseen</b>	1. occurrence – events 2. results – consequences 3. position (condition) – situation
<b>unexpected unanticipated</b>	1. occurrence – events 2. results – consequences
<b>unforeseen unanticipated</b>	1. events 2. consequences 3. circumstances – ways (conditions) 4. difficulty – obstacles
<b>unexpected unforeseen unanticipated</b>	1. occurrence – events 2. results – consequences

Firstly, it was shown that *unexpected* can describe a physical position as in *unexpected places* or *unexpected positions*. However, the context in which *unexpected* and *unforeseen* are able to be used interchangeably describes a state or a condition that was not expected rather than the physical location.

Secondly, it was found that *unexpected* and *unanticipated* were able to be used interchangeably in only two contexts e.g., to describe events and results.

Thirdly, *unforeseen* and *unanticipated* were revealed to be the most prominent pair because they can appear in four contexts e.g., to describe unexpected conditions, consequences, difficulty, and events. At this point, it can be stated that *unforeseen* and *unanticipated* can be used more interchangeably than *unexpected* and *unforeseen* and *unexpected* and *unanticipated*. However, statistical data from COCA is necessary to confirm the observation.

### 4.2.2 Noun Collocates from COCA

In addition to LDOCE, COCA was also consulted in order to generate three noun collocate lists for the synonyms. In Table 4.4, each list contains a total of 30 nouns which were selected based on their frequencies and MI scores ( $\geq 3$ ) (Cheng, 2012; Hunston, 2002).

**Table 4.4**

*Noun Collocates of the Target Synonyms in COCA*

Rank	Unexpected			Unforeseen			Unanticipated		
	Noun Collocate	Frequency	MI Value	Noun Collocate	Frequency	MI Value	Noun Collocate	Frequency	MI Value
1	event	326	3.53	consequence	146	7.65	consequence	67	7.13
2	turn	278	4.76	circumstance	133	7.72	effect	39	4.36
3	finding	215	4.64	event	112	5.44	event	35	4.36
4	twist	186	6.70	problem	97	3.86	outcome	32	5.92
5	surprise	151	4.22	change	32	3.14	cost	28	4.26
6	journey	147	4.74	effect	30	3.38	change	27	3.50
7	expense	131	4.56	development	29	3.56	result	27	3.57
8	pleasure	114	4.14	expense	26	5.68	expense	18	5.75
9	consequence	113	3.83	complication	23	7.26	finding	17	5.03
10	visit	113	3.87	challenge	22	4.06	development	14	3.11
11	guest	111	3.54	cost	20	3.18	challenge	14	4.01
12	visitor	111	4.23	crisis	20	4.36	demand	14	4.66
13	gift	95	3.20	accident	20	4.84	situation	13	3.12
14	discovery	94	4.26	difficulty	20	5.12	benefit	13	3.67
15	outcome	90	3.26	emergency	18	4.65	risk	12	3.24
16	bonus	80	5.01	disaster	18	5.13	increase	11	4.14
17	appearance	68	3.33	obstacle	17	6.30	revenue	11	4.58
18	arrival	58	4.38	risk	16	3.06	inflation	9	5.53
19	pregnancy	57	4.00	possibility	16	4.12	growth	8	3.06
20	delay	55	4.20	contingency	15	7.96	direction	8	3.33
21	insight	46	3.35	benefit	14	3.18	exit	8	5.75
22	shock	45	3.34	incident	13	4.44	reaction	7	3.72
23	joy	43	3.31	delay	13	5.57	interaction	7	4.20
24	encounter	36	3.87	injury	10	3.64	delay	7	5.28
25	surge	36	4.39	outcome	10	3.64	occurrence	7	6.65
26	departure	32	3.94	danger	10	3.88	crisis	6	3.22
27	complication	31	4.24	advantage	9	3.30	failure	6	3.34
28	kindness	31	4.83	calamity	9	8.06	circumstance	6	3.85
29	obstacle	30	3.67	illness	7	4.02	disaster	6	4.15
30	reward	29	3.19	tragedy	7	4.48	difficulty	5	3.72

Five findings relevant to noun collocates will be discussed in terms of shared and different noun collocates of each synonym, and semantic preference of each synonym.

**4.2.2.1 Shared Noun Collocates.** In Table 4.5, it is shown that *consequences*, *events*, *expenses*, *outcome*, and *delay* frequently co-occur with all of the synonyms.

**Table 4.5**

*Shared Noun Collocates of the Target Synonyms*

Synonyms	Unexpected	Unforeseen	Unanticipated
		consequences	
		delay	
<b>Collocates</b>		events	
		expenses	
		outcome	
<b>Total</b>		5	

However, in Table 4.6, *unforeseen* and *unanticipated* share 10 noun collocates, whereas *unexpected* shares only two nouns with *unforeseen* and one noun with *unanticipated*. The comparison of noun collocates in Table 4.6 also illustrates that *unforeseen* and *unanticipated* can be used more interchangeably.

**Table 4.6**

*Comparison of Shared Noun Collocates of the Target Synonyms*

Pairs of Synonyms	Unexpected - Unforeseen	Unexpected - Unanticipated	Unforeseen - Unanticipated
			benefit
			circumstance
			change
			challenge
<b>Collocates</b>	complication	finding	cost
	obstacle		crisis
			difficulty
			disaster
			effect
			development
<b>Total</b>	2	1	10

The shared collocation can be explained by Sinclair's description (2004) of collocation as the way meaning is created through the combinations of the co-selected

words. It can be observed that *event* and *consequence* co-occur with *unexpected*, *unforeseen*, and *unanticipated* in high frequencies. This can be explained by the association between the core definition of the three synonyms discussed in 4.1 and the definitions of co-selected nouns *event* and *consequence*.

An *event* is broadly defined as ‘a thing that happens’ (Oxford Advanced Learner's Dictionary, n.d.). Therefore, it is possible for nouns in Table 4.4 that share a similar semantic field with *event* to co-occur with the target synonyms. These words include *delay*, *surprise*, *change*, *crisis*, *accident*, *incident*, *emergency*, *situation*.

According to Oxford Advanced Learner's Dictionary (n.d.), *consequence* is defined as ‘a result of something that has happened, especially an unpleasant result’. According to Partington’s observation on how connotation of a word is derived from its collocation (1998), the combinations of the target synonyms with *consequence* have revealed possible negative connotations of the target synonyms imparted by the definition of *consequence*.

**4.2.2.2 Different Noun Collocates of Unexpected.** In 4.2.3.1, *unexpected* was found to share the least number of noun collocates among the three synonyms. Most of the noun collocates of *unexpected*, such as *turn*, *twist*, *journey*, *pleasure*, *visit*, or *guest* in Table 4.4 do not appear in the lists of *unforeseen* and *unanticipated*. According to this finding, it would be uncommon to come across *unforeseen twist*, *unforeseen guest*, or *unanticipated pleasure*. The findings on noun collocates in Table 4.4 also indicate that *unexpected* is able to co-occur with nouns associated with humans and emotions, for instance, *guest*, *visitor*, *surprise*, *joy*, *pleasure*, *shock*, and *kindness* whereas *unforeseen* and *unanticipated* may not be able to.

**4.2.2.3 Different Noun Collocates of Unforeseen.** In Table 4.4, it is noticeable that *circumstance* is reported to be the second most frequently co-occurring noun collocate of adjective *unforeseen* (133 tokens). The higher MI value of *unforeseen* and *circumstance* (7.72) also suggests that the two words are strongly associated (Hunston, 2002). In contrast, the same collocate is reported to have significantly lower MI values (3.85) and fewer co-occurrences with *unanticipated* (6

tokens). In addition, the combination of *unexpected* and *circumstance* cannot be found in its top 30 noun collocate list.

#### 4.2.2.4 Different Noun Collocates of Unforeseen and Unanticipated.

Although *consequence* was discussed in 4.2.3.1 as one of the noun collocates shared by the three synonyms, it collocates more significantly with *unforeseen* and *unanticipated* than with *unexpected*. In Table 4.4, it can be seen that *consequence* not only appears as the most frequent noun collocate of the two adjectives, but its collocational strength with *unforeseen* (MI = 7.65) and *unanticipated* (MI = 7.13) is almost two times greater than its collocational strength with *unexpected* (MI = 3.83).

**4.2.2.5 Semantic Preferences of the Target Synonyms.** According to Stubbs (2001), a semantic preference refers to a co-selection of one word with another word due to a shared semantic field. For example, *undergo* was shown to be used together with words belonging to two sets of semantic fields including *medicine* (e.g., *treatment*, *hysterectomy*, and *surgery*) and *changes* (e.g., *changes*, and *transformation*).

In 4.2.2.1, *unexpected*, *unforeseen*, and *unanticipated* were frequently used to describe event, consequence, and other nouns found in Table 4.4 which share close semantic fields with event and consequence, for instance, *accident*, *circumstance*, *consequence*, *crisis*, and *situation*. In addition, there are also other nouns which denote other semantic fields such as *joy*, *kindness*, *pleasure*, *shock*, *surprise*, and *visitor* etc., but they belong to noun collocates of *unexpected*. The different noun collocates of the target synonyms may be explained by the fact that the synonyms do not share the same number and types of semantic preferences. In order to investigate semantic preferences of the synonyms, their noun collocates in Table 4.4 were labelled and categorized based on their meaning found in KWIC. The semantic categories of the synonyms are presented in Table 4.7.

**Table 4.7***Comparison of Semantic Preferences of the Target Synonyms*

Semantic Categories	Noun Collocates		
	Unexpected	Unforeseen	Unanticipated
1. Type of event	appearance arrival departure discovery event finding journey visit	change development event possibility	development direction event exit finding interaction occurrence reaction situation
2. Effect	outcome	effect outcome	effect result outcome
3. Favorable outcome	bonus gift insight reward	advantage benefit	benefit growth revenue
4. Unfavorable outcome	complication consequence delay encounter expense obstacle pregnancy surge turn twist	accident calamity challenge circumstance complication consequence contingency cost crisis danger delay difficulty disaster emergency expense illness incident injury obstacle problem risk tragedy	challenge change circumstance consequence cost crisis delay demand difficulty disaster expense failure increase inflation risk
5. Person	guest visitor		
6. Emotion	joy kindness pleasure shock surprise		

In Table 4.7, it can be seen that all of the synonyms are highly interchangeable because of their similarities in semantic preferences, especially their association with an unfavorable outcome. Although nouns such as *encounter*, *pregnancy*, and *circumstance* may not have explicit connotations unlike *delay*, *consequence*, or *crisis*, KWIC taken from COCA revealed that the combinations of the target synonyms with these words in (1), (2), (3), and (4) resulted in negative connotations.

#### Examples of KWIC from COCA

(1) **Unexpected encounters** between animals and airplanes have caused hundreds of thousands of wildlife deaths.

(2) ...Clara and Stephanie were denied the opportunity to attend university as a result of **unexpected pregnancies**.

(3) Issues can arise due to **unforeseen circumstances**, such as when weather conditions affect the quality of roads.

(4) The cancellation was a "joint decision" prompted by **unanticipated "circumstances."**

Although the four semantic categories shared among *unforeseen* and *unanticipated* suggest they are highly interchangeable, *unexpected* is different from the other two adjectives because it appears to be more associated with another two semantic fields namely *to describe a person* or *emotion*, as in *unexpected guest/ visitor* or *unexpected joy/ kindness/ pleasure/ shock and surprise*.

Clusters in COCA revealed that *unforeseen* is preferred to be used as a formulaic language as in ‘*due to unforeseen + circumstances/ events/ difficulties*’ at the total of 31 tokens compared to *unexpected* at 16 tokens and *unanticipated* at 2 tokens. KWIC also reveals its communicative function for officially stating or explaining that something unexpected has happened that will prevent an event or situation from continuing normally (Macmillan Dictionary, n.d.).

### 4.3 Degrees of Formality

Symbols provided in LDOCE were collected to identify the synonyms' degrees of formality.

#### 4.3.1 Symbols in LDOCE

##### Figure 4.1

*Symbol of Unexpected in LDOCE*

un·ex·pect·ed /,ʌnɪk'spektɪd ◀ / ●●○

In Figure 2, *unexpected* is accompanied by two red circles in LDOCE which indicate the word is used in medium frequency. However, the red circles were not found with *unforeseen* and *unanticipated*.

##### Figure 4.2

*Symbols of Unanticipated in LDOCE*

un·an·tic·i·pat·ed /,ʌnæn'tɪsɪpeɪtɪd/ AWL SYN unforeseen

In Figure 3, *unanticipated* is shown to be accompanied by two symbols in LDOCE. Firstly, AWL indicates that *unanticipated* belongs in the Academic Word List (Coxhead, 2000) and it appears more frequently in academic texts than in everyday English, unlike *unexpected* and *unforeseen*. This finding suggests *unanticipated* has the highest degree of formality since it is used more frequently in the academic context. Secondly, SYN indicates that *unanticipated* and *unforeseen* are synonymous. However, frequencies per million in COCA are more reliable in identifying degree of formality of each synonym.

#### 4.3.2 Normalized Frequencies of the Target Synonyms

Table 4.8 presents the normalized frequencies across eight genres in COCA of *unexpected*, *unforeseen*, and *unanticipated* from the highest to the lowest. Suggested by ranks and frequencies, the three synonyms do not share the same degree of formality.

**Table 4.8***Ranks and Normalized Frequencies of the Synonyms*

Rank	Unexpected		Unforeseen		Unanticipated	
	Genre	Frequency (Per million)	Genre	Frequency (Per million)	Genre	Frequency (Per million)
1	Magazine	27.08	Academic	2.65	Academic	3.63
2	Fiction	24.06	Web	2.22	Magazine	1.55
3	Academic	20.29	Magazine	2.07	Web	1.07
4	Web	19.15	News	1.81	News	0.83
5	News	19.06	Blog	1.78	Blog	0.78
6	Blog	15.7	Fiction	1.27	Fiction	0.53
7	Spoken	11.23	Spoken	0.81	Spoken	0.36
8	TV/ Movies	8.9	TV/ Movies	0.73	TV/ Movies	0.12

**4.3.2.1 Degrees of Formality of Unexpected.** According to Table 4.8, *unexpected* appears more frequently in two genres, namely Magazine (Frequency = 27.08 per million words) and Fiction (Frequency = 24.06 per million words). However, it was also found that the word is used in Academic (Frequency = 20.29 per million words), Web (Frequency = 19.15 per million words), and News (Frequency = 19.06 per million words). It appears that *unexpected* appears in both formal and informal contexts. The evidence can also be found in Table 4.4. It can be seen that the target synonym expresses lower formality when it co-occurs with nouns used in everyday English such as *arrival, bonus, delay, departure, gift, guest, journey, joy, kindness, pleasure, pregnancy, reward, shock, surge, surprise, turn, twist, visit, and visitor*. On the contrary, the target synonym expresses higher formality when it co-occurs with nouns such as *complication, consequence, discovery, expense, obstacle, and outcome*.

**4.3.2.2 Degrees of Formality of Unforeseen and Unanticipated.** In Table 4.8, *unforeseen* and *unanticipated* occur with the highest frequencies in Academic genre. However, the two synonyms do not share similar degrees of formality. It is clearly visible that the frequency of *unanticipated* in Academic genre is approximately three times higher than its frequencies in the other genres. However, the frequency of *unforeseen* in Academic genre compared to its frequencies in the other genres is not as significant as *unanticipated*. The finding suggests that *unanticipated* has a higher

degree of formality than both *unforeseen* and *unexpected* since the word is more predominantly used in the academic field.



## CHAPTER 5

### DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Summary of the Findings

This corpus-based research aims at identifying the similarities and differences between *unexpected*, *unforeseen*, and *unanticipated* in terms of their meanings, noun collocates, and degrees of formality. The findings are summarized below.

##### 5.1.1 Meaning

**5.1.1.1. Similarity in Meaning.** LDOCE, noun collocates, and semantic preferences suggested that *unexpected*, *unforeseen*, and *unanticipated* share a core meaning which allows them to be used interchangeably. The synonyms' meaning is associated with a situation, an effect, or something that happened too quickly to be prepared for, especially an unfavorable event.

**5.1.1.2 Difference in Meaning.** Sample sentences in LDOCE and distinct types of semantic preferences of *unexpected* suggested that the synonym can additionally associate with nouns referring to humans and emotions such as *guest*, *visitor*, *warmth*, or *pleasure*.

##### 5.1.2 Noun Collocates

**5.1.2.1. Shared Noun Collocates.** Data from COCA suggest that the synonyms can be used interchangeably with at least five nouns including *consequences*, *delay*, *events*, *expenses*, and *outcome*.

**5.1.2.2. Similarity between Unforeseen and Unanticipated.** *Unforeseen* and *unanticipated* have a higher degree of synonymy because they were found to share 15 out of 30 noun collocates, while *unexpected* and *unforeseen* shared 7 noun collocates and *unexpected* and *unanticipated* shared 6 noun collocates.

### 5.1.2.3. Noun Collocates and Semantic Preferences of Unexpected.

*Unexpected* is not as interchangeable as *unforeseen* and *unanticipated* are. This is because both noun collocates and semantic preferences of *unexpected* differ from those of *unforeseen* and *unanticipated*. Unlike the other two synonyms, *unexpected* frequently co-occurs with noun collocates i.e., *guest, visitor, joy, kindness, pleasure, shock, and surprise*.

**5.1.2.4. Unforeseen Circumstances.** Data from COCA suggested that *unforeseen* and *circumstances* are used together in high frequency. In contrast, *circumstance* is used with *unanticipated* in significantly lower frequency. Additionally, *unexpected circumstances* may co-occur in a lower frequency so that the combination was not included in the list.

## 5.1.3 Degrees of Formality

**5.1.3.1 Degrees of Formality of Unexpected.** COCA suggests that *unexpected* is used in various degrees of formality depending on which genre it associates with. However, *unexpected* is used more frequently with everyday English nouns.

**5.1.3.2 Degrees of Formality of Unforeseen.** *Unforeseen* has a lower degree of formality than *unanticipated*. Although *unforeseen* has the highest frequency in Academic genre, the difference between its frequency in Academic genres and other genres is not as significant as that of *unanticipated*.

**5.1.3.3 Degrees of Formality of Unanticipated.** LDOCE and COCA indicate that *unanticipated* has the highest degree of formality because it is predominantly used in academic context.

## 5.2 Discussion

The findings regarding meaning, noun collocates, and degrees of formality of the target synonyms are discussed below.

### 5.2.1 Meaning and Collocation

The three synonyms may be used interchangeably in certain contexts because a synonym may substitute for another synonym as long as their meaning and semantic preferences overlap (Jackson & Amvela, 2007). The current study found that meaning and collocation are correlated, as meaning has been observed to derive from a string of words or phrase rather than from a single word (Cheng, 2012; Hunston, 2002; Murphy, 2010; Partington, 1998). To illustrate this point, the three adjectives may substitute for one another when they modify most of the nouns referring to unwanted outcomes. However, different noun collocates of the three synonyms suggest that *unforeseen* and *unanticipated* neither share the same semantic preference nor the connotative meaning with *unexpected* in two contexts including describing an emotion and a human. As a result, *unforeseen* and *unanticipated* may not be able to substitute for *unexpected* when it modifies a noun referring to *emotion* and *human* such as *unexpected guest/ visitor* or *unexpected joy/ kindness/ pleasure/ shock and surprise*.

### 5.2.2 Noun Collocates

It can be said that corpus data about word collocation is one of the most powerful sources in distinguishing loose synonyms (Lertcharoenwanich & Phoocharoensil, 2022).

Firstly, the findings on meanings of the synonyms collocation and meaning are significantly associated. In 5.2.1, different semantic preferences and connotative meaning were able to be identified by the co-occurrences between target synonyms and their noun collocates, as illustrated in Phoocharoensil's study (2021). However, the methodology was less effective with noun collocates that appear neutral such as *encounter*, *pregnancy*, and *circumstance*. It was necessary that KWIC of each collocation be consulted to identify its connotative meaning. The KWIC retrieved from COCA revealed that the collocation of the target synonyms and the neutral words resulted in negative connotation.

Secondly, a pair of words which have a higher degree of synonymy can be identified through the comparisons of the noun collocates of each synonym (Lertcharoenwanich & Phoocharoensil, 2022; Petcharat & Phoocharoensil, 2017; Thongpan, 2022). It was found that *unforeseen* and *unanticipated* share many noun

collocates that appear to be able to substitute for one another in many contexts. However, it is noticeable that *unforeseen* significantly co-occurs with *circumstance* while *unanticipated* does not. This finding reveals that two synonyms with close semantic links such as *unforeseen* and *unanticipated* may not always have the same collocates, and possibly require more effort to learn and acquire (Laufer, 1990).

### 5.2.3 Degree of Formality

The findings on degrees of formality are in line with Liu's comment on synonyms (2014) that one of the two words which share the same meaning may be used with more formality than the other word. The frequencies can clearly identify degrees of formality of *unforeseen* and *unanticipated* because they appear more frequently in formal contexts. However, *unexpected* has high frequencies in both formal and informal contexts. Phoocharoensil (2010) reported that verb synonyms such as *ask*, *beg*, *plead*, *request*, and *appeal* co-occur with nouns expressing various degrees of formality. Therefore, the noun collocate list of *unexpected* was consulted. It was found that the degree of formality of *unexpected* is associated with the degree of formality of the noun it collocates with. Because most of the noun collocates of *unexpected* are used in spoken English, *unexpected* has the lowest degree of formality.

### 5.2.4 Usage of Unforeseen in Formulaic Language

The frequency which 'due to *unforeseen circumstances*' appears in COCA suggests the chunk is preferred to be used as a formulaic language for a specific communicative function compared to its synonyms. Schmitt (2010) noted that the use of formulaic language improves fluency of the speakers because formulaic languages can be instantly produced as they are already processed into single clauses to enhance the working language memory of the speakers.

## 5.3 Conclusion

This study investigates the similarities and differences among three English synonyms including *unexpected*, *unforeseen*, and *unanticipated* in terms of meanings, noun collocates, and degrees of formality. LDOCE and COCA were consulted. The findings suggest that the target synonyms have the characteristics of loose synonyms

based on the following three findings. First of all, the three synonyms generally mean something that was not expected to happen, especially unwanted events. Nevertheless, the meaning of *unexpected* revealed by its noun collocates show that it can associate with types of emotions or persons. Secondly, *unforeseen* and *unanticipated* were found to share more similarity in terms of interchangeable noun collocates and semantic preferences than *unexpected*. The latter synonym selects types of emotions and persons as it collocates while the other synonyms do not. Two additional findings about noun collocates indicate that of all three synonyms, *unforeseen* strongly collocates with *circumstances*, and that *unforeseen* is preferred to be used as the phrase *due to unforeseen circumstances*. Finally, the synonyms do not share the same degrees of formality. *Unanticipated* was revealed to have the highest degree of formality, indicated by its highest frequency in academic texts. However, *unforeseen* was reported to have a lower degree of formality than *unanticipated*. Meanwhile, the formality of *unexpected* appears to be relative to the formality of the noun that it collocates with.

#### 5.4 Implications

The findings from the investigation of the three synonyms reflect the following implications on vocabulary teaching.

In terms of definitions, it was found that the three synonyms share a core meaning referring to a type of event or an outcome, but they are preferred to be used in a negative sense as indicated by their noun collocates. In fact, it is clear that the three synonyms share a core meaning and may not pose much learning burden to students; however, there are English vocabulary, for instance, *change (n.)* which may refer to, at least, two separate meanings 1) the act of becoming different or 2) money in the form of coins. Webb and Nation (2017) suggested that the learning burden will be reduced if attention is paid to a word's pragmatics, for example, guessing from context rather than its semantics, because speakers will apply their understanding to the context in which the word is used.

The findings on noun collocates suggest that one of the reasons synonyms are more burdensome to learn is that they do not always have the same collocates (Laufer, 1990). According to O'Keeffe, McCarthy, and Carter (2007), collocations are the result of probabilities that two or more words are used repeatedly in combinations. While it

may be difficult to use our intuition to explain collocations to our students, the application of corpus data can ascertain how frequently native speakers use two or more words in combinations.

The final implication is related to the selection of synonyms and typical collocations to be taught. Words can be classified according to their frequency or their different types of discourse. These classifications help teachers identify which word is more important (Webb & Nation, 2017). For example, we may give priority to the synonym with the highest frequency in the corpus, which is *unexpected*. As students pursue higher education, introducing an academic word such as *unanticipated* may be necessary for the comprehension of academic discourse. Meanwhile, we may consider adding chunks to our syllabus because of their pragmatic values in communication. For example, *due to unforeseen circumstances* was revealed to have a pragmatic function in communication because it is more frequently used as a prepositional phrase to explain or clarify that something unexpected has happened that will prevent an event or situation from continuing normally (Macmillan Dictionary, n.d.). With samples of KWIC, teachers can raise students' awareness that the phrase also creates vagueness to the message because the cause was not explicitly mentioned.

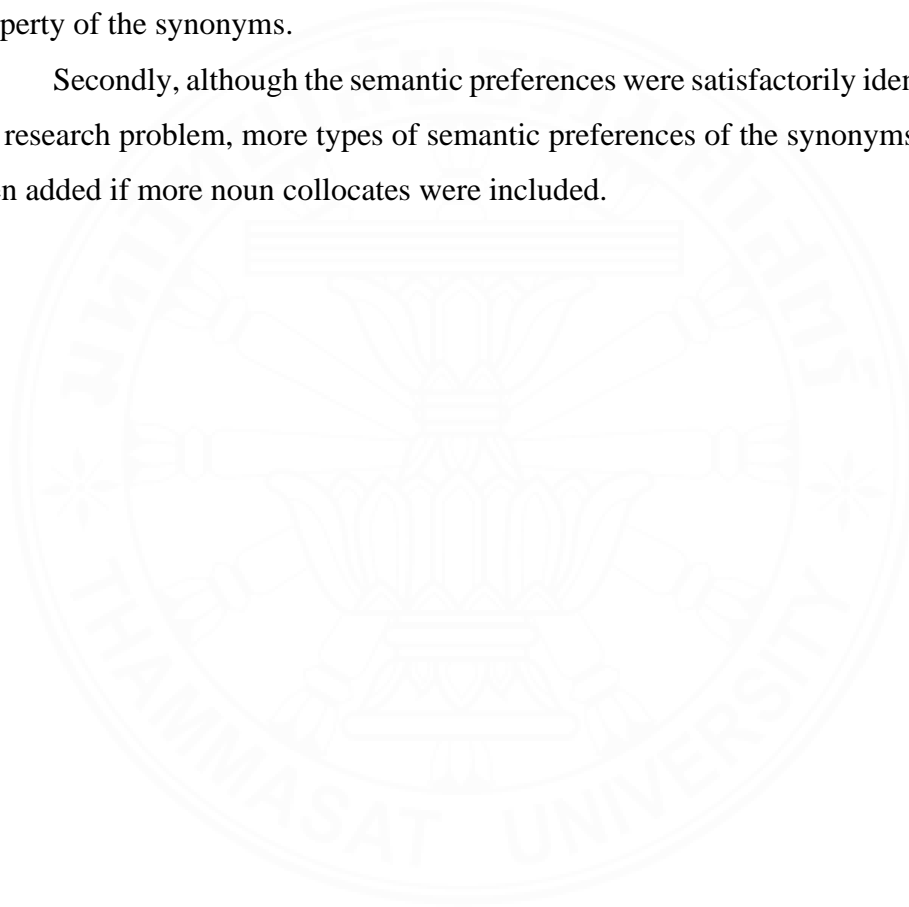
## 5.5 Recommendations and Limitations

It can be said that the methodology for studying near-synonyms has been well established, yet there are English synonyms that are still worth a systematic investigation. Verb synonyms that have high frequency in corpora can be particularly interesting to study not only because it will benefit the way we teach or clarify the synonyms to students, but also it will reveal different grammatical patterns the verbs may appear with. Furthermore, it is encouraged to compare findings from one corpus of a variation of English to another corpus of a variation of English such as comparing the findings from COCA to BNC (British National Corpus) or CANCODE (The Cambridge and Nottingham Corpus of Discourse in English) so that findings can reflect differences between two English varieties. Lastly, it is also recommended to analyze synonym distributions in various genres in conjunction with their concordance lines to identify the degree of formality of each synonym.

Nevertheless, the methodology and findings could be significantly improved if time permits in the following aspects.

Firstly, referring to literature review, different grammatical patterns found in KWIC appear to be one of the most effective criteria in differentiating verb synonyms. Therefore, the criterion was not adopted in the current study which investigates adjective synonyms. However, it may be possible that different grammatical patterns may appear if the concordance lines were thoroughly studied despite the syntactic property of the synonyms.

Secondly, although the semantic preferences were satisfactorily identified as per the research problem, more types of semantic preferences of the synonyms could have been added if more noun collocates were included.



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## **APPENDICES**

## APPENDIX A

### NOUN COLLOCATES OF UNEXPECTED

+ NOUN		NEW WORD	
326	3.53		event
278	4.76		turn
215	4.64		finding
186	6.7		twist
151	4.22		surprise
147	4.74		journey
131	4.56		expense
114	4.14		pleasure
113	3.83		consequence
113	3.87		visit
111	3.54		guest
111	4.23		visitor
95	3.2		gift
94	4.26		discovery
90	8.43		hobbit
84	3.26		outcome
80	5.01		bonus
68	3.33		appearance
58	4.38		arrival
57	4		pregnancy
55	4.2		delay
46	3.35		insight
45	3.34		shock
43	3.31		joy
36	3.87		encounter
36	4.39		surge
32	3.94		departure
31	4.24		complication
31	4.83		kindness
30	3.67		obstacle
29	3.19		reward
28	3.51		blow
28	4.22		delight
27	3.43		revelation
27	4.06		treat
27	5.11		setback
26	3.54		treasure
25	6.47		windfall
24	4.35		burst

23	4.29		dividend	
23	4.32		occurrence	
22	4.26		boost	
19	5.69		detour	
17	3.6		happening	
17	3.81		resignation	
16	3.87		beneficiary	
16	5.94		juxtaposition	
15	3.49		breakthrough	
15	5.35		turbulence	
14	3.02		sensation	
13	4.07		inheritance	
13	4.74		outage	
13	5.06		breakout	
12	3		warmth	
12	3.39		emergence	
12	4.99		boon	
11	3.42		disruption	
11	4.28		interruption	
11	6.02		snag	
10	3.68		cushion	
10	3.73		bounty	
10	3.84		generosity	
10	4.6		glitch	
10	4.77		tenderness	
9	3.06		intimacy	
9	3.06		compliment	
9	3.14		welcome	
9	3.58		hue	
9	3.83		brightness	
9	3.9		termination	
9	4.06		by-product	
9	4.33		vogue	
9	4.7		jolt	
9	5.42		epilepsy	
8	3.16		leisure	
8	3.39		reversal	
8	3.53		diversion	
8	3.7		perk	
8	4.21		shortfall	
7	3.41		contingency	
7	3.45		maneuver	
7	3.9		find	
7	3.93		outburst	

6	3.13	acceleration	
6	3.23	fluctuation	
6	3.28	sting	
6	3.35	intrusion	
6	3.99	infancy	
6	4.02	vista	
6	4.03	calamity	
6	4.26	malfunction	
6	4.87	summons	
6	5.13	reprieve	
6	6.46	underachievement	
5	3.01	facet	
5	3.31	sweetness	
5	3.37	richness	
5	3.37	frost	
5	3.52	misfortune	
5	3.54	locale	
5	3.67	flair	
5	3.69	roadblock	
5	3.72	resurgence	
5	3.91	pang	
5	4.82	downpour	
5	5.19	thaw	
5	5.25	gentleness	
5	5.4	side-effect	
4	3.02	ramification	
4	3.08	slap	
4	3.09	nighttime	
4	3.12	repercussion	
4	3.15	gust	
4	3.19	asbestos	
4	3.23	adversity	
4	3.32	vigor	
4	3.42	pairing	
4	3.49	tang	
4	3.6	heroism	
4	3.66	glimmer	
4	3.91	hitch	
4	3.92	audacity	
4	3.94	snowstorm	
4	4.27	softness	
4	4.68	lightness	
4	5.05	curveball	
4	6.18	homesickness	

4	6.35	swiftness	
3	3.04	flourish	
3	3.06	recurrence	
3	3.08	rebirth	
3	3.23	heartbreak	
3	3.29	vignette	
3	3.35	astonishment	
3	3.36	spasm	
3	3.43	shiver	
3	3.52	rupture	
3	3.62	overture	
3	3.68	confluence	
3	3.7	inevitability	
3	3.75	phrasing	
3	3.77	normalcy	
3	3.78	dislocation	
3	3.86	hiccup	
3	3.96	bonanza	
3	4.06	standstill	
3	4.12	downtime	
3	4.15	indignity	
3	4.4	sensuality	
3	4.44	unpredictability	
3	4.5	friendliness	
3	4.9	upset	
3	4.95	overrun	
3	5.12	upsurge	
3	5.46	simpleton	
3	5.59	reappearance	
2	3.01	tributary	
2	3.02	afterthought	
2	3.02	sheath	
2	3.03	credence	
2	3.05	shifting	
2	3.07	agility	
2	3.1	vertigo	
2	3.12	outpouring	
2	3.13	inversion	
2	3.14	annihilation	
2	3.17	jackpot	
2	3.19	hamster	
2	3.19	lair	
2	3.21	contentment	
2	3.24	diaphragm	

2	3.24	rationalization	
2	3.24	fling	
2	3.26	gleam	
2	3.27	triplet	
2	3.32	exuberance	
2	3.33	deliverance	
2	3.35	metamorphosis	
2	3.42	shyness	
2	3.45	reggae	
2	3.49	rioting	
2	3.55	wiggle	
2	3.55	devaluation	
2	3.56	pulsar	
2	3.57	sampler	
2	3.59	aggressiveness	
2	3.6	desolation	
2	3.6	twinge	
2	3.63	ferocity	
2	3.64	coolness	
2	3.64	revulsion	
2	3.67	allergen	
2	3.71	upshot	
2	3.72	strangeness	
2	3.77	flattery	
2	3.78	aftershock	
2	3.8	flutter	
2	3.82	hardness	
2	3.84	shake-up	
2	3.84	pathos	
2	3.89	sentimentality	
2	3.9	convulsion	
2	3.9	vagaries	
2	3.9	lurch	
2	3.93	arbor	
2	3.94	elation	
2	3.96	plasticity	
2	3.98	serendipity	
2	3.98	stubbornness	
2	4.03	pug	
2	4.09	hideaway	
2	4.14	stumble	
2	4.15	godsend	
2	4.27	bequest	
2	4.33	aside	

2	4.34	cliffhanger	
2	4.37	tiding	
2	4.38	playfulness	
2	4.41	rapprochement	
2	4.45	digression	
2	4.46	heaviness	
2	4.47	duplicity	
2	4.5	wildness	
2	4.55	harshness	
2	4.6	crevasse	
2	4.63	disconnection	
2	4.8	denouement	
2	4.88	layover	
2	4.9	wellspring	
2	4.91	poignancy	
2	4.95	loveliness	
2	4.97	forethought	
2	5	bedfellow	
2	5.05	rectitude	
2	5.15	flinch	
2	5.15	cuteness	
2	5.15	frankness	
2	5.16	miscue	
2	5.25	sunblock	
2	5.29	guffaw	
2	5.36	swerve	
2	5.41	singleton	
2	5.42	transient	
2	5.45	suddenness	
2	5.55	frisson	
2	5.56	graciousness	
2	5.66	conductance	
2	5.8	peekaboo	
2	5.84	eclecticism	
2	5.88	unavailability	
2	6.46	circumnavigation	
2	6.48	heatwave	
2	6.72	neighborliness	
2	7.08	sheathing	
2	7.13	brightening	
2	7.22	freesia	
2	7.97	benefice	

## APPENDIX B

### NOUN COLLOCATES OF UNFORESEEN

+ NOUN		NEW WORD
146	7.65	consequence
133	7.72	circumstance
112	5.44	event
97	3.86	problem
32	3.14	change
30	3.38	effect
29	3.56	development
26	5.68	expense
23	7.26	complication
22	4.06	challenge
20	3.18	cost
20	4.36	crisis
20	4.84	accident
20	5.12	difficulty
19	2.47	result
18	4.65	emergency
18	5.13	disaster
17	6.3	obstacle
16	3.06	risk
16	4.12	possibility
15	2.91	opportunity
15	7.96	contingency
14	3.18	benefit
13	4.44	incident
13	5.57	delay
12	2.11	force
11	2.37	technology
11	2.53	condition
10	2.14	situation
10	3.64	injury
10	3.64	outcome
10	3.88	danger
9	2.46	factor
9	3.3	advantage
9	8.06	calamity
8	2.11	series
7	2.04	attack
7	4.02	illness
7	4.48	tragedy

7	6.05	occurrence	
7	6.25	catastrophe	
7	7.15	by-product	
7	7.38	repercussion	
6	2.22	trouble	
6	2.32	direction	
6	2.74	failure	
6	4.74	encounter	
6	7.31	glitch	
5	2.41	increase	
5	2.64	enemy	
5	2.65	storm	
5	2.73	weather	
5	2.81	construction	
5	2.91	requirement	
5	2.96	coverage	
5	3.16	combination	
5	3.41	shift	
5	3.62	shock	
5	4.57	liability	
5	5.35	breakthrough	
5	6.13	setback	
5	8.33	snag	
4	2.17	conflict	
4	2.25	demand	
4	2.32	damage	
4	2.43	surprise	
4	2.46	supply	
4	3.15	discovery	
4	3.76	miracle	
4	3.76	harm	
4	4.34	traveler	
4	4.51	transit	
4	5.41	disruption	
4	5.61	hurdle	
3	2.09	intervention	
3	2.26	manner	
3	2.38	interaction	
3	2.5	athlete	
3	2.51	potential	
3	2.78	employment	
3	2.87	implication	
3	2.98	evil	
3	3.01	adventure	

3	3.04	barrier	
3	3.12	innovation	
3	3.32	legacy	
3	3.7	trading	
3	3.71	revelation	
3	3.85	repair	
3	4.19	flexibility	
3	4.29	dilemma	
3	4.4	leap	
3	5.12	hardship	
3	6.71	malfunction	
3	6.86	windfall	
3	8.09	firmware	
3	8.11	side-effect	
2	2.02	initiative	
2	2.02	height	
2	2.08	philosophy	
2	2.12	passion	
2	2.16	total	
2	2.19	entertainment	
2	2.25	consideration	
2	2.28	insight	
2	2.29	protest	
2	2.34	evolution	
2	2.35	drama	
2	2.45	destruction	
2	2.45	finance	
2	2.52	expansion	
2	2.54	instance	
2	2.54	wisdom	
2	2.78	dispute	
2	2.8	boom	
2	2.87	bias	
2	2.92	civilization	
2	3.04	equation	
2	3.07	fitness	
2	3.08	chaos	
2	3.18	lawmaker	
2	3.27	reminder	
2	3.52	disclosure	
2	3.61	flaw	
2	3.65	casualty	
2	3.78	modification	
2	3.78	hazard	

2	3.88	instant	
2	3.89	triumph	
2	3.9	bump	
2	3.97	remedy	
2	4.02	litigation	
2	4.05	vulnerability	
2	4.1	hedge	
2	4.17	fairness	
2	4.26	emergence	
2	4.27	defect	
2	4.43	discretion	
2	4.56	policymaker	
2	4.74	instability	
2	5.04	downturn	
2	5.04	fallout	
2	5.27	interruption	
2	5.47	ramification	
2	5.47	upheaval	
2	5.68	adversity	
2	5.8	slew	
2	6.39	juxtaposition	
2	6.54	entanglement	
2	7.81	overrun	
1	4.09	installment	
1	4.14	ripple	
1	4.15	revolt	
1	4.26	boredom	
1	4.28	resilience	
1	4.32	havoc	
1	4.32	blindness	
1	4.33	ache	
1	4.36	drawback	
1	4.36	showdown	
1	4.39	bonding	
1	4.43	haul	
1	4.46	vegetarian	
1	4.47	vitality	
1	4.47	debacle	
1	4.49	outage	
1	4.5	embodiment	
1	4.51	voltage	
1	4.53	timetable	
1	4.54	predicament	
1	4.54	undertaking	

1	4.59	slump	
1	4.59	supernova	
1	4.6	gust	
1	4.63	deregulation	
1	4.64	mortal	
1	4.65	misfortune	
1	4.65	domino	
1	4.65	hospitalization	
1	4.72	manufacture	
1	4.73	sheikh	
1	4.77	mitigation	
1	4.78	payday	
1	4.84	compatibility	
1	4.84	individuality	
1	4.89	vista	
1	4.9	detour	
1	4.92	quirk	
1	4.95	groin	
1	4.95	illumination	
1	4.96	dweller	
1	4.96	scheduling	
1	4.99	splendor	
1	5	nation-state	
1	5	assailant	
1	5.03	provocation	
1	5.05	phenotype	
1	5.06	birthplace	
1	5.06	rebuttal	
1	5.08	fervor	
1	5.09	cheesecake	
1	5.1	imperfection	
1	5.17	baton	
1	5.25	blunder	
1	5.27	raptor	
1	5.33	fertilization	
1	5.34	aggressor	
1	5.36	hitch	
1	5.36	cadence	
1	5.39	dishonesty	
1	5.43	mismatch	
1	5.49	incursion	
1	5.5	bombshell	
1	5.51	discord	
1	5.54	confluence	

1	5.57	inevitability	
1	5.58	ultimatum	
1	5.6	drowning	
1	5.61	spacing	
1	5.61	foothold	
1	5.64	minimalist	
1	5.69	craziness	
1	5.72	hiccup	
1	5.78	stratosphere	
1	5.87	tryout	
1	5.87	annexation	
1	5.91	treachery	
1	5.93	reincarnation	
1	6.08	infighting	
1	6.08	backfield	
1	6.1	invisibility	
1	6.11	premonition	
1	6.11	stumbling	
1	6.14	abatement	
1	6.16	life-form	
1	6.18	firefight	
1	6.27	kiln	
1	6.28	uneasiness	
1	6.3	coffeehouse	
1	6.36	perestroika	
1	6.43	serendipity	
1	6.55	carelessness	
1	6.6	viagra	
1	6.66	conflagration	
1	6.78	infirmity	
1	6.79	exigency	
1	6.88	hang-up	
1	6.96	blowback	
1	7	bustle	
1	7.14	overdraft	
1	7.21	hairstylist	
1	7.22	immensity	
1	7.22	blurring	
1	7.23	trapdoor	
1	7.25	denouement	
1	7.26	boondoggle	
1	7.35	unraveling	
1	7.59	gyro	
1	7.91	inundation	

1	8.55		cropper	
1	8.56		comradeship	
1	9.23		brio	
1	9.27		tomfoolery	
1	9.35		abolitionism	
1	9.44		lifeworld	
1	10.48		stripling	



## APPENDIX C

### NOUN COLLOCATES OF UNANTICIPATED

+ NOUN		NEW WORD
67	7.13	consequence
39	4.36	effect
35	4.36	event
33	2.91	problem
32	5.92	outcome
28	4.26	cost
27	3.5	change
27	3.57	result
18	5.75	expense
17	5.03	finding
14	3.11	development
14	4.01	challenge
14	4.66	demand
13	3.12	situation
13	3.67	benefit
12	3.24	risk
11	4.14	increase
11	4.58	revenue
9	2.14	death
9	2.9	behavior
9	5.53	inflation
8	2.12	market
8	2.51	technology
8	3.06	growth
8	3.33	direction
8	5.75	exit
7	2.19	need
7	2.34	source
7	2.41	opportunity
7	2.62	answer
7	2.8	sport
7	2.81	loss
7	3.72	reaction
7	4.2	interaction
7	5.28	delay
7	6.65	occurrence
6	3.22	crisis
6	3.34	failure
6	3.85	circumstance

6	4.15	disaster	
5	2.07	response	
5	2.13	nature	
5	2.16	bill	
5	2.44	impact	
5	2.77	violence	
5	3.02	application	
5	3.35	surprise	
5	3.72	difficulty	
5	4.08	discovery	
5	4.22	shock	
5	5.02	complexity	
5	5.13	obstacle	
5	5.66	complication	
4	2.17	environment	
4	2.65	debt	
4	2.66	species	
4	2.69	turn	
4	3.1	intervention	
4	3.19	requirement	
4	3.37	experiment	
4	4.36	harm	
4	4.75	encounter	
4	5.21	twist	
3	2.05	score	
3	2.16	researcher	
3	2.25	path	
3	2.27	gift	
3	2.31	possibility	
3	2.34	function	
3	2.35	connection	
3	2.37	variety	
3	2.56	victory	
3	2.64	meaning	
3	2.66	emergency	
3	2.81	error	
3	2.85	host	
3	2.88	beauty	
3	3.24	opponent	
3	3.37	reduction	
3	3.45	wonder	
3	3.72	innovation	
3	3.72	variation	
3	3.74	galaxy	

3	3.99	boom	
3	4.53	jump	
3	5.01	expenditure	
3	5.8	paradox	
3	6.03	reversal	
3	6.53	by-product	
3	6.91	glitch	
3	7.46	windfall	
3	12.32	disinflation	
2	2.02	conclusion	
2	2.03	assessment	
2	2.14	billion	
2	2.16	traffic	
2	2.22	teaching	
2	2.26	release	
2	2.26	profit	
2	2.29	fee	
2	2.34	incident	
2	2.34	payment	
2	2.42	bond	
2	2.46	rise	
2	2.48	visitor	
2	2.52	revolution	
2	2.53	potential	
2	2.59	schedule	
2	2.6	gap	
2	2.63	achievement	
2	2.66	alternative	
2	2.67	deficit	
2	2.69	shift	
2	2.73	tale	
2	2.83	planning	
2	2.84	mechanism	
2	2.84	transportation	
2	2.88	curriculum	
2	2.88	insight	
2	2.92	prospect	
2	2.92	settlement	
2	3.06	burden	
2	3.11	testimony	
2	3.38	reward	
2	3.41	grant	
2	3.44	prediction	
2	3.47	hypothesis	

2	3.57	arrival	
2	3.67	alarm	
2	3.68	stimulus	
2	3.74	bonus	
2	3.76	classic	
2	3.81	flash	
2	3.86	repair	
2	3.95	density	
2	3.96	defeat	
2	4.01	ecosystem	
2	4.2	listener	
2	4.23	venue	
2	4.27	surge	
2	4.29	auction	
2	4.31	dilemma	
2	4.38	modification	
2	4.44	methodology	
2	4.47	affection	
2	4.48	instant	
2	4.68	realization	
2	4.82	dividend	
2	5.01	disruption	
2	5.02	radical	
2	5.05	discharge	
2	5.14	hardship	
2	5.28	redemption	
2	5.35	allowance	
2	5.4	setback	
2	5.47	backlash	
2	5.53	downside	
2	5.62	wrinkle	
2	5.94	aesthetics	
2	6.18	adrenaline	
2	6.28	adversity	
2	6.69	spin-off	
2	7.29	outlay	
2	7.68	astrophysics	
2	10.85	conjuncture	
1	4.07	theorist	
1	4.14	aging	
1	4.15	performing	
1	4.17	recycling	
1	4.18	programmer	
1	4.18	succession	

1	4.2	closing	
1	4.23	myriad	
1	4.28	creditor	
1	4.29	prose	
1	4.31	precaution	
1	4.32	amnesty	
1	4.34	anomaly	
1	4.34	instability	
1	4.35	ambiguity	
1	4.38	affect	
1	4.39	layoff	
1	4.42	inheritance	
1	4.46	halt	
1	4.46	font	
1	4.47	formulation	
1	4.48	fascination	
1	4.49	mercury	
1	4.5	openness	
1	4.59	flying	
1	4.6	acceleration	
1	4.62	cache	
1	4.65	demonstrator	
1	4.66	contingency	
1	4.66	swimmer	
1	4.69	resonance	
1	4.69	unrest	
1	4.69	humidity	
1	4.7	gamble	
1	4.71	meltdown	
1	4.72	blockbuster	
1	4.73	coding	
1	4.73	intruder	
1	4.73	facet	
1	4.74	collateral	
1	4.75	helm	
1	4.76	abstraction	
1	4.77	neon	
1	4.8	warranty	
1	4.81	restructuring	
1	4.84	acknowledgment	
1	4.85	cover-up	
1	4.87	experimentation	
1	4.87	interruption	
1	4.88	overlap	

1	4.88	resilience	
1	4.9	upside	
1	5.03	sharing	
1	5.04	landslide	
1	5.05	ailment	
1	5.08	invader	
1	5.09	steward	
1	5.09	convergence	
1	5.15	find	
1	5.15	deterioration	
1	5.17	repercussion	
1	5.21	apprehension	
1	5.23	staffing	
1	5.25	berth	
1	5.25	slowdown	
1	5.25	thunderstorm	
1	5.26	defiance	
1	5.26	polymer	
1	5.29	improvisation	
1	5.34	fumble	
1	5.36	relocation	
1	5.4	metropolis	
1	5.4	toxicity	
1	5.4	slew	
1	5.41	ignition	
1	5.42	pharmaceutical	
1	5.43	torque	
1	5.46	boon	
1	5.47	plutonium	
1	5.48	faucet	
1	5.5	tenderness	
1	5.51	overhead	
1	5.54	gridlock	
1	5.56	scheduling	
1	5.56	unification	
1	5.58	jolt	
1	5.62	trappings	
1	5.64	saver	
1	5.66	rebuttal	
1	5.69	kitty	
1	5.69	interplay	
1	5.7	schema	
1	5.7	blowout	
1	5.75	wormhole	

1	5.79	schoolchild	
1	5.86	biofuel	
1	5.9	irregularity	
1	5.91	companionship	
1	5.98	triad	
1	5.99	juxtaposition	
1	6.01	coffer	
1	6.12	doubling	
1	6.15	synergy	
1	6.2	blackmail	
1	6.23	deductible	
1	6.32	shenanigans	
1	6.33	workflow	
1	6.35	throes	
1	6.38	admonition	
1	6.39	alcove	
1	6.53	realignment	
1	6.61	snag	
1	6.67	homeopathy	
1	6.74	misdeed	
1	6.92	permutation	
1	6.93	implosion	
1	6.95	vagaries	
1	6.96	perestroika	
1	7	letdown	
1	7.02	radioactivity	
1	7.1	curveball	
1	7.13	shrinkage	
1	7.29	largesse	
1	7.38	subsample	
1	7.41	overrun	
1	7.46	unconscious	
1	7.58	upsurge	
1	7.66	cost-effectiveness	
1	7.78	joblessness	
1	8.04	reconfiguration	
1	8.29	preserving	
1	8.35	interdependency	
1	8.4	swiftness	
1	8.89	eclecticism	
1	9.17	self-presentation	
1	9.25	teething	
1	9.3	emergent	
1	9.47	clearness	

1	9.48	checkmate	
1	9.5	languor	
1	9.77	spasticity	
1	9.85	redbud	
1	9.87	solidification	
1	10.18	doctoring	
1	10.27	overspending	
1	10.3	compensator	
1	11.16	thralldom	



## APPENDIX D










### THE FREQUENCIES IN EIGHT GENRES OF UNEXPECTED

SECTION	ALL	BLOG	WEB	TV/M	SPOK	FIC	MAG	NEWS	ACAD
FREQ	17969	2019	2379	1140	1417	2847	3415	2321	2431
WORDS (M)	993	128.6	124.3	128.1	126.1	118.3	126.1	121.7	119.8
PER MIL	18.10	15.70	19.15	8.90	11.23	24.06	27.08	19.06	20.29
SEE ALL SUB-SECTIONS AT ONCE									



## APPENDIX E

### THE FREQUENCIES IN EIGHT GENRES OF UNFORESEEN

SECTION	ALL	BLOG	WEB	TV/M	SPOK	FIC	MAG	NEWS	ACAD
FREQ	1649	229	276	94	102	150	261	220	317
WORDS (M)	993	128.6	124.3	128.1	126.1	118.3	126.1	121.7	119.8
PER MIL	1.66	1.78	2.22	0.73	0.81	1.27	2.07	1.81	2.65
SEE ALL SUB-SECTIONS AT ONCE									



## APPENDIX F

### THE FREQUENCIES IN EIGHT GENRES OF UNANTICIPATED

SECTION	ALL	BLOG	WEB	TV/M	SPOK	FIC	MAG	NEWS	ACAD
FREQ	1087	100	133	15	45	63	195	101	435
WORDS (M)	993	128.6	124.3	128.1	126.1	118.3	126.1	121.7	119.8
PER MIL	1.09	0.78	1.07	0.12	0.36	0.53	1.55	0.83	3.63
SEE ALL SUB-SECTIONS AT ONCE									



**APPENDIX G**

**THE FREQUENCIES OF UNFORESEEN IN THREE-TO-FOUR**

**WORD CLUSTERS**

31	due to unforeseen	4	unforeseen services that arise	6	the face of unforeseen
17	barring some unforeseen	4	unforeseen event that may	6	in case of unforeseen
16	of the unforeseen	4	unforeseen consequences for the	5	to deal with unforeseen
14	of an unforeseen	3	unforeseen consequence of the	5	one of the unforeseen
13	was an unforeseen	3	unforeseen dangers in the	5	due to an unforeseen
11	or other unforeseen	3	unforeseen glitch in the	4	there is an unforeseen
11	could have unforeseen	3	unforeseen national security challenges	4	ready for any unforeseen
10	barring any unforeseen	3	unforeseen issues with its	4	a number of unforeseen
10	to an unforeseen	2	unforeseen changes in the	4	any number of unforeseen
10	barring an unforeseen	2	unforeseen side effect of	4	a series of unforeseen
9	in an unforeseen	2	unforeseen problems or accidents	3	getting injured and unforeseen
9	barring any unforeseen	2	unforeseen events during the	3	to respond to unforeseen
8	number of unforeseen	2	unforeseen events that have	3	to adapt to unforeseen
8	because of unforeseen	2	unforeseen events could still	3	all kinds of unforeseen
7	and the unforeseen	2	unforeseen cost of civilization	3	there are no unforeseen
7	new and unforeseen	2	unforeseen costs related to	3	data in an unforeseen
7	dramatic and unforeseen	2	unforeseen attacks on the	3	case of an unforeseen
7	can have unforeseen	2	unforeseen malfunction in the	3	because of an unforeseen
7	barring some unforeseen	2	unforeseen encounter with a	2	were triggered by unforeseen

