A Study of Adjective Use in NPs as an Indicator of Syntactic Development in Swedish L2 Learners’ English

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Abstract

This is a corpus-based study on adjective use in eighty written compositions by Swedish learners of English from Grade 7 and Grade 9 in junior high school, and from Year 1 and Year 3 in senior high school. The aims of the study are to conduct an analysis of the use of attributive adjectives in noun phrases, and to investigate how attributive adjective use contributes to the syntactic complexity of noun phrases. This study proposes a hypothesis of the complexity of noun phrases in relation to different types of attributive adjectives, that is to say, an assumption that more complex types of attributive adjectives contain more compact information that requires more effort to learn and use.

The investigation shows that Swedish learners of English in junior and senior high school use an overwhelming number of noun phrases without premodifiers. The findings confirm that less proficient students use more adjectives as premodifiers in noun phrases than nouns as premodifiers. The results of the examination also reveal that students from the four school levels investigated use the most common attributive adjectives frequently, which accounts for more than half of the attributive adjectives used. However, a positive trend is that the use of more complex types of adjectives, such as derivational and participial adjectives, steadily increases in number when students advance in school level.

The comparison of the most common attributive adjectives in proportion to other adjectives used in the data from each grade shows that more proficient students use a richer variety of adjectives than less proficient students. Some pedagogical implications in this connection are the need to raise Swedish students’ awareness of different types of adjectives in language teaching and learning. Other pedagogical suggestions are the need to develop students’ skills in elaborating ideas and consolidating syntactic structures in their writing.

Keywords: syntactic development, noun premodification, attributive adjective, Swedish learners of English
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1. Introduction

The idea of studying the development of learner language started with a writing assignment that I gave to my students during one of my school placement. The students were assigned to write about either a memorable trip that they had been on or a dream holiday trip that they would like to take. After having read a number of texts written about travelling in a chronological order, I could not help but admiring this writer:

“Just outside the astonishing coasts of Spain lies a tropical island. An island packed with rare exotic creatures and native residents, with white pearly beaches along the coastline that stretch out as far as you can see and beyond the visible spectrum of the cornea. Its location remains unknown to this day as it is not visible to the regular human eye. Beneath the turquoise watery surface large mystic creatures lurk around. Disfigured octopuses and overgrown horrid fishes are just a fragment of what nightmares that roams the pitch black depths of the ocean.”

(Text16, male, 16-year-old, Grade 10)

It was this extraordinary piece of writing that aroused my interest in analyzing learners’ use of adjectives. This writer demonstrates an impressive skill in describing a place where he wants to go by using a dozen of adjectives, and it achieves an incredibly lively effect in his writing.

As we all know, there is a wealth of adjectives that are available for learners of English to choose from. As a matter of fact, the problem here is getting to know them and how to use them idiomatically in a range of registers that arise from different contexts (Börjesson, 2014:3). In this essay, I will investigate a series of performance data by Swedish learners of English in junior and senior high school in order to see how adjectives are used at different stages of English learning, and language development over time.

At last, I want to extend my gratefulness to all people who have supported me during the whole writing process. A special thank is given to my supervisor, Christine Johansson, for her valuable ideas and generous support.
2. Background

In this section, a general background about the English language is stated. Followed by this, a grammatical background is brought up, which is considered necessary to comprehend the subject of this present study, that is to say, the usage of adjectives in English grammar.

2.1 The English language

The English language has no doubt had a profound impact on communications worldwide. In fact, there are many historical factors that lead to today’s dominant use of English in social, cultural, political and economic contexts in the world. As a global language, the importance of English in our daily life is unarguable (Harmer, 2007:14). Learning and being able to use English is becoming a basic requirement for citizens of non-English speaking countries, like Sweden. It is not a surprise that plenty of research studies have given attention to English teaching and learning in the classroom, and to the influence of English outside of classrooms. One such study is Olsson’s (2012) investigation into the impact of extramural English on Swedish 16-year-old pupils’ writing proficiency, with the catchy title “Everything I read on the Internet is in English” for her essay. Unsurprisingly, the findings of Olsson’s (2012) investigation confirm the fact that pupils who are highly exposed to English in their spare time use more varied expressions in their writing and can better adjust their language to different contexts by showing a richer register variation. This may be partly explained by the fact that besides learning English as an obligatory subject in school, these pupils are exposed to English in various situations daily because of their frequent contact with and use of the Internet, where English functions as a common language across national boundaries.

In the English curriculum for Swedish secondary school, it is stated that English teaching should help students acquire the knowledge of English and develop their skills in communicating and interacting in a “meaningful and functional” way (Swedish National Curriculum for Secondary School, 2011). Put another way, having a good command of both spoken and written English certainly requires the ability to use the forms of the language in accordance with English grammar, in addition to English vocabulary.

There are already a great number of research papers and dissertations that investigate learner language with focus on the use of specific linguistic features, such as analysing learners’ errors (known as error analysis, EA) and learners’ accuracy (known as obligatory occasion analysis, OOA, cf. Brown, 1973). They have provided a broad and deep insight into the learner language. They have also contributed to an increased understanding of learners’ difficulties in second language acquisition (SLA), and promote a close interaction between English teaching and learning. This present study will focus on another aspect of learner language, that is, the complexity of language use in the combination of syntactic and
morphological knowledge from a psycholinguistic development perspective. It is hoped that this study will contribute an understanding of the processes inherent in language learning and be able to offer some pedagogical suggestions for promoting learners’ language progression.

2.2 Grammatical Background

All of us may sometimes need to describe or evaluate our outer world and inner world both in speech and written texts (Börjesson, 2014:1). We can expect a high frequency of adjectives in this case due to the semantic property of adjectives. However, this present study focuses on adjectives uses at phrasal and clausal levels from a syntactic point of view. For this reason, the following subsections will only highlight the morphological features and syntactic roles of adjectives.

2.2.1 Morphological features of adjectives

As one of the four lexical word classes, adjectives are very common in all registers, though less common than nouns and verbs (Biber, Conrad & Leech, 2002:187). From a typological point of view, it is crucial to clarify criteria for distinguishing adjective from other word classes and it is equally important to have criteria for distinguishing the types of adjectives. The following three features are commonly considered characteristics of adjectives:

a. morphological characteristics – they can be inflected into comparative and superlative forms.

b. syntactic characteristics – they can serve as attributive and predicative syntactic roles, as well as, postposed modifiers, noun phrase heads, clause linkers, free modifiers and exclamations.

c. semantic characteristics – they are descriptive, and they are gradable and can be modified by adverbs of degree, such as very.

(Biber, Conrad & Leech, 2002: 188; Greenbaum & Quirk, 2010:129)

Adjectives that have all these characteristics are central adjectives while other adjectives containing fewer characteristics are peripheral. Adjectives denoting colour, size, dimension, as well as adjectives of age and quality are central adjectives, such as red and black, big and short, and old and bad. Peripheral adjectives can usually either occur as attributives or predicative or they can not be inflected without the help of more and most, for example, alive and alone, and unbelievable and extraordinary.

In the present study, the term adjective includes central adjectives, peripheral adjectives and new adjectives, that is, adjectives in form of participle (like, amazing) and adjectives derived from nouns or verbs by adding derivational suffixes (like,-ful, -less and -able), as well as adjectives formed by compounding (like, cutting-edge and attention-catching) (Biber, Conrad & Leech, 2002: 190-192).
2.2.2 Syntactic roles of adjectives

As mentioned in Section 5.1, the two predominant syntactic roles of adjectives are the attributive and predicative function. Besides those, adjectives can also serve several other syntactic roles, such as postposed modifiers, noun phrase heads, clause linkers, free modifiers, and exclamations (Biber, Conrad & Leech, 2002: 202). Due to the fact that there are extremely few instances of other syntactic roles of adjectives in the data examined, they are therefore to be left out.

An adjective is called a predicative adjective when functioning as subject complement or object complement, as seen in (1) and (2). When an adjective is used in a noun phrase, modifying the head, it is then called an attributive adjective, as seen in (3). An adjective phrase can be only adjective or adjective together with its modifier(s), and serve a syntactic role in a phrase or a clause, as seen in (4) (Greenbaum & Quirk, 2010:135-138; Estling Vannestål, 2007: 220).

(1) What he said was ridiculous.

(2) To speak in front of the class makes him nervous.

(3) The stolen car was found a mile away.

(4) She was feeling slightly ill after a very long car ride.

Since adjectives frequently occur in prehead position modifying nouns, it is thus this use of adjectives that the present study has investigated. Hence, it seems necessary to describe briefly the structure of noun phrases. A noun phrase can be a word or a group of words functioning in a sentence exactly like a noun. The head is the obligatory part of a noun phrase and it can be a noun or a pronoun. A noun phrase can be just a noun or pronoun alone or with the determiner but frequently it appears with pre- and/or postmodification. The former types of noun phrases are called simple noun phrases while the latter is called complex noun phrases (Chalker & Weiner, 1994:267; Crystal, 2004:115). The premodification includes all the items placed before the head, such as, determiners, adjectives and nouns. In contrast, the postmodification comprises all the items placed after the head, like prepositional phrases, non-finite clauses, and relative clauses (Greenbaum & Quirk, 2010:364). Premodifiers mainly consist of adjectives, but nouns also commonly occur. According to Crystal (2004:145), and Greenbaum & Quirk (2010: 146), when more than one adjective occur in attributive position, the order of adjectives is determined to a large extent by their semantic properties. Attributive adjectives are normally placed into four zones, listed from the farthest to the closest distance from the head noun – precentral, central, postcentral and prehead zone. Although the ordering of attributive adjectives is not a clear-cut matter, conventionally, adjectives with an absolute or intensifying meaning come first, and then come other adjective types; participle adjectives
and colour adjectives come before the prehead zone, and nouns and adjectives come closest to
the head noun, as seen in (5). Again, attributive adjectives normally precede the heads in noun
phrases. However, in some cases they follow the head and these types of modification can
usually be turned into relative clauses, for example (6) (Svartvik & Sager 1996: 126). Adjectives
can function as heads of noun phrases as a special type of noun phrases, and this
type of noun phrases usually refers to a group of people sharing the characteristic described
by the adjective, as seen in (7).

(5) This is a typical ugly cheating trick of fraud.

(6) Something very strange happened last night.

(7) The young are often the spontaneous.
3. Aim and Scope

The present study is a corpus-based analysis of written samples taken from Swedish learners of English in junior and senior high school. The aim of the paper is to explore the use of adjectives in the written production of Swedish learners of English from four school levels in junior and senior high school, with a special focus on the use of adjectives as premodifiers in noun phrases. With this focus, the study examines how Swedish learners of English at different proficiency levels use adjectives and what evidence can be found revealing learners’ development in the complexity of language use over time. The research questions to be answered are as following:

- Are there any patterns of adjective use in the four different graders’ written production? If so, how are they represented?

- Is there any evidence showing a grammatical development: the higher proficiency the more complex use of adjectives?

- To what extent can the use of attributive adjectives prove its relation to the complexity of noun phrases?
4. Theoretical Framework

In this section, I will outline theories on second language acquisition (SLA) and SLA research concerning second language (L2) learners’ language use and language development in regards to the functions and forms of English grammatical structures and features, namely a wider definition of English syntax and morphology. In the final subsection I will summarize a few previous research works of high relevance to the subject matter of the present study.

4.1 Second Language Acquisition

As a research field, second language acquisition (SLA) has emerged from within linguistics and psychology. SLA studies individuals and groups as learners of an additional language, often called second language (L2) or Target language (TL), and their learning process of that language. The goal of SLA study is to offer a description and an explanation of L2 learners’ competence involving underlying systems of linguistic knowledge and how this develops over time (Ellis & Barkhuizen, 2005:5). The core of SLA research is to give answers to the following three basic questions: What exactly does the L2 learner come to know? How does the learner acquire this knowledge, and why are some learners more successful than others? (Saville-Troike, 2006:2).

When discussing L2 acquisition, it is inevitable to touch upon L1 acquisition. The first language (L1), also called the mother tongue (MT) or native language (NL), normally refers to the language that children have acquired before the age of about three. Saville-Troike (2006:14) says that how children learn and develop the L1 is extremely similar to the acquisition of a second language. There is a widely accepted hypothesis of L1 acquisition that a child possesses an innate capacity, which is open for learning whatever language he or she is exposed to and interacts with. Furthermore, it is said that L1 acquisition begins with a strong need for communication in real life. Driven by this need, children continuously and unconsciously accumulate the knowledge of the L1 (Saville-Troike, 2006:18; Corder, 1978; Selinker, 1972). Instead, L2 acquisition usually takes place in an artificial learning setting. Teachers stick to the syllabus while students comply with the instructions. Factors, like motivation and aptitude, play a consequential role with regard to individuality, though an undeniable fact is that L2 learners’ prior knowledge of the L1 and cognitive maturity can be two important factors in the learning process (Saville-Troike, 2006:20).

This study will concentrate on the syntactic features and structures of adjectives in SLA. The investigation aims to find out whether there is any evidence in the use of adjectives that indicates learners’ development of syntactic and morphological knowledge, and how such a development is promoted in the classroom in the light of the findings.
4.2 Interlanguage and learner language

Interlanguage, a term coined by Selinker in 1972 hypothesizes the existence of a linguistic system that a learner of a second language (L2) applies to his or her communication. It involves consequently how a learner processes the target language (TL) psychologically and linguistically and how a learner’s attempted production of that language is structured. From a learning perspective, interlanguage is an important linguistic phenomenon that is relevant to the way the learner actually learns a second language. A few important concepts of interlanguage that are found to be necessary to SLA research are permeability, transferability, and language transfer as a selection process (Lakshmanan & Selinker, 2001).

Corder (1978) also argues that interlanguage (IL) should be studied as a form of language in its own right. He claims that interlanguage on the one hand is related to individuals, and that it characterizes the L2 learning process as a series of stages in the direction of the TL on the other hand. It should be viewed as a dynamic system that constantly changes through time in the process of learning. In this sense, it should also be perceived as a continuum that interconnects the mother tongue (MT) and the TL, as an approximative system in which interaction between the MT and the TL is ongoing. It could be said that the closer an IL system is to the TL, the more successful second language learning has been (Selinker, 1992:165).

Learner language is the spoken or written language produced by learners who have not that language as a native language. Learner language is used as a means of communication and it is normally learnt in school (Ellis & Barkhuizen, 2005: 4; Færch, Haastrup & Philipsson, 1984:7). The description of learner language is of particular interest to SLA research by a learner language approach, that is to say, the study of second or foreign language teaching and learning based on the analysis of L2 production of a language learner and the understanding of SLA (McEnery, Xiao & Tono, 2006: 247). There have been a large number of error and accuracy analyses of learner language that provide evidence and support the hypothesis of the existence of interlanguage. Studies of this kind aim at uncovering learning processes and discovering what counts as the appropriate condition for successful L2 learning (Yule, 2010:192). On the other hand, the present study will focus on the representations of interlanguage in learner language, and aims to reveal to what extent Swedish L2 learners have acquired a certain grammatical feature by analyzing the developmental patterns of language use at a certain stage of development and progression over time.

4.3 Second language syntax and learners’ syntactic development

The syntax of a language is a set of properties which determine the construction of sentence in that language, that is to say, rules that govern how words combine into phrases, and into clauses or sentences (Hawkins, 2001: 2). Without any doubt, in order to be a fluent speaker of English, we have to learn syntactic rules of English, besides several other systems, such as
morphological rules, semantic rules, and phonological rules, as well as phonetic rules. Grammar is a set of instructions for generating all the grammatical sentences of a particular language (ibid: 4). As Greenbaum & Quirk (2010:1) use it in their book, the term grammar usually includes syntax and inflections (morphological elements that specify word forms).

The study of syntax involves uncovering the syntactic properties of a language which are involved in the construction of a grammatical sentence in a particular language (Hawkins, 2001:2-4; Baker 1995:3, 21; Yule, 2010). One of the purposes of studying syntax of a second language is to explain how knowledge of syntax develops over time. From current available evidence, it seems that the course of syntactic development is essentially the same, no matter what age, in what learning setting and of what L1 background one starts acquiring a second language (Hawkins, 2001: 22). Given that learners’ syntactic development follows a certain consequence of acquisition, changes in a learner’s interlanguage can be observed through the changes in the performance of learner’s language over time (ibid:1). As a result, patterns and preferences in learners’ performance data have strong causal roles in explaining why some syntactic properties are established before others (Hawkins, 2007:1-2).

4.4 Previous research

In this section, I will give a brief overview of previous research with regard to learners’ language development in terms of some particular syntactic structures and morphological features. Section 4.4.1 reports studies on measuring syntactic complexity concerning subordination in learners’ performance data. Section 4.4.2 presents research on the complexity of noun phrases. The last section 4.4.3 focuses on previous studies on the syntactic complexity of adjective phrases, and states how the preset study contributes to second language acquisition research.

4.4.1 Measuring learners’ syntactic complexity

Within applied linguistics, the development of grammatical complexity refers to the more advanced grammatical structures that L2 learners exhibit as they progress in their language proficiencies (Biber, Gray & Poonpon, 2011). Probably since the 1930s the focus of grammatical complexity has been on learners’ writing. Most researchers aim to find evidence for learners’ language development in complexity by carrying out longitudinal studies. It has been a belief that L2 learners follow a natural progression from simple clause structure to the more complex and elaborated clause structures that are regarded as typical advanced writing (ibid: 2011). A wide range of grammatical devices associated with complexity, such as syntactic structures, dependent clauses and phrasal modifiers that are used to add elaborating information in written texts, particularly become the subjects to be analysed.

Since the index of learners’ syntactic development –T-unit – was proposed and defined by Hunt (1966) as “‘a minimal terminable unit’ – one main clause or non-clausal structure that is
attached to or embedded in it”, T-unit analysis has been widely applied to measure the overall syntactic complexity of learners’ speech and written samples. Based on the assumption that increased subordination is an indicator of syntactic development, studies of L2 writing development have, since then, particularly attempted to quantify syntactic complexity by counting text features, such as the numbers of words per sentence, the number of words per clause, the ratio of subordinate clause to all clauses, and the number of words included in T-unit. At the same time, the three measures that Hunt (1966) claimed to be the most reliable indicators of syntactic progression in writing: clause per T-unit, words per clause, and words per T-unit, have encountered doubt and questioning of their reliability to measure syntactic development (Gaies 1980; Foster, Tonkyn & Wigglesworth, 2000; Biber, Gray & Poonpon, 2011).

Biber, Gray & Poonpon (2011) conducted an empirical analysis based on two large corpora of texts from academic writing and conversation. By comparing the data in the two corpora they found that the grammatical features that are actually used in complex written discourse are phrasal, while the complexity of conversation is clausal. The findings also suggest that the grammatical complexity of writing is different from those of speech. Measures of subordination and T-units can lead to a failure to detect other kinds of grammatical complexity in writing.

Another study on T-unit in learners’ written production is Johansson and Geisler’s (2011) paper. In order to improve reliability and validity of the traditional methods of T-unit analysis, Johansson & Geisler (2011) adopted an adjusted concept – error-free T-units – as a complementary method, and applied it to measuring the syntactic complexity in written production by Swedish learners of English in junior and senior high school. They claim that the four measures as a whole reflect more accurately students’ syntactic development. The outcomes of their study reveal that the frequency of relative clauses and nominal/adverbial clauses appears to be the strongest indicators of increasing syntactic complexity across school levels.

Foster, Tonkyn & Wigglesworth (2000) also argue for another measure of syntactic unit, termed the AS-unit, a mainly syntactic unit in measuring learners’ ability to produce units with more than one clause in speech. According to Foster et al (2000), an AS-unit is a single speakers’ utterance consisting of an independent clause, or sub-clause unit, together with any subordinate clause(s) associated with either. They claim that the ability to plan at the multi-clause level is important for establishing a speaker’s level of proficiency, and AS-unit appears thus to be an effective measure for all reason. They add though that analyzing oral data is not an easy task. More work is needed to formulate flexible definitions of units currently available for measuring syntactic complexity.

Lakshmanan’s (1995) study on child second language acquisition of syntax suggests that the role of Universal Grammar (UG, grammatical features that are common in all natural
languages) and the role of the mother tongue in acquisition of second language syntax are somehow interwoven. The mother tongue or first language (L1) appears to affect certain syntactic domains while UG remains unclear whether the child L2 learners’ syntactic knowledge is a result of direct or indirect access to UG.

Another interesting study carried out by Beer & Nagy (2007) adds a new perspective to syntactic analysis, that is to say, the correlation between syntactic complexity and the quality of the writing. They explored the use of syntactic complexity as a predictor of writing quality in two genres of texts produced by middle school students. By examining syntactic features, words per clause and clauses per T-units, in narrative and persuasive texts, Beer & Nagy (2007) found that syntactic complexity as measured in words per clause was positively correlated with quality for persuasive essays but not for narrative ones, while clauses per T-unit were positively correlated with quality for narrative essays, but negatively correlated with quality for persuasive essays. The results suggest therefore that the relationship between syntactic complexity and text quality were found to be dependent both on the genre of the text and the measure of syntactic complexity used.

4.4.2 Syntactic complexity of noun phrases

There is no doubt that noun phrases (NPs) can be more or less complex. Even though there have been a large number of studies that explore the complexity of NPs, most of them have highlighted the complexity by focusing on the postmodification of NPs (Comrie & Keenan, 1979; Hellan, 1980; De Haan, 1989; Bowen, 2005 and Berlage, 2014). Still there are some functional similarities between premodification and postmodification in NPs. For this reason, it is of high relevance to mention a few important research papers that have contributed to the analysis of the syntactic complexity of NPs, although few studies have focused the premodification of NPs.

Hellan (1980: preface) studied the relation between syntax and semantics within the noun phrase, based on the principle of compositionality, that is, the meaning of a complex expression (here referring to NPs) is a function of the meanings of its parts and the way these parts are combined and described the syntactic and semantic relation in noun phrases. He states that within grammars of a natural language, there is a “form” residing in the internal structure of complex expression, “content”. The interesting question in his research is why noun phrases, standing as a construction in its own right, of various sizes, occurring in a variety of positions, can be used without the result in each case offering problem of interpretation for speakers and hearers (Hellan, 1980: iii). Viewed on the surface structure, the longer it is the more complex a noun phrase can be. But there are other factors that can make a NP more or less complex, for example, the syntactic role of NPs, the number of modifiers and the types of modifiers.
The next research work that is deserved to be mentioned is De Haan’s (1989) corpus-based study on postmodifying clauses in the English noun phrase. He explored all the postmodifying clauses that occur in the post-head position in NPs. The findings of his examination of syntactic constituents in NPs showed that more than half of all NPs appear to have postmodifiers and these modifiers are realized by clauses (De Haan, 1989:2). Apart from finite relative clauses, De Haan (ibid: 195) also investigated other clause types in post-head position of NPs. In total 85% of the post-head clauses were found to be finite relative clauses, which can explain the fact why finite relative clauses have received most attention in previous research. De Haan (ibid: 195) came to a conclusion that text variety has influence both on the types of noun phrase head and on the position and length of the postmodifying clause. Apart from that, indirect objects are not realized by NPs with postmodifying clauses at all. The findings suggested that there are not any real constraints on the occurrence of postmodifying clauses in NPs. An intriguing finding directly relating to the investigated subject in my study is that De Haan (ibid: 196) found a relatively high number of occurrences of premodifying adjective phrases in indefinite noun phrases.

Another similar study carried out by Berlage (2014) is her corpus-based analyses of the complexity of post-postion modifiers in NPs. She focused on four different syntactic variables, that is, topic-restricting construction, two cases of word order, and the optional occurrence of the infinitive marker to, and she compared three parameters – the length of the NPs, their structural complexity and their quality (ibid: 2). Berlage (2014:254) first suggested nine hypotheses about why structural construction is considered simpler or more complex than the others. After having analyzed data from the corpora, she rejected or confirmed the nine hypotheses. She came to a conclusion that all these nine hypotheses have been confirmed and the analyses yielded two hierarchies of NP-complexity: one based on single postmodification type, and another based on a mixture of single and multiple postmodification types. The hierarchy of single postmodification type is cited as follows, from the simplest number 1 to the most complex number 5:

1. Non-postmodified NPs;
2. NP+PP/NP/coordinated NPs;
3. Np+non-finite clause/gerundial constructions;
4. NP+finite relative clause;
5. Free wh-clauses
(Berlage 2014: 255)

The third piece of research to be brought up is Biber & Gray’s (2011) study. They carried out a corpus-based analysis of noun phrases in academic research writing. Two grammatical features were explored, namely nouns as nominal premodifiers and prepositional phrases as nominal postmodifiers. The findings of their study show that four types of nominal modifiers – adjectives, nouns, prepositional phrases and appositive noun phrases – come to an
increasing prominence in academic prose in the last 200 years. Their findings also suggest that the highly frequent use of phrasal features in academic prose can result in an increasing demand of acquisition of these features in writing while students advancing in their education (Biber & Gray, 2011).

The last corpus-based analysis considered highly relevant to the present study is Parkinson & Musgrave’s (2014) analysis of academic writing. Based on the hypothesized developmental progression index suggested by Biber, Gray & Poonpon (2011), Parkinson & Musgrave (2014) investigated noun phrases in the writing productions of two groups of students, of which one group was preparing for graduate study and the other group was already enrolled for graduate study. Both premodification and postmodification of NPs were manually examined. The findings of their examination confirm the suggested developmental index that the less proficient group more frequently uses attributive adjectives, that is to say, more than half of the modifiers used in contrast to one third of the modifiers used by the more proficient group. Furthermore, a greater proportion of participial adjectives as premodifiers in noun phrases are used by the more proficient group. As well, the other types of noun premodifiers, such as nouns, possessive nouns, prepositional phrases, and appositive noun phrases are used more frequently by the higher proficient group. Accordingly, this is an interesting finding to be compared with the findings of the present study, which will be stated in discussion section.

4.4.3 Syntactic complexity of adjectives

As an integral part of the noun phrase, adjectives as premodifiers have a close relation to the head noun in the sense of both syntactic realization and semantic description. Studies into the complexity of premodifiers in NPs, as has been mentioned earlier, are relatively few. However, there are a dozen of research studies of great quality on the adjective phrase and its modifiers. Consequently, it may be reasonable to take a look at studies that investigate the syntactic and semantic complexity of the adjective phrase and their use as premodifier in NPs.

Many agree that adjectives and adverbs have been significantly less studied with comparison to other major lexical categories, such as nouns and verbs, although they are highly complex in their functions and usage (McNally & Kennedy, 2008; Cabredo Hofherr & Matushansky, 2010). As a productive category of English vocabulary, adjective phrases have the most varied distribution of any syntactic category. In the following text, research relating to the use of adjectives will be highlighted.

The first mentioned is Bäcklund’s (1981) dissertation about restrictive adjective-noun collocations and the combinability of lexical items in English. This study gives attention to a few examples of highly “frozen” adjective-noun collocations, such as clenched fist, raving lunatic, blithering idiot and driveling rubbish, as well as other more or less frozen collocations, like weak, faint and feeble collocating with sense, idea, and notion. Bäcklund’s (1981) discussion about types of collocational cohesion and restrictiveness shed light on the
fact that the semantic complexity of adjectives is a massive subject related to historical language use and language development and changes. As Bäcklund (1981) suggests, restrictiveness and combinability of adjective-noun and premodifiers in adjective phrases require more effort to acquire in order to reach a native-like sense of language.

Next is an analysis of adjective phrases conducted by McNally & Kennedy (2008). McNally & Kennedy (2008:2) claim that adjective phrases have perhaps the most varied distribution of any syntactic category in English. They can be used in predicative and attributive positions served as primary or secondary predicates, and as modifiers of nominals, sometimes even as postnominal modifiers, such as following everyone, something. McNally & Kennedy (2008:5) also point out that the ordering of adjectives is another aspect of the syntactic structure of adjective phrases due to the fact that different orders could yield different interpretations. There is not a universal rule for adjective ordering, though descriptors precede classifiers, that is to say, adjectives that are used to describe, and adjectives that are used to identify the class or kind of the head of a noun phrase.

Again, one more research paper that looks into the structure of adjective phrases is Börjesson’s (2014) work. She investigated written and spoken data from Swedish advanced learners of English concerning the use of modification of adjectives. Her study specifically looked into how Swedish learners differ from native speakers of English regarding frequency, choice of modifiers and collocations in the use of reinforcing and attenuating. By comparing learner corpus with that of native speaker’s, Börjesson (2014) found many cases of “overuse” and “underuse”. The findings from written corpus and spoken corpus share many similarities. One of the findings is that Swedish learners overuse all-purpose adjectives and modifiers, such as the reinforcers totally, very and really, and the attenuators quite, fairly and more or less. Another finding shows that Swedish learners underuse idiomatic expressions where modifiers are combined with certain set of adjectives. Meanwhile, some usages suggesting transfer from Swedish are also found in the data investigated, for example, scarily clear and completely headless. Since the present study also focuses on adjective use by Swedish learners of English, a comparison with the finding of the present study and Börjesson’s (2014) study will be meaningful and well-motivated.

4.5 Hypothesis – complexity of the noun phrase

According to the notion of interlanguage that offers a general account of how L2 acquisition takes place, learners’ interlanguage can be monitored by linguistic representations in performance over time, and in turn, learner language development can be predicted. Saville-Troike (2006:77) discusses a couple of theories regarding the universal acquisition sequence. The most relevant theory to the present study is Processability Theory, presented by Pienemann in 1998. Saville-Troike (2006:77) sums up an acquisitional hierarchy of processing skills, proposed by Pienemann and Håkansson in 1999, that learners process
language elements in the L2 in the following order: word access, category procedure, phrasal procedure, S-procedure and clause boundary. This sequence claims that learners first acquire the base form and the most common meaning of a word without any association with grammatical information. The next step is to categorize the word in order to acquire knowledge about how to use it, where grammatical information is involved, such as part of speech and inflection. The last three steps concern processing the usage of the word at phrasal and clausal levels, as well as at a cross-phrasal and cross-clause level, involving syntactic rules, such as subject-verb agreement.

Inspired by Berlage’s (2014) study of postmodification in noun phrases (see Section 4.4.2) and based on the concept of interlanguage, a hypothesized hierarchy of the complexity of noun phrases related to adjectives could be formulated as follows, listed from the least to the most complex:

a. NPs contain simple adjectives, for instance, adjectives on the list of most common attributive adjectives (Biber, Conrad & Leech, 2002: 200)

b. NPs contain derivational adjectives, for instance, adjectives with typical suffixes, such as, -ful, -less, -able, -ous, -al and -like.

c. NPs contain participial adjectives, for instance, adjectives are derived from the present and past participle forms of verb.

d. NPs contain compound adjectives, for instance, adjectives are formed by combining more than two words, like tax-free, energy-saving and task-based.

e. NPs contain combined types of common, derivational or participial adjective, the more adjectives involved the noun phrases are structurally more complex.
6. Material and Method

Eighty texts in total are chosen from four groups of students from four proficiency levels – Grade 7 and Grade 9 in junior high school, and first-year students and third-year students in senior high school (further in the text they will be named as Grade 10 and Grade 12). Considering a balanced and equal representativeness in the data investigated, 20 texts from each grade were chosen to comprise a small-scale learner corpus, with totally 21,126 words and a general average text length of 264 words. With consideration of the aim of this essay, these 80 texts are all of the genre narrative and about travelling experiences, in which there is a high probability that adjectives frequently occur.

Apart from the written samples from students at Grade 10 collected by me during one of my school placement at a Swedish senior high school, the rest of the data was taken from the Uppsala Learner English Corpus (ULEC). The ULEC is a new corpus of learner English, consisting of essays from Swedish junior and senior high school students. Currently, ULEC contains approximately 136,000 words (19,000 words from junior high school and 117,000 words from senior high school) (Johansson & Geisler, 2009). Essays in ULEC are gathered by student teachers who performed studies concerning language use by Swedish learners of English. The number of essays collected is constantly growing, thanks to new studies and research on learner English carried out by new student teachers each semester (ibid). However, I could say that the 20 essays from my own collection were comprised under a slightly different circumstance from the other 60 essays in the ULEC, since my first intention was not like other student teachers, that is to say, intending to use the written production for analyzing. The writing assignment was given to my students in an ordinary English teaching and learning situation after the students had had a few lessons about English-speaking countries. For this reason, the results found in the texts from Grade 10 show a slight difference from the other three grades, which will be highlighted in next section Presentation of results.

By and large, all written samples are materials immediately related to the language classroom where learners are acquiring a second language (McEnery, Xiao & Tono, 2006: 65). McEnery, Xiao & Tono (2006:247) point out that a particular interest in studying learner language originates from the assumption that the researchers may gain insight into the process of second language acquisition (SLA) by exploring second language (L2) productions. McEnery & Hardie (2012:88) add that linguistic corpora provide more accurate and reliable descriptions of how languages are structured and used. Over the last three decades, corpus-based studies have approached the description of English from many perspectives, and a variety of topics have been explored, particularly on aspects of English lexis, morphology,
syntax and discourses. The purpose of the present study is to contribute some knowledge to second language syntactic development.

A number of different approaches have been employed to the description of learner language. There are four major approaches identified by Ellis (Ellis, 1994: 44; McEnery, Xiao & Tono, 2006: 248): the study of learners’ errors, developmental patterns, variability, and the study of pragmatic features. Ellis & Barkhuizen (2005: preface) present an account of methods that can be used for analyzing the spoken and written samples produced by L2 learners. They also point out that researchers of SLA have to consider the historical and theoretical aspects of the approaches and the particular research questions addressed, while choosing an operable method. The present study applied a corpus-based analysis methodology combining frequency analysis with complexity analysis defined and described by Ellis & Barkhuizen (2005: 94-98, 139-145). The procedures of frequency analysis are explained as follows:

1. Select 80 written texts by Swedish learners of English of a genre personal narrative. The analysis is focused on the use of adjectives in the texts chosen.
2. Divide the data by 20 of each from four groups across school levels, Grade 7, 9, 10 and 12.
3. Go through the data manually and identify instances of use of adjectives.
4. Identify different ways of using adjectives and how they are used.
5. Calculate the frequency of use of adjectives in each grade.
6. Determine the stages of acquisition by identifying which types of use of adjectives are dominant and which types of premodifiers in noun phrases increase over time.

Another method applied was complexity analysis. Ellis & Barkhuizen (2005:139) state that complexity of learner language can be exhibited by two fashions. One refers to the fact that the learner is willing to use more difficult and challenging expressions and the other refers to the sense that the learner is ready to vary his or her expression by using different language structures and forms. Traditionally, complexity is measured by subordination in learner language based on the assumption that the more subordination used the more complex the language produced (ibid: 140). The analysis of complexity in this study is based on the exhibition of learners’ use of adjectives in noun premodification in view of L2 proficiency. Different types of adjectives and learners’ lexical richness are examined by calculating the occurrence and the variety of tokens in proportion to text length. For a convenient purpose, instances that were directly quoted from the data were coded by a text number. Besides that, information of the writer’s gender, age and school level was given, as well, while the words examined are illuminated in italic, as seen in (8).

(8) It’s one of the biggest churches in Europe, I think! (Text 14, male, 14-year-old, Grade 7)
In brief, frequency analysis was used to calculate the number of instances of different usage of adjective phrases in a distributional perspective. The first step was to count adjective phrases in different syntactic roles, that is, as predicatives and as attributives. The second step was to count the variety of types of adjectives as premodifiers in noun phrase modification. At last, a complexity analysis of adjectives as premodifiers in noun modification was carried out to explore the complexity of adjectives used by learners.

In order to get a clear view of the analysis procedures in this essay, the subject studied need to be defined and some terminologies need to be clarified. The subject studied is adjectives at phrasal and clausal level from a syntactic point of view, that is, in predicative and attributive positions, as seen in (9) and (10). If not specified, the term adjective phrase generally refers to both adjectives alone as lexical word and together with their modifiers, as seen in (11) and (12). Emphatically, in the present study, the noun phrases counted are those having common nouns as their heads. Noun phrases with pronouns, proper nouns as the heads are thus excluded from the examination. The term premodifier in NPs is used in accordance with Crystal’s (2004:39) classification and in this essay refers thus to adjectives or nouns as premodifiers, as seen in (13). As a result, determiners and possessive pronouns, as well as the genitive’s and the of-construction, are not taken into account, as seen in (14), (15) and (16).

(9) That’s awful.
(10) That’s an awful trip.
(11) That’s a terrible experience.
(12) That’s an absolutely terrible experience.
(13) A smart car thief could easily cheat the latest alarm system.
(14) He has stopped many drunken men from crossing that busy road.
(15) This girl is her second child.
(16) Don’t take Jane’s advice so serious due to her lack of experience.

In short, the overall aim of the present study was to find developmental evidence for learners’ progression in the syntactic structure of adjectives and adjective phrases as premodifers in noun phrase modification. As McEnery & Hardie (2012: 271) point out, applications of corpus linguistics should not only draw attention to the distribution of certain elements of language, but also show concern for what the distribution might indicate. A discussion about what the findings may imply and what pedagogical implications may be proposed will therefore follow the section Presentation of Results.
7. Presentation of Results

In this section the results will be presented in three subsections regarding the use of the adjective found in the data investigated. The outcomes of the present study will be illustrated in figures and tables showing contrasts among the four groups of different proficiency levels. Analysis and discussion of the results will come after this section.

As has been noted in Section 6, eighty texts of narrative genre on a topic of travelling written by four groups of Swedish students from Grade 7, Grade 9, Grade 10 and Grade 12 were examined. The distribution of the data is given in detail in Table 1. Since some language features examined are extremely few, the proportion will be illustrated by instances per 1,000 words, if not other clarification is given.

Table 1 Distribution of texts in the data investigated

<table>
<thead>
<tr>
<th></th>
<th>Number of texts</th>
<th>Number of words</th>
<th>Average text length</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade 7</td>
<td>20</td>
<td>4,055</td>
<td>203</td>
</tr>
<tr>
<td>Grade 9</td>
<td>20</td>
<td>5,356</td>
<td>268</td>
</tr>
<tr>
<td>Grade 10</td>
<td>20</td>
<td>7,854</td>
<td>393</td>
</tr>
<tr>
<td>Grade 12</td>
<td>20</td>
<td>3,958</td>
<td>198</td>
</tr>
<tr>
<td>In total</td>
<td>80</td>
<td>21,126</td>
<td>264</td>
</tr>
</tbody>
</table>

As seen in Table 1, eighty texts in total were assembled, with twenty from each grade, totaled 21,126 words with an average length of 264 words. In order to explain some of the results, the number of words and the average text length from each grade illustrated in Table 1 are relevant. In particular, the average text length of Grade 10 is significantly longer than the other three grades’.

7.1 Syntactic roles of the adjective

As has been mentioned in Section 5.2, the adjective has mainly two syntactic roles, predicative and attributive, and functioning as subject or object complement, and as modifier of nouns, respectively. As a matter of fact, it is only these two roles of the adjective that are found in the data investigated, as seen in Figure 1.
Looking at the figures above, we can see that the frequency in predicative uses of the adjective are incredibly similar among the four groups, especially within the groups of Grade 7, 10 and 12 with an equal size of 17 per 1,000 words. However, it is interesting to see the differences in the attributive use of adjectives among the four groups. The attributive use of adjectives shows a frequency pattern of increasing number of uses across the school levels.

### 7.2 Types of premodifiers in noun phrases

As has been noted, adjectives appear most commonly in the attributive position, that is to say, modifying nouns, which is confirmed by the frequency found in the data examined. The following table shows a frequency distribution of types of premodifiers in NPs in the data investigated.

**Table 2 Distribution of types of premodifiers in NPs (per 1,000 words)**

<table>
<thead>
<tr>
<th></th>
<th>NPs without premodifiers</th>
<th>NPs with adjectives as premodifiers</th>
<th>NPs with nouns as premodifiers</th>
<th>In total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade 7</td>
<td>122</td>
<td>15</td>
<td>4</td>
<td>141</td>
</tr>
<tr>
<td>Grade 9</td>
<td>110</td>
<td>16</td>
<td>3</td>
<td>129</td>
</tr>
<tr>
<td>Grade 10</td>
<td>106</td>
<td>21</td>
<td>9</td>
<td>136</td>
</tr>
<tr>
<td>Grade 12</td>
<td>103</td>
<td>28</td>
<td>6</td>
<td>135</td>
</tr>
</tbody>
</table>

As seen in Table 2, despite the fact that all the four proficient groups use overwhelmingly noun phrases without premodifiers, the figures of adjectives modifying nouns increase when proficiency levels arise. Particularly, between the least proficient group and the most proficient group, the number is nearly doubled. Interestingly, the total number of NPs found keeps relatively stable over time across all school levels, at an average level of 136 per 1,000 words. The use of nouns as premodifiers in NPs varies at different school levels and remains at a low frequency over time. In contrast, the use of adjectives as premodifiers shows a constant increasing frequency over time. The following subsection will therefore focus on the use of attributive adjectives in NPs.

### 7.3 Attributive adjectives

Viewed in a semantic perspective, the high frequency of attributive adjectives depends on the characteristics of adjectives, such as descriptors and classifiers. Since the major part of the investigation of the present study accounts for different types of attributive adjectives, the results will be reported in detail after a qualitative complexity analysis of the collected data. Adjectives related to titles of the texts are excluded from the figures shown in the tables below, such as *the best vacation, the ideal vacation, the perfect vacation, my favourite journey*, and *my most memorable trip*, as well as *my best vacation memory*, due to the fact that
they are probably included in writing instructions and do not actually represent learners’ “real” language use.

In order to distinguish the other adjectives from derivational, participial and compound adjectives found, the term *simple adjective* is used in Table 3. Simple adjectives refer also to adjectives that are not derived from other words or adjectives originated as compounds but the meaning of the two parts has been lost, for example *nearby*. The category of coordinate use of adjectives stands out since they can be combinations of all the four types of adjectives listed in Table 3. The figures shown in the following tables are based on instances per 1,000 words.

### Table 3  Distribution of frequency of types of attributive adjectives (per 1,000 words)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade 7</td>
<td>12.5 (83%)</td>
<td>0.8</td>
<td>0.7</td>
<td>0</td>
<td>1.2</td>
<td>15</td>
</tr>
<tr>
<td>Grade 9</td>
<td>12.0 (75%)</td>
<td>2.4</td>
<td>0.9</td>
<td>0.2</td>
<td>0.9</td>
<td>16</td>
</tr>
<tr>
<td>Grade 10</td>
<td>12.9 (61%)</td>
<td>3.3</td>
<td>2.3</td>
<td>0.5</td>
<td>2.2</td>
<td>21</td>
</tr>
<tr>
<td>Grade 12</td>
<td>16.9 (60%)</td>
<td>5.5</td>
<td>2.7</td>
<td>0.5</td>
<td>2.3</td>
<td>28</td>
</tr>
</tbody>
</table>

In fact, as is evident from the figures in Table 3, the use of derivational and participial adjectives shows a relatively clear pattern of increase along with proficiency level. Less proficient students use more simple adjectives, as seen the percentages in the brackets, which shows the proportion of simple adjectives in comparison to the total number of attributive adjectives used, while they use significantly fewer derivational and participial adjectives. On the other hand, the more proficient the students are, the more derivational and participial adjectives, and fewer simple adjectives they use. Concerning the use of participial adjectives, the figures indicate that students of Grade 7 and grade 9 in junior high school have made a slow progress. On the other hand, they have advanced significantly relating to the use of derivational adjectives, that is to say, from just 0.8 to 2.4 per 1,000 words, even though it is only 2 or 3 words in question. Students of senior high school show the same pattern of progress that the use of participial adjectives is actually quite similar to each other with a slight growth of quantity. However, the use of derivational adjectives has significantly grown in number, that is to say, nearly doubled in number from Grade 10 to Grade 12, from 3.3 to 5.5. Two lists of all derivational and participial adjectives found in the data are attached to this paper in Appendix 1 and 2, respectively.

The coordinate use of attributive adjectives has progressed if compared the two junior groups with the two senior groups. However, within the two junior groups and within the two senior groups, the figures have not indicated a significant progress. On the contrary, the ninth graders use less coordination of adjectives than the seventh graders. Looking at the instances found in coordinate use of adjectives, there are three different types of use. The first type is adjectives combined by *and*, as seen in examples (17), (18), (19) and (20). The second type is the use of coordinator *or*, with only one instance found in the texts from Grade 7, as seen in (21), and no instances of this type are found in the text from the other three grades. The last
type is no involvement of coordinators, as seen in examples (22), (23), (24) and (25). To illustrate, each type of use is exemplified by four instances from each grade. All instances are directly quoted from the original texts and coded by text number, gender, age and school level.

(17) I remember that our neighbour have much old and hurt cats. (Text 12, male, 14-year-old, Grade 7)

(18) I heard that its very hot weather and nice and clean beatch. (Text 3, male, 16-year-old, Grade 9)

(19) It was a wonderful and exciting trip and it all began on a summer day in June. (Text 15, male, 16-year-old, Grade 10)

(20) I especially remember one evening/night when the sunset lit up the whole sky with a fantastic orange and pink colour, I really loved that moment. (Text11, male, 18-year-old, Grade 12)

(21) I will ride a black or white horses. (Text 7, female, 13-year-old, Grade 7)

(22) They send us to a strange green planet, everybody has black helmets with stars on. (Text 12, male, 14-year-old, Grade 7)

(23) On the left side you have the big blue ocean and on the right side you have the skimountain. (Text 17, female, 14-year-old, Grade 9)

(24) An island packed with rare exotic creatures and native residents, with white pearly beaches along the coastline that stretch out as far as you can see ad beyond the visible spectrum of the cornea. (Text 16, male, 16-year-old, Grade 10)

(25) Everyday, we woke to clear blue sky and warm weather. (Text 13, male, 18-year-old, Grade 12)

Surprisingly, the use of compound adjectives is extremely rare by all the four groups investigated. Possible explanations will be discussed in the section of analysis and discussion. Only seven instances are found in the written samples, of which one is found in the texts from Grade 9, four from Grade 10 and two from Grade 12, as shown in examples (26), (27), (28), (29), (30), (31) and (32) respectively.

(26) [...] no divorces and heartbroken boys and girls, [...] (Text 19, female, 15-year-old, Grade 9)

(27) The flight was going to take off at 9 am so we had a lot of time to go tax-free shopping. (Text 5, male, 16-year-old, Grade 10)

(28) We all walked in a zombie-like state towards our next plane and I drowsed off as soon as I sat down again. (Text 5, male, 16-year-old, Grade 10)

(29) [...] we have to do those finger-scan things, it was a pretty cool way to detect criminals. (Text 20, male, 16-year-old, Grade 10)
(30) The ribs were super hot [...] but anyway I’ll call it 6.5 /10 on the “good-food scale”. (Text 10, male, 16-year-old, Grade 10)

(31) With just a few days left of the week, we all took some well-deserved vacation to discover more of Prague on our own, without our coaches. (Text 12, male, 18-year-old, Grade 12)

(32) [...] with a temperature of about 39 degrees Celsius when the water in my hair froze because of the low-tempered air. (Text 16, male, 18-year-old, Grade 12)

Furthermore, another close analysis was undertaken in order to understand the frequency of simple adjectives shown in Table 3. The following four tables illustrate how large is the proportion of the most common attributive adjectives (Biber, Conrad & Leech, 2002:200, see Appendix 3) that occur in the texts from the four groups. The percentage in proportion to all simple adjectives found in the data from each grade is given in the parentheses in Tables 4, 5, 6, 7 and 8. Four complete lists of all simple adjectives found in the data from the four grades are listed in the appendices 4, 5, 6 and 7.

As seen in Table 4, totally 51 instances of simple adjectives are found in the seventh graders’ text, of which 39 account for the most common attributive adjectives, that is, little, big, good, long, new, best, great, nice, young, bad, black, old, small and white, listed in the order from the most frequent down to the least frequent adjective (see Appendix 4).

Table 4 Simple adjectives found in the texts from Grade 7

<table>
<thead>
<tr>
<th>simple adjectives (instances)</th>
<th>most common attributive adjectives (instances)</th>
</tr>
</thead>
<tbody>
<tr>
<td>In total</td>
<td>51</td>
</tr>
<tr>
<td></td>
<td>39 (76%)</td>
</tr>
</tbody>
</table>

As shown in Table 4, the most common attributive adjectives stand for 76% of the total uses of simple adjectives. The most frequent use is the adjectives big and little, which comprises 15 instances, as shown in (33) and (34).

(33) When we arrived as usely I had a big headache and [...] (Text 5, female, 13-year-old, Grade 7)

(34) But the best THING is the little trip to “Phantasialand” outside Cologne. (Text 14, male, 14-year-old, Grade 7)

As seen in Table 5, the texts from Grade 9 provide 62 instances of simple adjectives.

Table 5 Simple adjectives found in the texts from Grade 9

<table>
<thead>
<tr>
<th>simple adjectives (instances)</th>
<th>most common attributive adjectives (instances)</th>
</tr>
</thead>
<tbody>
<tr>
<td>In total</td>
<td>62</td>
</tr>
<tr>
<td></td>
<td>38 (61%)</td>
</tr>
</tbody>
</table>

Among the 62 instances, the share of the most common attributive adjectives, nice, good, big, new, little, small, special, whole, best, great, long, old, right and same (see Appendix 5),
is 61%. The adjectives *nice* and *good* are most frequently used in this group, which composes 12 instances together, as seen in (35) and (36).

(35) When we came to Taizé it was a very *nice* weather and we got our number for the house we should stay in. (Text 1, female, 16-year-old, Grade 9)

(36) It was very *good* food there and I’ll never forget their pizza. (Text 16, female, 16-year-old, Grade 9)

As shown in Table 6, 97 instances of simple adjectives are spotted in the data examined from this group. The larger number of instances found in this group depends probably on the longer average text length compared to the other three groups investigated.

**Table 6 Simple adjectives found in the texts from Grade 10**

<table>
<thead>
<tr>
<th>simple adjectives (instances)</th>
<th>most common attributive adjectives (instances)</th>
</tr>
</thead>
<tbody>
<tr>
<td>In total</td>
<td>97</td>
</tr>
<tr>
<td></td>
<td>55 (57%)</td>
</tr>
</tbody>
</table>

The most common attributive adjectives consist of *whole, big, long, good, best, nice, great, little, same, small, white, large, low, new, old* and *young* (see Appendix 6), which share a portion of 57% of the total instances. The most frequent use is the adjectives *whole* and *big* accounting for 20 instances together, as seen in (37) and (38).

(37) When we arrived to Miami it was like 8 pm and we saw the *whole* city from above. (Text 8, male, 16-year-old, Grade 10)

(38) They live in a *big* English house with a *big* garden. (Text 6, male, 16-year-old, Grade 10)

As shown in Table 7, in total 63 instances of simple adjectives are found in the data from Grade 12. The most common attributive adjectives account for 35 instances, having a share of 55% of the total number.

**Table 7 Simple adjectives found in the texts from Grade 12**

<table>
<thead>
<tr>
<th>simple adjectives (instances)</th>
<th>most common attributive adjectives (instances)</th>
</tr>
</thead>
<tbody>
<tr>
<td>In total</td>
<td>63</td>
</tr>
<tr>
<td></td>
<td>35 (55%)</td>
</tr>
</tbody>
</table>

Among the most common attributive adjectives, *whole, big, best, great, nice, small, long, new, same, high, little* and *special* (see Appendix 7), the two adjectives *whole* and *big* made up 12 instances, as illustrated in (39) and (40).

(39) After a few days in Singapore, the whole family flew to the north of Thailand, a city called Chiang Mai. (Text 7, male, 18-year-old, Grade 12)

(40) Finally, the last day had come and we all went back home to Sweden with big smiles. (Text 12, male, 18-year-old, Grade 12)
As shown in table 8, the only comparable figures across the four grades investigated are the percentages of the most common attributive adjectives.

*Table 8 Overview of distributions of all simple adjectives found*

<table>
<thead>
<tr>
<th></th>
<th>Average text length (words)</th>
<th>Simple adjectives (instances)</th>
<th>Most common attributive adjectives (instances)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade 7</td>
<td>203</td>
<td>51</td>
<td>39 (76%)</td>
</tr>
<tr>
<td>Grade 9</td>
<td>268</td>
<td>62</td>
<td>38 (61%)</td>
</tr>
<tr>
<td>Grade 10</td>
<td>393</td>
<td>97</td>
<td>55 (57%)</td>
</tr>
<tr>
<td>Grade 12</td>
<td>198</td>
<td>63</td>
<td>35 (55%)</td>
</tr>
</tbody>
</table>

The proportion of the most common attributive adjectives decreases when the proficiency levels rise. In other words, the further students progress, the richer variety of adjectives is used. It is a noticeable and significant progress compared Grade 7 with Grade 12, that is, the portion of the most common attributive adjectives comes down from 76% to 55%.

The next section, Analysis and Discussion, will deal with how the results presented should be interpreted and what they indicate, and how suggestions of the findings can be put into teaching practice.
8. Analysis and Discussion

According to Hawkins (2004:3), even highly abstract and fundamental properties of syntax can be argued to be derived from simple principles of processing. Relation between efficiency and complexity can be explained by patterns of preferences in performance and ease of processing certain syntactic structures. An increasing complexity means that more linguistic forms and structures are involved and therefore more linguistic properties assigned to them have to be processed, while efficiency is increased by selecting the most ultimate syntactic and semantic representations as possible. Accordingly, the results from the previous section as shown in Figure 1, confirm the difference between the two syntactic properties of adjective, namely predicative or attributive use. The results show that the use of adjectives as predicative remains stable over time. In contrast, the use of adjective as attributive steadily increases. The figures shown in Table 2 in section 7.2 indicate that Swedish junior and senior high school students use, as expected, more and more adjectives as premodifers than nouns as premodifiers in NPs over time. As a part of the noun phrase, more and more adjective types get involved in the complexity of the premodification in NPs. The more complex noun phrases become the more advanced adjective type are involved. However, the overall results suggest that Swedish junior and senior high school students have mastered the two language devices, that is to say, the predicative and attributive use of adjectives, in their written production.

Moving on to the core of the present study – the use of attributive adjectives in noun phrase premodification, a hypothesized hierarchy proposed in Section 5.3 was applied to access morphological and syntactic progress of adjective types used in noun phrase premodification in students’ writing. Biber, Gray & Poonpon (2011) state that one aspect of grammatical complexity refers to the morphological distinctions between languages or varieties, that is, the more distinctions the more complex the language is. Likewise, it can be inferred that adjectives that carry more grammatical information are more complex. As has been mentioned in the section of 7.2, and shown in Table 2 and 3, as Swedish junior and senior high school students reach a higher school level, they use more and more noun phrases with adjectives as premodifiers. The findings also reveal that the more proficient the students become, the more adjective types, such as derivational and participial adjectives, are involved in noun phrase premodification. The extremely few instances of attributive compound adjectives can be explained by the fact that compound adjectives present a compact form of information, which characterizes advanced writing (Biber, Conrad & Leech, 2002: 192; Biber & Gray, 2011). In other words, the written production investigated has not illuminated the characteristics of academic writing yet. Swedish learners of English in junior and senior high school still have a long way to go to acquiring the writing skill of elaborating ideas while
consolidating sentence structures. The use of more complex structure, namely coordinate use of attributive adjectives, is not actually consistent with the same pattern as the use of adjective types. However, it also shows a pattern of increasing uses. All this evidence supports Biber, Gray & Poonpon’s (2011) claim that the more advanced grammatical structures students exhibit as they progress in their language proficiencies. The findings of the present study are also confirmed by Parkinson & Musgrave’s (2014) study that adjectives as noun premodifiers are acquired earlier than other types of noun premodifier, for example, nouns as premodifiers, and that the use of attributive adjectives is favoured by less proficient writers. The finding of this study are also consistent with their findings that less proficient students use more frequently adjectives in the list of most common attributive adjectives by Biber, Conrad & Leech, (2002:200), and that more proficient students use a greater proportion of participial adjectives.

Beer & Nagy (2007) point out that the relation between syntactic complexities and writing quality is complex, since there are many other factors that contribute to a good piece of writing. However, an effective use of syntactic structures will open up the possibility for expressing more complicated ideas in a clearer way and the possibility for producing more fluent texts. Considering the semantic property of adjectives, more accurate and effective use of attributive adjectives will contribute to better narrative texts. The present study has not looked into the relation between syntactic complexity and writing quality, but during the course of reading and coding the data investigated the quality of the texts is inevitably roughly evaluated. As the piece of writing quoted in the section Introduction, the use of adjectives definitely makes the text well-presented, even though other factors are involved to be able to achieve a good writing quality.

Analyses employing different measures of T-unit have been proven and confirmed the fact that syntactic development is taken place in learner language and syntactic complexity reflects the sequence of acquisition of new syntactic constructions. The present study also provides a piece of evidence that Swedish junior and senior high school students acquire the morphological features within adjective formation first from simple common forms to forms attached with derivational suffixes, and then to forms derived from verbs, namely participial forms. According to the data, the findings show that the use of compound forms in noun phrase premodication has not been acquired by the overwhelming majority of Swedish junior and senior high school students.

Although the type of attributive adjectives used in a noun phrase does not change the syntactic complexity of the noun phrase, still different types of attributive adjectives contain different grammatical information, besides their lexical meaning. Especially, participial adjectives or adjectival compounds involving participles denote a compact meaning and function that can be realized by relative clauses, as seen in examples (41a) and (41b) (Biber, Conrad & Leech, 2002: 192).
(41a) Over the bonfires hangs newly *hunted seasoned* wild boars and lots of happy villagers sit around. (Text 16, male, 16-year-old, Grade 10)

(41b) Over the bonfires hang wild boars *that were newly hunted* and *seasoned*, and lots of happy villagers sit around.

As has been noted, there is a wealth of adjectives that are available for learners of English to choose from (Börjesson, 2014:3). We can affirm that as students progress in their proficiencies, the acquisition of lexical items becomes more and more important for their writing in order to express more complicated ideas and concepts. When Tables 4, 5, 6 and 7 are compared, we can confirm that along the decrease of simple adjectives, a larger proportion of other types of adjective use increase when students progress in their language study. The twelfth graders exhibit the use of a richer variety of adjectives, even though the average text length is relatively shorter than that of other grades. While this is true, students from the four grades after all show highly frequent uses of most common attributive adjectives in their writing, as seen in Table 8.

A close scrutiny of the use of compound adjectives was carried out. Totally seven instances are found in the eighty texts examined, that is to say, one from Grade 9, four from Grade 10 and two from Grade 12. The only one from Grade 9 is *heartbreaked*, The four instances used by the tenth graders are *tax-free shops*, *zombie-like state*, *finger-scan things* and *good-food scale*, which shows that more word classes are involved in these compound adjectives, for example, combinations of noun with adjective and noun with noun. The two instances *well-deserved* and *low-tempered* are found in the texts of the twelfth graders. From a grammatical point of view, we may be able to say that these two instances are more advanced types of compound adjectives by combining adverb or adjective with participles. On the whole, all seven compound adjectives found are highly topic-related and are learnt at particular occasions, like travelling.

Obviously, the use of coordinators *and* and *or* is not common in the students’ texts examined, which may depend on the fact that they have not completely mastered the semantic relation between adjectives and the heads modified. The ordering of adjectives in attributive position was not found as a problem in the present study, which may be explained by the fact that the number of adjectives modifying head nouns is seldom more than two. In fact, only two instances are found containing three adjectives modifying the head in the 80 texts investigated, as seen in examples (20) and (41a).

Another feature that is confirmed by the findings of Börjesson’s (2014: 187-188) study is the Swedish learners of English overuse both common adjectives and their modifiers, such as *really* and *very* for “all-purposes”. Although this is not the focus of the present study, it is impossible to overlook the overwhelmingly uses of *very* and *really* as modifier of adjectives in the data examined.
To sum up, the findings of the present study confirm the hypothesized hierarchy of attributive adjectives in noun phrases. A constant progress in the complexity of noun phrase premodification is undergoing across the four school levels. The more proficient students become, the more instances are found in more complex adjective types, for example the increasing use of derivational and participial adjectives. While this is true, Swedish junior and senior high school students still frequently use the most common attributive adjectives. A positive trend is that the number of such instances is dropping and the variety of adjectives becomes richer when students advance in school levels.
9. Pedagogical Implications

As has been noted, there has already been a considerable amount of research focusing on the measure of fluency, accuracy and complexity in second language writing, and proving that the grammatical features in conversation differ from those in academic writing. For instance, many findings of previous research on second language writing have confirmed that conversation is more clausal while academic writing is more phrasal (Biber, Gray & Poonpon, 2011; Biber & Gray, 2011; Parkinson & Musgrave, 2014). As Biber, Gray & Poonpon (2011) point out, hypotheses of developmental sequence in language complexity usually assume that language learners acquire first the grammar of spoken language, and the grammar of writing comes after. It could happen that the grammar of writing may not be successfully or fully acquired in second language learning. They also believe a widely accepted assumption that students follow a natural progression from simple clause structures to more complex and elaborated clause structures in conversation and writing in both first language (L1) and second language (L2) acquisition.

Saville-Troike (2006:77) also discusses a couple of theories regarding the universal acquisition sequence. The most relevant theory to this study is Processability Theory, presented by Pienemann in 1998. Saville-Troike (2006:77) sums up an acquisitional hierarchy of processing skills, proposed by Pienemann and Håkansson in 1999, that learners process language elements in the L2 in the following order: word access, category procedure, phrasal procedure, S-procedure and clause boundary. This sequence claims that learners first acquire the base form and the most common meaning of a word without any association with grammatical information. The next step is to categorize the word in order to acquire knowledge about how to use it, where grammatical information is involved, such as part of speech and inflection. The last three steps concern processing the usage of the word at phrasal and clausal levels, as well as at sentential level, involving syntactic rules, such as structures and functions of different word phrases. Accordingly, processibility theories can be understood as a progressive mastery of lexical items along with the morphological features and the semantic strings that are part of lexical knowledge, thereafter, involving the syntactic properties of lexical items about how to form phrases and clauses.

The findings of the present analysis of adjective use in written production by Swedish learners of English from junior to senior high school confirm that a developmental sequence of adjective use follows the processes as stated above. Less proficient students use adjectives in simple forms more frequently. More proficient students exhibit more uses of various types of adjectives in more complex forms. However, it is believed that this sequence of development cannot be radically promoted by explicit teaching of English grammar. On the other hand, an explicit teaching of word formation may benefit L2 learners in the long-term
course of language learning and development. Larsen-Freeman (2014:265) states that the explicit teaching of grammatical rules and pattern by using conscious-raising tasks might gain an advantage to L2 learners, especially older ones. A consciousness-raising in English teaching concerning the ability to describe things and elaborate thoughts may also promote the varied use of descriptive adjectives and the quality of narrative writing.

Furthermore, the findings in the present study suggest that the use of attributive adjectives is important for elaborating and consolidating information in noun phrases. For instance, example (42a) is much more elaborated than example (42b), and example (42c) is much more concise than example (42a). In this sense, we can say that attributive adjectives play an essential role in the complexity of noun phrases, both from syntactic and semantic points of view. In addition, particularly in writing, it is important to develop the ability to produce complex sentences that contain more sufficient expression of complex ideas and thoughts. Language devices, like nominalisation and attributive adjectives will indicate more advanced writing, and skills in using these language devices therefore become necessary for students to acquire (Beer & Nagy, 2007; Biber & Gray, 2011; Parkinson & Musgrave, 2014).

(42a) And outside there was a really big pool that was very warm and nice. (Text 12, male, 16-year-old, Grade 10)

(42b) And outside there was a pool.

(42c) And outside there was a very warm, and really nice and big pool.
10. Conclusion

The present study has undertaken an analysis of how adjectives are used and acquired morphologically and syntactically in second language acquisition. As answers to the research questions:

Are there any patterns of adjective use in the four different graders’ written production? If so, how are they represented?

Is there any evidence showing a grammatical development that the higher proficient learners the more complex use of adjectives they exhibit?

To what extent can the use of attributive adjectives prove its relation to the complexity of noun phrases?

The findings of this study provide valid proof of the SLA theories presented earlier in section Interlanguage and Learner Language, and section Second Language Syntax and learners’ Syntactic Development. It can be confirmed that learners’ use of adjectives does provide strong pieces of evidence that learners’ morphological and syntactic development follows a sequence of processibility and acquisition, that is, from simpler forms to more complex forms, and from simpler structures to more complex structures. For this reason, most grammar books are presented in this natural processable order and the same is suggested for English teaching in the classroom.

As Hawkins (2001:1) claims, the changes in learners’ interlanguage can be observed by learners’ language performance over time. Accordingly, the findings prove that analyzing learner language is an effective way of studying learner’s interlanguage. The findings reveal that Swedish L2 learners at different developmental stages exhibit frequent uses of certain grammatical features but show a progression over time, for instance the different types of adjectives. Furthermore, the findings of this study confirm the hypothesis of the development of morphological and syntactic complexity in the use of attributive adjectives in noun premodification. That is to say, the greatest portion of the most common was found in the writing of the least proficient students, and the more complex types of adjectives was found significantly larger in number in the writing of the most proficient students, such as derivational adjectives and participial adjectives. The increasing use of derivational and participial adjectives in noun premodification indicates a progression of grammatical complexity, if syntactic complexity cannot be used as the right term.

As has been noted earlier in section Previous Research, Parkinson & Musgrave (2014) study different types of premodifiers in noun phrases and claim that the less proficient group more frequently uses attributive adjectives. The findings of this study support Parkinson & Musgrave’s (2014) findings in the sense that more adjectives as premodifiers were found than noun as premodifiers in the data studied. In addition, they discover that the more proficient
group uses a greater proportion of participial adjectives as noun premodifiers, which is also confirmed by the present study.

Again, as one of the aims of this study, some pedagogical suggestions based on the findings are that teaching adjectives may start by learning their meanings and then analyzing contexts in which they occur, and lastly using them in all kinds of classroom activities involving giving descriptions. It may also be a part of purposeful instructions for speaking and writing. Definitely, teaching vocabulary should include knowledge of word formation.

The last point to add is the limitations of the present study. As Bäcklund (1981) points out, studies about the semantic complexity of adjectives are a massive subject and it is related to historical language use and language development and changes. Due to the limited time for working on this paper, an analysis of the semantic complexity of adjectives has to be set aside. Likewise, the decision of mainly investigating the use of attributive adjectives as premodifiers in noun phrases has also been hard to make, due to the syntactic flexibility of adjectives. The syntactic and morphological aspects of adjective use have thus to be included in order to achieve a proper view of learners’ overall development in acquiring and using adjectives. As a result, further study in this aspect may make a valuable contribution to the understanding of the correlation between adjective use and the quality of writing.
References


38


Internet:
Appendices

Appendix 1. Distribution of all derivational adjectives found

<table>
<thead>
<tr>
<th>Grade</th>
<th>Average text length (words)</th>
<th>Derivational adjectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>203</td>
<td>expensive, beautiful, gigantic</td>
</tr>
<tr>
<td>9</td>
<td>268</td>
<td>normal (2)*, beautiful (4), awful, awesome, magic, electronic, civilian, Swedish, Canadian</td>
</tr>
<tr>
<td>10</td>
<td>393</td>
<td>awesome (3), native (2), famous (2), beautiful, typical, uncomfortable, endless, enormous, expensive, imaginary, valuable, visible, wooden, historical, official, gnorly, vigorous, colonial, English, Swedish</td>
</tr>
<tr>
<td>12</td>
<td>198</td>
<td>Ancient (2), enormous (2), joyful, colourful, daily, lovely, unreal, endless, ordinary, national, emotional, historical, phisycal, adventurous, mountainous, reasonable, wooden, excellent, military, European, Swedish</td>
</tr>
</tbody>
</table>

* Numbers in the parentheses refer to the occurrence more than once.

Appendix 2. Distribution of all participial adjectives found

<table>
<thead>
<tr>
<th>Grade</th>
<th>Average text length (words)</th>
<th>Participial adjectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>203</td>
<td>fried rice, toasted bread (2)*</td>
</tr>
<tr>
<td>9</td>
<td>268</td>
<td>walking, camping, boring, drunk,</td>
</tr>
<tr>
<td>10</td>
<td>393</td>
<td>interesting, amazing, astonishing, shopping, packing, running, surfing, cruising, deafening, blazing, chirping, shooting, speaking, fried, hunted, seasoned, overgrown</td>
</tr>
<tr>
<td>12</td>
<td>198</td>
<td>interesting, amazing, shopping, standing, trembling, thrilling, enduring, skiing, flavoured</td>
</tr>
</tbody>
</table>

* Numbers in the parentheses refer to the occurrence more than once.

Appendix 3. Most common attributive adjectives in conversation and academic prose

<table>
<thead>
<tr>
<th>descriptors</th>
<th>Conversation</th>
<th>Academic</th>
</tr>
</thead>
<tbody>
<tr>
<td>size/amount</td>
<td>big, little, long</td>
<td>long, small, great, high, low, large</td>
</tr>
<tr>
<td>time</td>
<td>new, old</td>
<td>new, old, young</td>
</tr>
<tr>
<td>color</td>
<td>black, white</td>
<td>-</td>
</tr>
<tr>
<td>evaluative</td>
<td>good, bad, best, right, nice</td>
<td>good, best, right, important, simple, special</td>
</tr>
<tr>
<td>relational</td>
<td>same, whole, different</td>
<td>-</td>
</tr>
</tbody>
</table>

(Biber, Conrad & Leech, 2002:200)

Appendix 4. Distribution of all simple attributive adjectives found in the texts from Grade 7

<table>
<thead>
<tr>
<th>Adjectives</th>
<th>Frequency</th>
<th>Adjectives</th>
<th>Frequency</th>
<th>Adjectives</th>
<th>Frequency</th>
</tr>
</thead>
</table>

40
<table>
<thead>
<tr>
<th>Adjectives found</th>
<th>Frequency</th>
<th>Adjectives found</th>
<th>Frequency</th>
<th>Adjectives found</th>
<th>Frequency</th>
<th>Adjectives found</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>nice</td>
<td>7</td>
<td>whole</td>
<td>3</td>
<td>nearby</td>
<td>1</td>
<td>warm</td>
<td>1</td>
</tr>
<tr>
<td>good</td>
<td>5</td>
<td>best</td>
<td>1</td>
<td>old</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>big</td>
<td>4*</td>
<td>calm</td>
<td>1</td>
<td>poor</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>fun</td>
<td>4</td>
<td>dark</td>
<td>1</td>
<td>private</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>new</td>
<td>4</td>
<td>evil</td>
<td>1</td>
<td>rich</td>
<td>1</td>
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<td></td>
</tr>
<tr>
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<td>3</td>
<td>favorite</td>
<td>1</td>
<td>right</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>hot</td>
<td>3</td>
<td>great</td>
<td>1</td>
<td>same</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>little</td>
<td>3</td>
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<td></td>
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<td>small</td>
<td>3</td>
<td>long</td>
<td>1</td>
<td>single</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>special</td>
<td>3</td>
<td>mean</td>
<td>1</td>
<td>ugly</td>
<td>1</td>
<td></td>
<td></td>
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</tbody>
</table>

* Adjectives of the same frequency are listed in alphabetical order.

Appendix 6. Distribution of all simple attributive adjectives found in the texts from Grade 10

<table>
<thead>
<tr>
<th>Adjectives found</th>
<th>Frequency</th>
<th>Adjectives found</th>
<th>Frequency</th>
<th>Adjectives found</th>
<th>Frequency</th>
<th>Adjectives found</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>whole</td>
<td>12</td>
<td>nice</td>
<td>3</td>
<td>blue</td>
<td>1</td>
<td>old</td>
<td>1</td>
</tr>
<tr>
<td>big</td>
<td>8</td>
<td>funny</td>
<td>2</td>
<td>decent</td>
<td>1</td>
<td>rare</td>
<td>1</td>
</tr>
<tr>
<td>long</td>
<td>7</td>
<td>great</td>
<td>2</td>
<td>distinct</td>
<td>1</td>
<td>tiny</td>
<td>1</td>
</tr>
<tr>
<td>biggest</td>
<td>6*</td>
<td>late</td>
<td>2</td>
<td>extra</td>
<td>1</td>
<td>wet</td>
<td>1</td>
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<tr>
<td>good</td>
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<td>2</td>
<td>full</td>
<td>1</td>
<td>wrong</td>
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<td>young</td>
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<td>2</td>
<td>hard</td>
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<td>small</td>
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<td>large</td>
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<td>low</td>
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<td></td>
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</table>

* Adjectives of the same frequency are listed in alphabetical order.
Appendix 7. Distribution of all simple attributive adjectives found in the texts from Grade 12

<table>
<thead>
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<th>Adjectives found</th>
<th>Frequency</th>
<th>Adjectives found</th>
<th>Frequency</th>
<th>Adjectives found</th>
<th>Frequency</th>
<th>Adjectives found</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>whole</td>
<td>8</td>
<td>hot</td>
<td>2</td>
<td>fun</td>
<td>1</td>
<td>special</td>
<td>1</td>
</tr>
<tr>
<td>big</td>
<td>4*</td>
<td>long</td>
<td>2</td>
<td>grand</td>
<td>1</td>
<td>tiny</td>
<td>1</td>
</tr>
<tr>
<td>best</td>
<td>4</td>
<td>new</td>
<td>2</td>
<td>happy</td>
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<td>unique</td>
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</tr>
<tr>
<td>great</td>
<td>4</td>
<td>same</td>
<td>2</td>
<td>high</td>
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<td></td>
<td></td>
</tr>
<tr>
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<td>largest</td>
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</tr>
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<td>dark</td>
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<td>latest</td>
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* Adjectives of the same frequency are listed in alphabetical order.