Gender-based differences in learner English
A syntax study of Swedish high school students’ written production

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Abstract

Female students have long had a perceived advantage over male students in second language acquisition. In Swedish schools, the girls have outperformed the boys in the subject of English since the end of the Second World War, but the female students’ edge over the male students has diminished considerably over time. This essay aims to find out if there are any differences in linguistic ability between the two genders. The study uses a T-unit based syntax analysis in order to quantify the level of syntactic maturity that Swedish high school students possess, using data drawn from the Uppsala Learner English Corpus. Furthermore, the study aims to research gender-based stylistic differences and risk-taking behavior in the student’s writing.

The results show that there are differences in syntactic maturity between the genders, as the female students in junior high school and the male students in senior high school outperform their respective counterparts, particularly in the indices based on error-free T-units. In addition, there are also stylistic disparities, as the female students have a greater focus on personalized accounts in their writing and the male students in junior high school have a very sparse and concise style of writing. The conclusion is drawn that while there are differences in syntactic maturity between boys and girls, the syntactic indices cannot accurately display the sophistication of the students’ writing and consequently should only be used in conjunction with more qualitative measures. Finally, while the study is not able to discern risk-taking in the students’ writing, the author concludes that risk-taking is an important factor in second language acquisition, especially considering the fact that the Swedish curricula in junior and senior high school English have a strong focus on communicative competence.

Key words: English, high school, syntactic maturity, T-units, gender
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1. Introduction

My degree project is a study of syntactic development in learner English. Specifically, I have researched Swedish students’ written production by using a wide range of syntactic indices, primarily Hunt’s T-unit. Throughout the years, female students have continuously shown that they outperform the male students across the board in Swedish schools, except for the more vocational subjects. Historically, the girls have had a clear advantage over the boys in the subject of English. As such, one aim with my study is to determine if this advantage can be proven, purely from a syntactic standpoint.

I have had an interest in language development for a very long time, particularly whether one can quantify progression in language development and if so, how? In my C-paper in English, I discussed this topic and came to the conclusion that you can, in fact, measure language progression through indices such as the subordinate clause index, however, only a very specific type of progression, namely syntactic development. As a future teacher of English, I wanted to know if different syntactic indices could be used in the grading and assessment of students, or if they only were linguistic tools that had no actual use in the classroom. My fascination with grading students is also reflected in this study, as I wanted to discuss how you as a teacher should relate grammatical correctness, risk-taking and content. How should you assess a student who writes with a great degree of accuracy, but who avoids using difficult grammatical constructions? I find the correlation between grammatical accuracy, risk-taking and the content in a piece of writing to be extremely interesting.

I wish to give a heartfelt thank you to Christine Johansson at the Department of English, who is a never-ending source of inspiration.
2. Background

In studies such as the expansive European Survey on Language Competences, a major initiative by the European Commission, Swedish students have displayed their high level of linguistic ability in the English language compared with students from other European nations, especially when it comes to listening- and reading comprehension. In addition, the Swedish students performed very well on the written tests. However, they did not quite reach the same level of excellence as they did in the other two skills, as their Common European Framework of References (CEFR) levels were lower in comparison, and fewer students seemed to reach the B2 level (vantage or upper intermediate) (Education and Training 2012, p. 37 f.). In the assessment of the students’ written production, this particular survey focused on such areas as vocabulary, grammatical accuracy, coherence and cohesion (Ibid., p. 23). However, the study in question did not employ any gender-based perspective at all. As such it cannot tell us anything about differences (if there are any) in language ability between the genders.

Ever since the end of the Second World War, when girls got the right to the same education as boys in Sweden, the female students have outperformed the male students in the subject of English (Statens offentliga utredningar 2009, p. 142). In the most recent survey that has been commissioned, the girls still hold an advantage over the boys, however the gap between the two genders has decreased drastically (Ibid., p. 127 f.). In the light of these facts, I wanted to investigate whether one could find any gender-based differences in the writing of Swedish high school students, using a purely syntactic outlook.

The question one must ask oneself is: how can language progression be measured and quantified? Obviously it is impossible to create an index of language development that can measure every aspect related to second language acquisition (SLA), such as vocabulary, grammatical accuracy and spelling. Instead, the focus must lie on one solitary aspect, such as syntax. In 1965, Hunt developed the T-unit in order to be able to measure syntactic development (also known as syntactic maturity, complexity or proficiency). To put it simply, a T-unit is the smallest unit a piece of discourse can be broken down into, without leaving any sentence fragments behind (1965, p. 305 f.) (see section 5.4 for a more detailed description of the T-unit). Hunt developed this index because he thought that sentence length, which was the most popular way of measuring language progression at the time, could not provide adequate data, and he also considered sentence length to be an arbitrary way of measuring linguistic ability (1966, p. 737). Following Hunt’s development of the T-unit, the linguistic community has adopted the index as a way of measuring syntactic development, in addition to reconfiguring the index for second language acquisition research through the modified index known as the error-free T-unit (see section 5.4) (Larsen-Freeman 1978, p. 440; 1 There was no spoken English test in this particular survey (Education and Training 2012).
By using indices of syntactic maturity such as these, my study focuses on gender-based differences in the writing of Swedish high school students. In conjunction with syntactic differences, pure stylistic disparities between boys and girls are also looked at in this study.

Something that language teachers face daily is the fact that second language acquisition is incredibly complex and constitutes a wide array of different aspects, such as grammatical accuracy, range of vocabulary, morphology, pronunciation, and spelling to name a few. One factor that researchers, such as Casanave (1994), has focused on is how you as a teacher should look at grammatical accuracy, risk-taking and the content itself in your students’ writing, and particularly how these three aspects relate to each other. Should a student who tries to write difficult grammatical constructions and at the same time has an interesting, coherent and cohesive text be commended, even though he or she fails miserably from a purely grammatical standpoint? How should you compare such a student’s piece of writing with another student who has a grammatically flawless language, but at the same time takes very few risks as he or she avoids using difficult constructions and produces texts without coherence and flow? Should they even be compared? The Swedish curricula and grading criteria for junior high school and senior high school (Skolverket 2011) have a strong focus on communicative competence. Consequently, this means that risk-taking behavior should be encouraged by teachers, as the emphasis lies on making yourself understood rather than native or near-native competence.

As such, one of the aims with this study is to use different indices of syntactic maturity in order to investigate Swedish high school students’ level of syntactic complexity, with particular focus on gender-based differences. Moreover, there is also a focus on stylistic differences between the genders in the students’ writing. Finally, the study aims to visualize risk-taking in the students’ written production.
3. Review of the literature

This section provides an overview of the results and conclusions that previous studies have made when it comes to T-unit based syntax research, risk-taking contra language progression and gender in relation to language learning. Furthermore, second language acquisition theories related to my research are also discussed.

3.1 Previous research

The following section is devoted to studies relevant to my research, and it is divided into the following subsections: T-unit research, Risk-taking in a second language and finally Gender and language.

3.1.1 T-unit research

Hunt, who developed the T-unit in 1965, applied his index to material written by American first language (L1) learners of English in grades four, eight and twelve. In his research, he found that T-unit length (number of words per T-unit) was a far better indicator of syntactic maturity than sentence length, which was the dominant syntactic index at the time (Hunt 1965, p. 306). Hunt’s study showed that the average T-unit length increased as the learners got older, from 8.6 words per T-unit in fourth grade to 14.4 words in twelfth grade, while the average number of T-units per sentence decreased from 1.60 in fourth grade to 1.17 in twelfth grade (Ibid.). As such, Hunt felt the T-unit could quite accurately display the increased sophistication of the learners’ writing (Ibid., p. 307).

Furthermore, Hunt was able to show a correlation between syntactic development and the usage of subordinate clauses (1966, p. 733). He found that as language learners develop and get older, they use more subordinate clauses, which is why he developed the subordinate clause index (SCI) (Ibid.). His results showed that average fourth graders have a subordinate clause index of 1.3, meaning that they write 0.3 subordinate clauses per main clause, while the corresponding number for average twelfth graders was 1.68 (Ibid., p. 737).²

Hunt also considers clause-consolidation to be a very important part of a learner’s syntactic development: “[…] the reduction and consolidation of many clauses into one is intimately related to syntactic growth” (1966, p. 739). As a learner’s linguistic proficiency in the target language increases, he or she not only uses more subordinate clauses but also writes clauses with more

² As a point of interest, Hunt found that superior adult writers had a subordinate clause index of 1.78. However, some article writers had an SCI of 2.36, i.e. for every main clause they wrote 1.36 subordinate clauses (Hunt 1966, p. 733).
words in them. This should not be considered as padding, but as reduction and consolidation (or a process known as embedding transformations) (Hunt 1966, p. 738). The extra words are consolidated clauses that have been turned into a single word or a phrase within another clause. As a result, the average clause length increases as the learner develops a more and more sophisticated understanding of the target language (Ibid., p. 734–737).

More recently, Johansson and Geisler have conducted two different studies of learner English, using material written by Swedish high school students (2009; 2011). Their studies have a strong focus on syntactic development and they found that while the students’ syntactic complexity does increase with age, it could be argued that it does not increase as significantly as previous studies have shown (Johansson and Geisler 2009, p. 189). Johansson and Geisler show that mean T-unit length increases from 13.62 in year 9 of junior high school to 15.90 in year 3 of senior high school, while the number of T-units decreases from 7.54 (per 100 words) to 6.68 (2011, p. 150). The decrease in number of T-units is attributed to the fact that the junior high school students write many short T-units (primarily main clauses), while the senior high school students write longer and more complex T-units (Ibid., p. 147). Significant progress is also shown in the students’ utilization of subordinate clauses, as the students in year 9 of junior high school have a subordinate clause index of 1.49, while the senior high school students in year 3 have an SCI of 1.92 (Ibid., p. 150). Furthermore, the usage of nominal clauses, adverbial clauses and relative clauses is perhaps the strongest indicator of syntactic development in Johansson and Geisler’s study. In year 9 of junior high school, the students use 3.27 nominal and adverbial clauses (per 100 words) and 0.58 relative clauses on average, while in year 3 of senior high school the mean numbers are 4.85 for nominal and adverbial clauses and 1.58 for relative clauses (Ibid.). These numbers clearly show the increased sophistication of the students’ writing. In addition, Johansson and Geisler draw the conclusion that the use of the error-free T-unit as a syntactic tool poses significant challenges, since the junior high school students’ writing, to a great degree, consists of short main clauses without any subordination (Ibid., p. 153). This skews the results and makes the junior high school students seem more syntactically advanced than they actually are.

Larsen-Freeman (1978) conducted a major T-unit based study with 212 non-native speakers of English, in which the students were asked to write a composition of about 200 words. The students were placed in five different groups based on their results, ranging from very basic learners to near-native speakers of English. The data showed that T-unit length is perhaps not as sensitive an indicator of second language acquisition development as desired, since the difference in mean T-unit length between the more advanced learner groups was negligible (15.23, 15.25 and 15.67 words per T-unit respectively for the top three learner groups) (Larsen-Freeman 1978, p. 445). However, the data does show a clear progression in the percentage of error-free T-units, since these percentages increase from 11.4 percent in the basic learner group to 49.6 percent in the near-native speaker group (Ibid., p. 445 f.). In addition, mean error-free T-unit length increases from 4.61 words to 13.20 words (Ibid., p. 446). As such, Larsen-Freeman feels that the error-free
T-unit is a much better linguistic index when measuring the syntactic maturity of second language learners (1978, p. 446).

Similarly to Johansson and Geisler’s research, Bergman (2010) has also conducted a syntax-based study into learner English, using data written by Swedish senior high school students. The students in her study display a high level of syntactic maturity, as evidenced by their high number and length of their error-free T-units, especially considering the fact that Bergman utilized the strictest definition of what constitutes an error-free T-unit, namely that it must be correct syntactically, grammatically and in spelling (2010, p. 13 f.). Furthermore, Bergman looked at if a direct correlation between the length of error-free T-units and syntactic maturity could be found. Bergman argues that such a claim could not be made on the basis of her research, as she found that medium-length T-units with several subordinate clauses and consolidated phrases were more accurate markers of syntactic maturity (Ibid., p. 16 f.).

Casanave performed a longitudinal study with Japanese students that had a strong focus on the T-unit as a way of measuring and quantifying language progression. Her results showed that a clear syntactic progression could not be observed in all of her students’ writing (Casanave 1994, p. 193). Consequently, she came to the conclusion that indices such as the T-unit could not provide an accurate picture of her student’s language development (Ibid., p. 192 f). However, Casanave does not mean that the T-unit is useless for measuring syntactic development; she simply argues that such indices should not be used to quantify the syntactic maturity of an entire class, as it instead should be brought down to an individual level (Ibid., p. 193). Casanave’s results are interesting because they break the pattern displayed in most studies that deal with syntactic maturity. Other studies I have looked at show quite clear progression in the students’ writing, while Casanave’s study does not, which makes it an interesting antithesis for my research.

### 3.1.2 Risk-taking in a second language

Risk-taking is intimately intertwined with second language acquisition, as risk-taking, along with high self-esteem and an empathetic and imaginative mind, is generally associated with greater success in second language acquisition (Oxford and Ehrman 1993, p. 195; Saville-Troike 2006, p 89 f.). Casanave has conducted extensive research into the field of risk-taking and learner language. In one of her studies, she looked at how a group of second language (L2) learners’ English writing ability changed and developed over time. Her aim was to discover different ways of actually visualizing the progression in the students’ written language (Casanave 1994, p. 179). The study was performed over a period of one and a half years with 16 Japanese students who studied English as a second language, in which the students wrote journal-like texts in portfolios. Her goal was to make the students move away from having a strong focus on writing with grammatical accuracy. Instead she wanted the students to take more risks and write texts with a greater degree of variation as well as depth, which did not necessarily have to be grammatically accurate (Ibid., p. 184 f.). According to Casanave, previous research into the field of risk-taking and sec-
ond language acquisition have shown that students who are willing to take greater risks in their writing, i.e. that they are willing to move away from a strong focus on grammatical accuracy, display greater progression in their language development compared to students who take fewer risks and stick to constructions that they know by heart (1994, p. 183).

Casanave’s study shows that 45 percent of the students regressed in their grammatical ability, and at the end of the study actually produced more grammatical errors than they did at the beginning (1994, p. 193). This did not surprise Casanave, as she concludes that students who are more prone to taking risks also tend to write with less grammatical accuracy (Ibid., p. 180). Casanave wishes to put a larger focus on risk-taking and she argues that there are different kinds of second language development, which her students, at first, did not see because they were obsessed with writing as grammatically accurate as possible (Ibid., p. 193).

In her study, Casanave provides examples from the students’ portfolios (1994, pp. 194–197). Not only do her students display an incredible progression in the ability to write content with more depth, as the contrast with the students’ earlier texts is staggering, but the students also display much more coherent and cohesive texts, which make their writing more interesting to read. The grammatical accuracy of many of the students does decrease, but in return they develop other parts of their language proficiency. Casanave draws the conclusion that language progression cannot only mean that students write with accuracy, as other factors should be taken into consideration, such as risk-taking (Ibid., p. 199).

Furthermore, gender can also be a factor in risk-taking. Murphy and Elwood found in their study that:

[...] girls’ conformity has been found to influence negatively teachers’ perceptions of their ability. The converse has been found for boys. Ebullient, aggressive, risk-taking behaviour is often interpreted as an indicator of high ability. (Murphy and Elwood 1998, p. 172)

In Murphy and Elwood’s study, different language teachers who were interviewed suggested that since male students are willing to take risks and sound less knowledgeable in front of their peers, they have a much higher belief in their own abilities and are therefore able to overcome a general lack of understanding or knowledge of a particular linguistic aspect (1998, p. 177). The teachers cited in the study felt that female students are much less prone to risk-taking behavior and seen as more cautious. Murphy and Elwood draw the conclusion that the girls’ inability to believe in themselves could also be judged as a sign that they have less command of the subject at hand by teachers (Ibid., p. 177). The following quote from a female teacher is taken from Elwood’s research:

It’s the boys who will come up with something absolutely unique, that I’d never thought of. They suddenly say ‘what about this?’ while the girls will listen to every single word, and do it exactly along those lines and they won’t take risks. They’ll produce a very competent, good piece of work, but it hasn’t got any sparkle. (Elwood 1998, p. 178)
Since risk-taking and L2 learning are firmly intertwined, researchers such as Oxford and Ehrman have discussed ways that teachers can develop their students’ risk-taking ability in the classroom. They favor having a non-threatening classroom climate, individual talks with shy students, class discussions on fear and anxiety, and actively promoting risk-taking behavior (especially in spoken language situations) (Oxford and Ehrman 1993, p. 200).

3.1.3 Gender and language

Language and gender are firmly intertwined as language helps form gender identities, particularly in adolescence since words such as *slut, stud* and *fag* help construct normative gender behavior (Eckert 2003, p. 386 f.). However, gender differences in language learning have long been a debated issue. An important factor to consider is the fact that constituting a facet of a student’s language to his or her gender can be problematic issue. As Swann puts it:

> The use of phrases such as ‘doing gender’ indicate [sic] that gender is seen as a process rather than as a fixed category that somehow ‘explains’ language behaviour. Despite the attractiveness of this approach, however, it poses a number of challenges for empirical enquiry. In practice, language researchers do not, and probably cannot, dispense with gender as an a priori explanatory category. (Swann 1998, p. 154)

Gender should not, as such, be seen as something fixed and distinct, but rather as something that evolves and changes, hence the phrase “doing gender” as it is something that is “done” in context (Swann 2003, p. 625). The distinction between sex and gender is commonly made. Sex refers to the biological characteristics that set men and women apart, while gender refers to socially constructed roles and behaviors that are considered to be appropriate for men and women in that particular context. It is obviously difficult for me to say whether, for example, a commonly used stylistic construction is attributable to that particular person’s sex or gender, and I make no such assumptions in my research. For the purpose of this essay, I have decided to only use the term gender when describing differences between boys and girls, in an effort to avoid any confusion. Again, this does not mean that I make the assumption that any differences between boys and girls have their origin in socially constructed roles, it simply means that I use the term gender to describe these differences. It is also important to remember that without extensive quantitative and qualitative empirical studies, it would be extremely difficult to associate any language component in male and female writing specifically with gender. Even then it would be difficult to say that a particular language discourse is intrinsically gender-dependent, as other factors need to be considered, such as age and socioeconomic background (Ehrlich 1997, p. 437; Swann 2003, p. 630).

In first language acquisition research, female superiority in language ability can almost be seen as a paradigmatic theory (Ehrlich 1997, p. 425). Gender has proven to be a factor in second language acquisition as well, since female learners have proven to be superior in general language
proficiency in several studies (Ehrlich 1997, p. 424). For example, Payne and Lynn found that women perform better in second language ability compared to men (2011, p. 435). In their study, Payne and Lynn measured the reading comprehension ability of college students in both their first language (English) and in a second language (Spanish). Even though the male and female students had an equal amount of experience in the L2 and also did not exhibit any differences in first language ability, the female students still excelled at the reading comprehension test in the L2 (Ibid., p. 435). Payne and Lynn concluded that “[…] females have a stronger module for second language ability than do males” (Ibid., p. 436).

Similarly, Lynn and Wilson found that female students held a distinct advantage in second language learning (1993, p. 277). In their study, Lynn and Wilson conducted several language tests (reading comprehension, vocabulary, spelling etc.) with students in Ireland who studied Irish as a second language, across different age groups. Their results clearly showed that the female students outperformed the male students at every age level, except in the youngest age group wherein the students had just started learning the L2 (Lynn and Wilson 1993, p. 277). The gap in second language ability between the genders manifested itself after one or two years of learning the L2, and the difference remained constant as the learners got older (Ibid., p. 278).

However, female superiority in SLA cannot be seen as a fact. For instance, in Brantmeier’s study into the reading comprehension ability of native English speakers who studied Spanish as an L2, the results clearly indicated that there were no significant differences across gender (2003, p. 9 f.). Furthermore, from a syntactic standpoint in SLA, the male students in Bergman’s study showed a slight advantage over the female students. For example, the boys wrote more and longer error-free T-units, as the boys had a mean error-free T-unit length of 14.4 while the girls’ number was 13.6 (Bergman 2010, p. 14). However, the other indices of syntactic maturity that were used showed no radical differences across gender (Ibid.). In addition, Johansson and Geisler’s study indicates that there are no statistically significant differences in syntactic maturity between boys and girls in more directed written assignments. They come to the conclusion that “[…] gender differences would appear to be leveled out […]” (Johansson and Geisler 2011, p. 146). In one of my own studies, the female students outperformed the male students in junior high school. For example, the girls had a much higher subordinate clause index (1.92 to 1.53) and also a higher proportion of error-free T-units (0.69 to 0.32) (Signell 2012, p. 16). In senior high school the roles were reversed, as the male students displayed a higher level of syntactic maturity, particularly in mean error-free T-unit length (14.62 for the boys versus 11.48 for the girls) (Ibid., p. 17). However, it is important to remember that this study was quite limited in its scope.

Studies have shown that male students occupy the majority of teacher time and attention in the classroom (Swann 2003, p. 625). This differential treatment means that female students are disadvantaged, since they get fewer opportunities to interact in the target language. As a way to counter this phenomenon, there has been a movement in British schools to provide a more hospitable atmosphere in the classroom and a greater focus on collaboration, in order to provide the
female students with opportunities to contribute more (Swann 1998, p. 150). This increased focus on collaboration has also raised the question whether there is, in fact, a process of “feminization” in the classroom, and if so how this will affect both female and male learners (Swann 2003, p. 631). Some researchers have argued that the “girl-friendly” schooling has led to male learners falling behind (Ibid., p. 633).

However, it is important to remember that since the introduction of the General Certificate of Secondary Education in Great Britain in 1988, girls have outperformed the boys in the proportion of the top grades (Murphy and Elwood 1998, p. 171 f.). The underachievement of boys has led the British government to take great action, for example by getting more male teachers into classrooms, changing reading-lists to cater more to boys’ interests and also by developing different programs designed to tackle the underachievement of boys in schools (Swann 2003, p. 633). Similarly, in Swedish schools the female students have outperformed the male students ever since they got the right to the same education as boys after the end of the Second World War (Statens offentliga utredningar 2009, p. 142). However, the gap between the two genders has decreased drastically over the years and the most recent study shows that the differences are at an all-time low (Ibid., p. 127 f.).

Possible explanations for the boys’ results in school have been attributed to them being less motivated to learn, whereas girls are more positively inclined to the process of learning and school (Murphy and Elwood 1998, p. 172). Furthermore, there is a perceived anti-academic culture amongst boys, as studying and getting good grades is not seen as something to strive for. English is also seen as a “girls’ subject”, as it is more sedentary, while boys require more active participation and well-defined tasks (Swann 2003, p. 632–634).

In relation to gender-based differences in language output, studies have also found differences in the content between boys and girls. For instance, male students tend to write more narrative pieces of writing, which usually have a basis in fact, while female students tend to write much more creatively, imaginatively and reflectively with a stronger focus on emotion and personal affection (Murphy and Elwood 1998, p. 174 f.) The following quotes from English teachers serve to illustrate how male and female writing can differ:

The boys go through it like a Panzer division. Their writing is very clinical and clean, you know, point point point. Girls are much more ‘if this then that and I might think this and I might think that…’ The girls tend to like to take a lot of time. […] He will write you a side-and-a-half where others are writing four or five pages…it’s like a knife through butter – almost notes but not quite, a very sparse style of writing. I’ve never seen a girl do that. Never. (Murphy and Elwood 1998, p. 178)

Bergman echoes this sentiment, as she also found similar gender-related stylistic differences in her study. For example, the female students exhibited a greater degree of altruism in their writing, as it often dealt with compassion and caring for other human beings (Bergman 2010, p. 23).

Usage of vernacular language, particularly the use of expletives (profanity), is generally seen as something that is related to male language, as a way of exhibiting toughness but also as a search
for autonomy (Eckert 2003, p. 387). However, Eckert shows in her study that usage of vernacular language has more commonality with class rather than gender (Ibid., p. 392). Further, she argues that “[i]f there is a consistent gender pattern in all these data, then, it is the girls’ overall use of linguistic variability across social categories” (Ibid., p. 393). As such, female learners show a greater degree of variety in their language.

A general stylistic conclusion which Johansson and Geisler draw based on their research is that both male and female students seem to “write as they speak”, meaning that they utilize features of spoken language in their writing such as run-on sentences, sentence fragments and discourse markers (oh, well, then and you know) (2009, p. 186). Johansson and Geisler also studied the usage of stance expressions, such as I think, I believe, really and maybe, but they did not find any major differences across gender (2011, p. 146 f.). Moreover, Bergman found stylistic differences in the usage of subordinate clauses between the two genders, since the male students in her research seemed to favor adverbial clauses, while the female students utilized more relative clauses (2010, p. 15). Further, in my C-paper study into syntactic maturity, I found that the male students in senior high school exhibited a much richer vocabulary, which was what set them apart from the female students (Signell 2012, p. 21 f.).

3.2 Second language theory

The following section includes the relevant second language theories I have based my research on. I have divided this section into two subsections that deal with two widely different aspects, namely Chomsky’s universal grammar and Krashen’s psycholinguistic phenomenon the affective filter.

3.2.1 Universal grammar and second language acquisition

Chomsky developed the school of thought most commonly referred to as universal grammar in the 1960s, in which he argues that children have an innate knowledge of certain principles that help guide them in developing the grammar and syntax of the particular language they are learning (2002, p. 5). In short, Chomsky claims that universal grammar is a set of unconscious restrictions that tell us whether a sentence is correctly formed or not. This does not mean that a mental grammar exists that corresponds to all languages in the world. Chomsky simply means that the process of determining whether a sentence makes sense or not in a particular language context is universal and hard-wired in the brain (1981, p. .11). This is why we immediately notice something wrong with the example in (1), but we can still perceive the meaning behind it:

(1) Austin book reads the.

The concept of universal grammar was revolutionary, as Locke’s tabula rasa hypothesis had long been the perpetuated paradigm by empiricists (Chomsky 2002, p. 8).
According to Chomsky, there exists a set of principles (essentially properties of all languages in the world) and parameters (points where the choice of settings in a specific language are limited) through which children can innately interpret and unconsciously analyze the input they receive and consequently produce the right grammatical or syntactic structures (1981, p. 10 f.). Universal grammar is seen as the initial state from which child L1 learners develop their language ability. This process is innate, which is why child L1 acquisition is incredibly rapid and always successful, i.e. the final state is reached (Chomsky 2002, p. 9).

When looking at universal grammar and second language acquisition, there are several factors to consider. First of all, it is incredibly difficult to say what the initial state of SLA really is. Second language learners have already acquired the appropriate grammatical and syntactic knowledge from their L1 through universal grammar when they start learning a new L2 (Saville-Troike 2006, p. 50). Researchers disagree on whether L2 learners retain access to universal grammar or not, and if they do to what extent they can utilize it in their learning of the L2 (Ibid., p. 50 f.). What is clear though, is the fact that a learner’s L1 knowledge affects the L2, positively through transfer and negatively through interference (or negative transfer) (Ibid., p. 50). Transfer means that an element acquired in the L1 is appropriate in the L2 as well, while interference simply means that a learner uses an L1 structure inappropriately in the L2 (Ibid., p. 35). Transfer and interference are easily exemplified by word order. In English as well as in Swedish, subject–verb–object (SVO) word order is the norm, which means that a Swedish L2 learner of English would benefit from transfer. However, a German student would perhaps not benefit from the same type of transfer, as the German language partially has a subject–object–verb (SOV) word order, typically for compound verbs. This is exemplified in (2abc):

(2a) I have seen the movie.
(2b) Jag har sett filmen.
(2c) Ich habe den Film gesehen.

Second of all, there is the factor of interlanguage and universal grammar. Interlanguage can be seen as intermediate states (or grammars) of L2 language development on the way towards the goal of native or near-native linguistic ability (Saville-Troike 2006, p. 40 f.). From a Chomskyan perspective, a large part of SLA is as such to reset the parameters set by universal grammar in the L1, in order to be able to form the correct output on the basis on the L2 input (Ibid., p. 51). Saville-Troike concludes that:

Learners change the parameter setting (usually unconsciously) because the L2 input they receive does not match the L1 settings they have. If access to [universal grammar] is still available, then that will limit their choices (as it does in L1) and their [interlanguage] grammars will never deviate from structures that are allowed by [universal grammar]. (Saville-Troike 2006, p. 51)

Finally, there is also the question of why certain L2 learners are more successful than others. This aspect is not relevant for L1 acquisition in relation to universal grammar, since all L1 learners achieve a native “final state” (Chomsky 2002, p. 9). Some of the factors that may influence a
learner’s ability to achieve native or near-native competence in the L2 within the universal grammar framework, include the relationship between the L1 and the L2 (differences in transfer and interference), the degree of access the learner has to his or her universal grammar, the ability the learner has to see mismatches between the L2 input and the parameter settings in the L1 and also differences in L2 input, as some learners might receive much more qualitative L2 input from their learning environment (Saville-Troike 2006, p. 52).

Of course, all of this hinges on that L2 learners do in fact have access to universal grammar. If they do not, then second language acquisition is something completely different from first language acquisition. As such, it could not be explained through universal grammar and would have to be explained through another linguistic theory.

3.2.2 The affective filter hypothesis

Risk-taking behavior is related to Krashen’s affective filter hypothesis. What Krashen means with this term is that learners might not progress in a language because of negative attitudinal factors, meaning that they, for example, are afraid of being embarrassed if they produce language errors or if they speak with thick accents and pronounce vocabulary items in the wrong way (1981, p. 23). These attitudinal factors do not necessarily have to be negative, as there are several factors that encourage intake, such as a high level of motivation and a positive outlook on the target language (Ibid., p. 21 f.). A high affective filter effectively causes a blockage in the learners’ ability to further their knowledge in the L2, because of fear of embarrassment, low self-esteem or feelings of anxiety related to learning the L2 (Ibid., p. 23 f.). A learner with a low affective filter, i.e. a learner that has high self-confidence, the ability to empathize, with positive feelings geared toward the target language and the teaching environment in question, has a much greater chance to succeed in the L2 (Ibid.). As such, a low affective filter can be said to facilitate risk-taking behavior in second language acquisition. If a student has a high affective filter they might not reach the target language norms, and instead fossilize their language ability in the L2 (Saville-Troike 2006, p. 41 f.).

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3 Krashen constructed four other hypotheses related to second language acquisition. However, these hypotheses have been heavily criticized by SLA researchers. For example, criticism has been raised against Krashen’s input hypothesis, in which he argues that language acquisition occurs because of comprehensible input, and if there is enough input then the grammatical structures are provided automatically. SLA researchers have questioned what exactly constitutes comprehensible input, as they feel the concept is much too vague (Saville-Troike 2006, p. 45).
4. Aims of the study

One of the aims with this study is to use syntax-based T-unit research as a tool for visualizing Swedish high school students’ syntactic maturity in the English language. The focus lies on gender-based differences, since female students have continuously outperformed male students in the subject of English (Statens offentliga utredningar 2009, p. 142), even though other research has proven that the differences between the genders are negligible (Johansson and Geisler 2011, p. 153). In addition, another aim with the study is to look at stylistic differences between the genders, i.e. do female and male students use dissimilar constructions, vocabulary or subordinate clauses. Furthermore, I want to put my research in relation to risk-taking. More specifically, how the relationship between content, grammatical accuracy and risk-taking is visualized in the students’ written production.

The following are my intended research questions:

- From a purely syntactic point of view, to what extent can the girls’ perceived advantage over boys in the subject of English be found in the writing of Swedish high school students?
- Are there any stylistic differences between two genders, i.e. do they use different constructions or vocabulary?
- To what extent can risk-taking behavior be visualized in the students’ writing?
5. Method

For the purpose of this study, I utilized both quantitative as well as qualitative forms of text analysis. I analyzed the students’ writing quantitatively from a syntactic perspective and qualitatively by looking more thoroughly at stylistic structures. From a syntactic standpoint, I looked at how the students used main- and subordinate clauses, in order to show their level of syntactic maturity. I chose to utilize Hunt’s T-unit as my analytical tool, since it is the index that the majority of second language researchers use. Moreover, I also looked at risk-taking in relation to grammatical accuracy and content, making an attempt to visualize risk-taking in the students’ writing.

5.1 Method of data collection

This study uses material from the Uppsala Learner English Corpus (ULEC), which is a corpus developed at the Department of English at Uppsala University. ULEC is a collection of essays written by Swedish junior and senior high school students in the greater Uppsala area. The texts are usually collected by teacher trainees from the Department of English and are used as material for C-papers and other research into learner English. The texts are shorter essays that consist of roughly 200–300 words each. The students write these texts on computers using a specific interface developed for ULEC, without the aid of dictionaries and spell check. Each essay is coded for information as follows: date of composition, genre (argumentative, descriptive or narrative), number of years in school, level of English course (A, B or C, only at the senior high school level), type of educational program (vocational or academic), gender and age. This is exemplified in (3):

(3) <D 20111111><G ARG><YR 3><K C><P S><S M><A 18>
I never liked the dark as a child. I don’t recall being afraid of anything specific, only an irrational fear of the dark. Now however, a late night walk in the dark is one of the best things in the world. I really really like to be outside, all alone, at night.
(male student, aged 18, year 3, English C, academic program)

5.2 Selection of the data

The data I used in this study is directly drawn from ULEC. As such, I did not collect this particular material myself. I originally set out to gather my own data from a Swedish senior high school, however, due to extenuating circumstances I was not able to collect the data. For the sake of this study, this was not an issue, as there is plenty of material available in ULEC. It was unfortunate though, since I wanted to contribute to the corpus as a way to further the studies into learner English.
The most important limitation that was set on the amount of data that was used is time. Syntax-based studies that use T-units are extremely time-consuming and therefore one cannot use too much material. With this in mind, I decided to use 28 essays for my research, which is a manageable amount of data. Using 28 essays also meant that I had an even number of essays across gender and age level.

Furthermore, when choosing the data that is to be used, it is important to remember that a certain topic might lend itself to a very specific type of grammatical construction. For example, in argumentative texts, the students might utilize constructions such as I think (that) or I believe (that) which leads to a lot of subordinate clauses in the form of nominal that-clauses. Other types of texts, for example ones with a more descriptive topic, might contain comparably fewer subordinate clauses, which could make any sort of comparison between two widely different texts very difficult as the results could be skewed in one way or the other. I chose to conduct my research with the same topic across junior and senior high school, namely the argumentative topic “Do you believe in ghosts?”, since I felt this helped make the comparison between the two different age groups easier and much more focused.

Another limitation in using corpus data drawn from ULEC is that it sets certain limits on what you can research. The only comparisons that can be made are between age groups, gender and different educational programs. As a researcher, you do not know the students’ linguistic backgrounds, and you cannot tell if their first language is Swedish or not. This can be an issue, because sometimes it can be vital to have that information in order to draw specific conclusions. With these limitations in mind, I decided to focus my study on gender-based differences.

5.3 Material

My researched material consists of 28 essays written by 14 junior high school students (aged 15-16) and 14 senior high school students (aged 17-19) taken from the Uppsala Learner English Corpus. The authors are 14 female students and 14 male students. The students are also all in their third and final year of junior high and senior high school respectively. Further, the students in senior high school are on the English C course, meaning that they have elected to study an optional course in English. The material is composed of free-writing essays of 200-300 words each on the topic “Do you believe in ghosts?” The total sample size equals 7 461 words of running text. The data used in the study is shown in Table 1:

Table 1: Distribution of the data across Level, School year and Gender

<table>
<thead>
<tr>
<th>level</th>
<th>school year</th>
<th>male students</th>
<th>female students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>mean essay length</td>
<td>number of essays</td>
</tr>
<tr>
<td>junior high</td>
<td>year 9</td>
<td>264.8</td>
<td>7</td>
</tr>
<tr>
<td>senior high</td>
<td>year 3</td>
<td>256.6</td>
<td>7</td>
</tr>
<tr>
<td>total</td>
<td></td>
<td>260.7</td>
<td>14</td>
</tr>
</tbody>
</table>
5.4 Data processing and analytical method

If you want to quantify and measure the level of syntactic maturity in learner English, what indices should you use? Sentence length used to be a very popular way of measuring syntactic development in second language acquisition. It is true that as a learner’s knowledge of a particular language deepens, he or she will write longer sentences. However, this fact alone does not mean that the learner in question possesses a high level of linguistic proficiency. For example, some students tend to use conjunctions to artificially lengthen their sentences with pieces of discourse that really should stand on their own. As such, sentence length is not an ideal choice for measuring syntactic maturity (Hunt 1965, p. 306).

In 1965, Hunt created the T-unit index, which stands for minimal terminable unit (1965, p. 305 f.). To put it simply, a T-unit is the shortest allowable sentence. A T-unit is minimal because it is the shortest unit a piece of discourse can be divided into, without leaving any sentence fragments behind. A T-unit is terminable since putting a capital letter in the beginning and a terminal punctuation at the end can terminate it. Further, a T-unit consists of a main clause and any subordinate clauses that are attached to or embedded in it (Hunt 1966, p. 737). Hunt found in his studies that the T-unit index gave a much more accurate view of language learners’ syntactic development than, for example, sentence length (Ibid., 737). Example (4) consists of one T-unit and the subordinate clause is italicized:

(4) Although I admire her reasoning, I reject her conclusions.

In ordinary prose, about half of the sentences consist of just one such T-unit. The other half consists of two or more T-units, often joined together by coordinating conjunctions such as and, so or but (Hunt 1966, p. 737). Furthermore, a distinction is usually drawn between short T-units which are defined as having eight words or less, and long T-units which consist of twenty words or more. Hunt showed in his studies that as learners of English got older they wrote fewer and fewer short T-units, which is why Hunt considered frequency of short T-units to be an excellent mark of syntactic maturity (1965, p. 308).

Hunt developed the T-unit since he felt that sentence length was not an ideal way of measuring syntactic development, mostly because of what is known as the run-on sentence phenomenon, which simply means that you put several main clauses after each other in the same sentence, and as such artificially lengthen your sentences. The example in (5) is taken from Hunt’s research:

(5) I like the movie we saw about Moby Dick the white whale the captain said if you can kill the white whale Moby Dick I will give this gold to the one that can do it and it is worth sixteen dollars they tried and tried but while they were trying they killed a whale and used the oil for the lamps they almost caught the white whale. (Hunt 1965, p. 305)
This is a great example of how the run-on sentence phenomenon might look. In (6), the example in (5) has been divided into six T-units:

(6) (a) I like the movie we saw about Moby Dick, the white whale.  
(b) The captain said if you can kill the white whale, Moby Dick, I will give this gold to the one that can do it.  
(c) It is worth sixteen dollars.  
(d) They tried and tried.  
(e) But while they were trying they killed a whale and used the oil for the lamps.  
(f) They almost caught the white whale. (Hunt 1965, p. 305)

It is important to remember though, that the number of T-units in itself does not tell you anything about a student's level of syntactic maturity. It is not enough to simply quantify the number of T-units, instead one has to apply the data using different applications of the T-unit. For example, Hunt found that the fourth-grade students in his study had an average number of T-units per sentence that was higher than that of superior adults (1.60 and 1.24 T-units per sentence, respectively) (1966, p. 737). As such, having a higher number of T-units per sentence is, in fact, a mark of syntactic immaturity (Ibid.).

I have chosen to utilize several different applications of the T-unit, which have all been proven to highlight syntactic complexity (cf. Hunt 1966; Larsen-Freeman 1978; Gaies 1980; Casanave 1994; Johansson and Geisler 2011), such as the number of words per T-unit (T-unit length) and the number of T-units per sentence (main clause coordination index). Hunt also developed another index for measuring syntactic proficiency, namely the subordinate clause index, which tells you how many subordinate clauses are written in relation to the number of main clauses (1966, p. 733). For example, an SCI of 1.78 would mean that the person writes an average of 0.78 subordinate clauses per main clause. As a learner's linguistic proficiency increases, the number of subordinate clauses he or she writes increases as well, which makes the subordinate clause index a good way of measuring syntactic development (Ibid.).

Originally, Hunt developed the T-unit as a tool for measuring the syntactic maturity of learners who studied English as a first language (1966, p. 732 f.). Although, the second language researcher Gaies has shown that the syntactic development of second language learners of English is similar to that of first language learners (1980, p. 54). However, there is particularly one specific problem related to the usage of the T-unit as a tool for quantifying syntactic development in second language data, namely the fact that linguistic errors that are not very common in first language data, can be relatively prevalent in second language data (Ibid., p. 55). In order to solve this problem, a new index was developed that takes developmental errors into account, the so-called error-free T-unit. Several different researchers, such as Larsen-Freeman (1978, p. 440), Gaies (1980, p. 55) and Casanave (1994, p. 183), have argued that the error-free T-unit more accurately shows syntactic development in learners who study English as a second language.

A problem associated with error-free T-units lies in how one exactly should define an error and also the severity of that particular error. Larsen-Freeman argues that an error-free T-unit
should be correct syntactically (i.e. that subordination is used correctly), grammatically and also be spelled correctly (1978, p. 440). A problem with this approach is that it allows for no gradation of the errors, as they are all seen as equally severe (Barnwell 1988, p. 189). Other researchers, such as Johansson and Geisler, use a much less strict definition, as they consider a T-unit to be error-free if it merely is correct syntactically (2011, p. 142 f.). Johansson and Geisler argues that, since their data drawn from ULEC contained a great many subject-verb concord errors, there would be no sense in using a stricter definition of the error-free T-unit (Ibid.). However, Barnwell argues that “…this [approach] introduces a subjective element into what sets out to be an objective measure” (1988, p. 189).

My own definition of what constitutes an error-free T-unit is that it should be correct syntactically and grammatically, since I felt that the ULEC data that I used was sufficiently grammatically accurate. My definition does not include spelling, as I feel that spelling is not intimately related to syntactic ability. Furthermore, students may also have reading and writing difficulties, which would have to be taken into account.

5.5 Terminology of syntactic indices utilized

In this essay, the following syntactic indices are used to measure and quantify length (or fluency), complexity and accuracy in the students’ writing (cf. Signell 2012, p. 7):

- Average T-unit length, which is the number of words per T-unit. It is calculated by dividing the number of words in a text with the number of T-units.
- Main clause coordination index, or simply the number of T-units per sentence. It is calculated by dividing the number of T-units with the number of sentences in a text.
- Average error-free T-unit length, which is the number of words per error-free T-unit. This index is calculated by dividing the number of error-free words in a text with the number of error-free T-units.
- Proportion of error-free T-units, i.e. the ratio of error-free T-units to T-units. This is calculated by dividing the number of error-free T-units with T-units.
- Subordinate clause index (SCI), which is the number of subordinate clauses per main clause. By dividing the total number of clauses in a text with the number of main clauses, you get the subordinate clause index of that particular text.

5.6 Reflections on the choice of method

Some criticism has been raised against the T-unit as an index for language development, since it only focuses on syntax. One could argue that syntax and vocabulary are intimately related, and that since the T-unit as a linguistic tool does not take vocabulary into consideration at all, it could
conceivably mean that linguistic phenomena such as *circumlocution*\(^4\) can make a student seem more syntactically advanced than he or she really is (Gaies 1980, p. 56). However, it is important to remember that the T-unit is only meant to measure and quantify syntactic maturity, and nothing else. Hunt never claimed that the T-unit could demonstrate other forms of linguistic competence.

Furthermore, Gaies recognizes several other problems associated with T-unit based studies. First of all, he questions “[...] whether an index based on syntactic complexity alone, divorced from considerations of appropriateness and stylistic effectiveness, can be a valid measure of overall language proficiency” (Gaies 1980, p. 55). Inherit in this argument is the fact that syntactic maturity – the ability to produce sentences of greater complexity – should not be based solely on the basis of an analytical tool that really only can show the surface of a learner’s ability (Ibid., p. 54).

Second of all, the T-unit as a linguistic tool was originally developed as a way to circumvent the issue of sentence coordination. However, coordination of noun phrases and verb phrases could essentially be seen as the same thing as sentence coordination. T-units do not account for the coordination of verb and noun phrases at all (Gaies 1980, p. 55). As such, there are definite flaws associated with using T-units as a basis for measuring syntactic maturity. Although, Gaies also concedes that the T-unit is the most useful tool available for measuring growth in the ability to use subordination and clause-consolidation (Ibid., p. 57).

One can also question whether or not the T-unit can accurately measure syntactic development properly, as exemplified by (7a) and (7b):

(7a) That’s the boy that lives in the house with the blue door.
(7b) That’s the boy with whom I would have liked to have spoken. (Barnwell 1988, p. 190)

The two sentences contain the same number of T-units (one), but from looking at them it becomes extremely clear that (7b) is a much more sophisticated piece of writing. As such, the T-unit as an index for syntactic complexity has its flaws.

The T-unit is of course not the only index that can show progression in a learner’s second language ability. For example, increased usage of adjectives, adverbials, relative clauses or the passive could be seen as markers of linguistic ability, in addition to purely stylistic constructions such as *cleft*, *pseudo-cleft* or *fronting*. However, the T-unit is a particularly proven index for measuring syntactic development, which makes me confident in my choice of method.

5.7 Ethical considerations

I do not know whom the students are that wrote the essays used in this study, as I have never met them. Furthermore, their anonymity is secured through the fact that their texts are written

\(^{4}\)Circumlocution is a phenomenon related to a limited vocabulary. Circumlocution occurs when a learner uses many words or a phrase to describe something for which a concise expression exists (Gaies 1980, p. 56).
anonymously into a computerized interface. The essays are coded for information, but only the level and year of schooling, in addition to their gender. Moreover, the essay topics do not deal with personal questions. For example, some essay topics are “A dream journey” and “What would you do if you won a million Swedish crowns?” among others. If personal information is written in a text, in such a way that someone could conceivably find out whom that person is, I have simply not used that particular text as a linguistic example.
6. Presentation of results and analysis

The following section presents the results of my syntax study of learner English. The section is divided into four different subsections where I first present the data and then analyze it using the research questions I set up for this study, namely if there are any gender-based differences in syntactic maturity between the two genders, if there are any stylistic differences between boys and girls and finally if and how risk-taking is visualized in the students’ writing.

6.1 Presentation of results

Tables 2 and 3 below contain the results of my study into Swedish junior and senior high school students’ level of syntactic maturity.

Table 2: Indicators of syntactic maturity among students in year 9 of junior high school across gender.

<table>
<thead>
<tr>
<th>Factor of syntactic maturity</th>
<th>Junior high, year 9</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Female</td>
</tr>
<tr>
<td>T-units per sentence</td>
<td>1.37</td>
</tr>
<tr>
<td>Average T-unit length</td>
<td>12.98</td>
</tr>
<tr>
<td>Average error-free T-unit length</td>
<td>11.87</td>
</tr>
<tr>
<td>Proportion of error-free T-units</td>
<td>0.61</td>
</tr>
<tr>
<td>Subordinate clause index</td>
<td>1.89</td>
</tr>
</tbody>
</table>

As shown by Table 2, the female students in junior high school outperform the male students in every factor of syntactic complexity, except in main clause coordination index, as the boys have a slightly lower number of T-units per sentence. However, the difference between the genders is negligible (1.35 for the boys to 1.37 for the girls). As stated, writing more T-units per sentence is associated with syntactic immaturity, as it typically is a reflection of excessive sentence coordination (Hunt 1966, p. 737). Further, the difference in average T-unit length is not that high, as the male and female students have an index of 12.44 and 12.98 respectively. Instead, it is in the error-free indices and the subordinate clause index that the female students’ higher level of syntactic maturity is visualized. The girls write longer error-free T-units, 11.87 words per T-unit to the boys’ 9.79, and also have a higher proportion of error-free T-units, 0.61 to 0.32. Finally, the female students seemingly write more subordinate clauses than the male students, as the girls’ SCI is 1.89 while the boys’ corresponding number is 1.67. As such, at the junior high school level it would seem that the female students hold a distinct advantage over the male students in certain syntactic indices.
Table 3: Indicators of syntactic maturity among students in year 3 of senior high school across gender.

<table>
<thead>
<tr>
<th>Factor of syntactic maturity</th>
<th>Senior high, year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Female</td>
</tr>
<tr>
<td>T-units per sentence</td>
<td>1.13</td>
</tr>
<tr>
<td>Average T-unit length</td>
<td>13.39</td>
</tr>
<tr>
<td>Average error-free T-unit length</td>
<td>11.63</td>
</tr>
<tr>
<td>Proportion of error-free T-units</td>
<td>0.57</td>
</tr>
<tr>
<td>Subordinate clause index (SCI)</td>
<td>1.90</td>
</tr>
</tbody>
</table>

In senior high school, it is the male students who outshine the female students in every factor of syntactic maturity, except for the subordinate clause index, but the difference between the genders’ SCI is negligible (1.90 for the girls and 1.86 for the boys). The male and female students are comparatively equal in regards to average T-unit length (13.92 words per T-unit for the boys versus 13.39 for the girls) and main clause coordination index (1.12 and 1.13 T-units per sentence for the boys and girls respectively). Similar to junior high school and in accordance with Larsen-Freeman’s research (1978, p. 446) and Bergman’s findings (2010, p. 14), it is the syntactic indices based on error-free T-units that are able to show any differences between the genders. On average, the male students write longer error-free T-units compared to the female students (13.50 to 11.63), while simultaneously having a higher proportion of error-free T-units (0.67 to 0.57). Based on these results, the male students in senior high school outperform the female students in certain syntactic indices.

A general comparison between junior and senior high school yields the result that there is progression in the students’ syntactic maturity, as all the syntactic indices show development between the two age groups. However, it is arguable that the differences between year 9 of junior high and year 3 of senior high are not that pronounced. This is in line with previous research done into learner English using material from ULEC (Johansson and Geisler 2009, p. 189).

6.2 Gender-based differences in syntactic maturity

According to the most recent survey on the English language competence of Swedish students, girls still outperform the boys (Statens officiella utredningar 2009, p. 127 f.). From a syntactic perspective, my study shows that this both does, and does not prove to be true. While my research is limited in its scope, it does show that there are differences in syntactic maturity between the female and male students, both in junior high school as well as in senior high school. These findings are in line with some of the previous research of the field (Bergman 2010), but they also stand in opposition against other research, such as Johansson and Geisler (2011).
6.2.1 Junior high school

In junior high school, the female students outperform the male students in all but one of the syntactic indices and in that particular index the difference is miniscule, as the boys only write 0.01 less T-units per sentence than the girls on average. As shown by Larsen-Freeman, the indices based on the error-free T-unit are comparatively better indicators of syntactic maturity than the indices based on the regular T-unit (1978, p. 446). The female students display a higher degree of syntactic complexity through their average error-free T-unit length, which is 11.87 compared to the male students’ 9.79. In examples (8) and (9) I have exemplified the difference in error-free T-unit length between the female and male students in junior high school:

(8) Everything has a scientific explanation, but what if that explanation hasn’t been discovered yet? […] I think that we are fascinated by the unknown because it is just that: unknown. […] Maybe it is because no one has been able to discover this for as long as we can know? I have never experienced anything remotely supernatural as far as I can remember […]
(female student, aged 16, junior high, year 9)

(9) They don’t exist neither the supernatural powers. There ain’t any proof about it and that means that it doesn’t exist. […] We are fascinated about supernatural powers because no one ever had it. We know nothing about it which makes people more interested about it. If everyone had supernatural powers then no one would see it as a big deal.
(male student, aged 15, junior high, year 9)

Example (8) consists of four T-units, all of them error-free as per my definition in section 5.4, while example (9) is comprised of five T-units, of which only one could be considered error-free. These two examples serve as reliable indicators of the junior high school students’ writing, since they show the differences in error-free T-unit length. While the average difference between the genders is only 2.08 words, there is still a marked difference in the students’ essays. In general, the girls’ average error-free T-unit length is quite high, but the aggregate number is dragged down by one student in particular. In contrast, the male students all seem to be on the same level of syntactic maturity. As such, the boys’ average error-free T-unit length more accurately reflects the ability of the whole group of students.

Furthermore, the female students in junior high particularly excel in the proportion of error-free T-units, since the girls write almost twice as many error-free T-units compared to the boys (0.61 to 0.32). The errors are largely of a similar fashion across gender, as subject-verb concord errors, prepositional errors and article usage errors are extremely common in both the male students’ writing as well as the female students’ writing. However, the girls tend to produce fewer mistakes and errors overall, as evidenced by the females students’ higher proportion of error-free T-units. Moreover, the female subject-verb agreement errors seem to happen more often in contexts were the agreement between the subject and verb is not entirely obvious. In contrast, the male students produce much more basic subject-verb concord errors more frequently. In (10) and (11) I have contrasted a female student against a male student:
(10) I don’t know if there is any supernatural powers. […] I’m not sure if there is supernatural things or if it’s just some hoax, but I’ll withhold my judgement until further evidence is discovered.
(female student, aged 16, junior high, year 9)

(11) No one have ever seen a monster in their lives neither someone with supernatural powers. […] Kids believes that there is monsters under the bed because of the cartoons, but were there a monster under the bed?
(male student, aged 15, junior high, year 9)

As evidenced by example (11), the male students in junior high typically have difficulties with very basic subject-verb constructions, while the female student in (10) makes subject-verb concord errors that are not as evident or basic. The girls also make basic agreement errors, but not as frequently as the boys seem to make them.

If one looks at the female superiority in the error-free T-unit indices from a Chomskyan perspective, it would be conceivable to say that the female students have more access to their universal grammar and that they are more adept at resetting the parameters set by their L1 (Saville-Troike 2006, p. 51 f.). Factors that relate to transfer and interference are impossible to speculate upon, since the students’ first languages are not known. It can be assumed that a fair share of the students have Swedish as their L1, and would as such benefit from the same types of transfer and interference, regardless of their gender. However, no specific assumptions about the students’ first languages can be made.

The female students higher level of syntactic maturity in junior high school is also visualized by their subordinate clause index, which is 1.89 in comparison with the male students’ 1.67. Both of these numbers are quite high, as the junior high school students in Johansson and Geisler’s study had an SCI of 1.49 (no distinction was made between the genders) (2011, p. 150; cf. Hunt 1966, p. 733). The difference in SCI between the female students in junior high and senior high is only 0.01. As such, the girls in junior high display a seemingly higher level of syntactic maturity compared to the boys. However, the female students’ SCI number can largely be attributed to the usage of nominal that-clauses. The argumentative nature of the essays inadvertently leads the students to use constructions such as I think (that) and I believe (that). In such cases, the following piece of text is a nominal that-clause, i.e. a subordinate clause. Examples (12) and (13) serve as typical illustrations of how this phenomenon looks in the female students’ texts (note that the female student in (12) has omitted the word thought in the first T-unit, which is presumably a mistake):

(12) […] and that night I really that I was going to die, but I did not […] I think it’s really fascinating, because no one can prove if you are right or wrong […]
(female student, aged 15, junior high, year 9)

(13) I won’t believe there is any until I have seen proof. […] Some people seem insistent on believing that there is something supernatural.
(female student, aged 16, junior high, year 9)
Obviously, constructions such as these are not limited to the female students. On the contrary, the boys utilize the nominal *that*-clause often, but not as frequently as the girls do. This could account for the female junior high school students’ surprisingly high subordinate clause index.

Further, the male students seem to make more errors within the subordinate clauses themselves. For example, in relative clauses they sometimes use personal relative pronouns when referring to a non-personal antecedent and vice versa. I have exemplified two such cases in (14) and (15):

(14) I think that people which believe in supernatural powers either have no knowledge so they just make up stories or that they have a physical decease.
   (male student, aged 16, junior high, year 9)

(15) Supernatural powers are just something who exists in cartoons or films, just like monsters.
   (male student, aged 15, junior high, year 9)

In (14) the student uses the relative pronoun *which* to refer to a personal antecedent, namely *people* and in (15) this particular student utilizes the relative pronoun *who* to refer to a non-personal antecedent, *supernatural powers*. These types of errors are not made at all by the female students in junior high school, which further exemplifies their level of syntactic maturity. However, it should be noted that the male students do not make these types of errors all that frequently. Mostly, both the male and female students in junior high seem to know which relative pronoun to use based on the antecedent.

In addition, the male students in junior high school have certain difficulties with using subordination correctly. On multiple occasions, the boys use subordinate clauses as main clauses, something that the female students do not do as frequently. In (16) and (17), two such cases are exemplified:

(16) I have feelings sometime that my grandfather, which I loved very much, is still with me.
    Maybe when I have a hard time and when I feel sad.
    (male student, aged 15, junior high, year 9)

(17) I accept people believe in it, because after all, it would be awesome with some supernatural
    powers of some kind! Why? Because it’s something different from the usual.
    (male student, aged 16, junior high, year 9)

I have included the preceding sentences in order to clarify the contexts of the subordinate clauses that are used as main clauses. This is another factor in the female syntactic superiority in junior high school.

### 6.2.2 Senior high school

In senior high school, the male students have a slightly higher T-unit length, 13.92 to 13.39, which both are lower than what Bergman found in her study (15.0 for the boys versus 14.2 for the girls) (2010, p. 14). As I pointed out, the difference in main clause coordination index is negligible (1.13 for the boys versus 1.12 for the girls). Similar to junior high school, it is in the error-
free T-unit indices that more tangible differences between the two genders are shown. The boys in senior high write longer error-free T-units, 13.50 compared to the girls’ 11.63. The boys also write more error-free T-units on average, 0.67 to the girls’ 0.57. However, the difference between the genders is not as marked as it is in junior high school. Seemingly, the boys in senior high retain a higher degree of grammatical accuracy, even in longer and more complex T-units since their error-free T-unit length and T-unit length are quite similar. In contrast, the female students would appear to lose accuracy when the T-units get longer and, theoretically, more complex. I have exemplified this in (18) and (19):

(18) Somehow, I think people find comfort in believing in ghosts. Firstly, they find comfort in thinking that if they face a terrible death, they will be able to come back and haunt and take their revenge on the people that killed them. Secondly, the ones that are mostly afraid of leaving their loved one’s behind, find comfort in being able to return to watch over them. Lastly, people find comfort in thinking that people that have done terrible things, will be punished and haunted for it, although they go unpunished by law.
(female student, aged 18, senior high, year 3)

(19) Throughout history, mankind has been exposed to phenomena it cannot explain. Unable to prove otherwise, mankind decided to blame those unsettling and unexplainable events on something which, more often than not, resulted in “ghosts”, “spirits” and other supernatural beings. It’s pretty much the same as religion (relatively) or all scientific researches, once you face something you cannot explain you try to find ways to explain it. Although there hasn’t been any proof that ghosts or any supernatural beings exist, people still believe in them today.
(male student, aged 17, senior high, year 3)

The piece of writing by the female student in (16) consists of four T-units, and only one of these could be considered error-free, which also happens to be the shortest T-unit (ten words). The male student’s text, on the other hand, is comprised of five T-units, of which four are error-free and the longest error-free T-unit is 28 words in length. These two examples could be seen as quite extreme, as there is a 1.87 difference in error-free T-unit length between the genders overall, and not an 18-word difference. However, I would not hesitate to say that these examples could in a way be seen as a microcosm of the senior high school data. The male senior high school students write T-units that are longer and more consistently error-free, similar to the female junior high school students. The female senior high school data is more often categorized by shorter error-free T-units as exemplified in (20):

(20) I remember when me and my cousins were bored. It was a regular boring Sunday. Until one of my cousins came up with the idea that we should play a game called "The spirit in the glass". We got everything ready. We wrote the alphabet on a big sheet, then we put a glass upside down on the sheet.
(female student, aged 18, senior high, year 3)

However, Bergman also raises an important point when she argues that medium length error-free T-units are better at displaying linguistic competence than longer error-free T-units (2010, p. 22 f.). Thus, one should not blindly look at the length of T-units and automatically think that longer T-units equal linguistic proficiency.
Unlike the junior high school students, there is only a marginal difference in subordinate clause index between the genders at the senior high school level, as the boys’ SCI is 1.86 and the girls’ is 1.90. These results are quite similar to previous research into learner English that have used material from ULEC; Bergman’s study showed that the male students in year 3 of senior high had an SCI of 1.78 while the female students’ SCI was 1.76 (2010, p. 14). Similarly, the senior high school students in Johansson and Geisler’s study had an SCI of 1.92 (no distinction is made between the genders) (2011, p. 150).

In senior high school, both the female and male students seem to have moved away from relying mostly on nominal that-clauses and to a greater degree utilize adverbial- and relative clauses. In (21) and (22) I have exemplified two adverbial clauses and in example (23) a relative clause:

(21) While we don't have any proof of ghosts existing, we neither have any proof of their non-existence.
(male student, aged 18, senior high, year 3)

(22) Although there hasn't been any proof that ghosts or any supernatural beings exist, people still believe in them today.
(male student, aged 17, senior high, year 3)

(23) Children believe everything they see and hear which could be a reason to why they believe in ghosts [...].
(female student, aged 18, senior high, year 3)

The greater utilization of adverbial- and relative clauses by senior high school students is echoed by Johansson and Geisler, who found that as the students got older they began to use more of these types of clauses (2011, p. 150).

6.3 Gender-based stylistic differences

Based on the data I have looked at, the female and male students’ writing differs in certain ways. If these differences can be explicitly linked to gender is harder to say. As stated by Swann and Ehrlich, it would be extremely difficult to link any stylistic patterns in language to gender alone, without extensive empirical studies (Ehrlich 1997, p. 437; Swann 2003, p. 630). Nevertheless, there are differences in the male and female writing patterns, which could be gender-related in their origin.

In a previous study, I argued that the male senior high school students possessed a greater degree of linguistic proficiency because of their richer vocabulary and greater variety in the usage of phrasemes (Signell 2012, p. 22). In this study, the male students in senior high school display a similar degree of proficiency, as exemplified by the students in (24) and (25):

(24) Throughout history, mankind has been exposed to phenomena it cannot explain. Unable to prove otherwise, mankind decided to blame those unsettling and unexplainable events on something which, more often than not, resulted in "ghosts", "spirits" and other supernatural beings.
(male student, aged 17, senior high, year 3)
But at the same time, another thought gnaws at the back of the mind. While we don't have any proof of ghosts existing, we neither have any proof of their non-existence. So while it still is incredibly unlikely that the muffled sound you just heard was produced by a ghost, there’s really no way of knowing for sure. It's exactly that quality that scares or unsettles us, as it caters to one of our oldest instincts, the fear of the unknown.

(male student, aged 18, senior high, year 3)

This level of vocabulary is not present in the female senior high school students’ writing. Furthermore, the boys in senior high utilize linking words and phrases much more frequently, such as furthermore, in short and first of all, which helps give their writing a level of cohesion that the girls’ writing generally lacks.

Eckert considers the usage of expletives to be an indicator of male speech patterns (2003, p. 387). In my data, there is only one occasion where a student utilizes an expletive:

(26) […] I just closed my eyes really hard and I said to myself 'don't look back, don't look back, just don't fucking look back' and that night I really that I was going to die, but I did not […]

(female student, aged 15, junior high, year 9)

The student in example (26) is a girl, but this seems to be an isolated case. It is conceivable that expletives generally have no place in the students' written language. A study of spoken English and the usage of expletives would most likely yield very different results.

The most marked differences between boys and girls seem to lie in the junior high school students’ written production. For example, a tendency that is somewhat common amongst the male junior high school students (but not senior high) is to utilize slang expressions, particularly the contraction ain’t as exemplified by (27) and (28):

(27) Humans ain't meant or capable to understand every little thing that happens around us […]

(male student, aged 16, junior high, year 9)

(28) There ain't any proof about it and that means that it doesn't exist.

(male student, aged 15, junior high, year 9)

This type of slang or colloquial language is not a part of the female students’ writing in neither junior high nor senior high. In addition to the usage of ain’t, the boys in junior high also tend to “write as they speak” to a greater degree, meaning that they utilize aspects of spoken language in their writing (Johansson and Geisler, 2009, p. 186). In (29) and (30), I have exemplified two such cases:

(29) No i do not believe in supernatural voodoo stuff just saying and here's my point of view.

(male student, aged 15, junior high, year 9)

(30) People today on the other hand... I mean come on we have so much knowledge about our environment, I think that it's just stupid of people now days to believe in supernatural beings.

(male student, aged 16, junior high, year 9)

The usage of phrases such as just saying, I mean and come on are typical patterns of spoken language. However, the female students in junior high display some aspects of spoken language in their
writing as well. For instance, there are several instances where a female student uses run-on sentences quite excessively, such as in example (31):

(31) I believe it because I have had a few experience of it, like when I where sleeping home as my dad and it was like in the middle of the night and he was sleeping and suddenly a heard some one talking down stairs and it was no one there and then it did walk up the stairs but nothing did come up and then i saw when something did crawl out of my floor, I saw how it did crawl closer to my bed and I closed my eyes and when I open them again it was gone, then I felt how something did pet my arm, pretty hard but not to hard and I could feel how it was laying behind me [...] (female student, aged 15, junior high, year 9)

As such, it is arguable that, to a degree, both the male and female junior high school students tend to write as they speak.

Furthermore, the male junior high school students display similar characteristics in their writing that the teachers in Murphy and Elwood’s study specifically linked to typical male writing patterns, namely a very strict and sparse style of writing, and always to the point (1998, p. 178). This is exemplified in (32):

(32) They don't exist neither the supernatural powers. There ain't any proof about it and that means that it doesn't exist. [...] We are fascinated about supernatural powers because no one ever had it. We know nothing about it which makes people more interested about it. If everyone had supernatural powers then no one would see it as a big deal. (male student, aged 15, junior high, year 9)

As evident by example (32), the male junior high students’ writing is more often than not extremely concise, sparse and directly to the point of the matter. In comparison, the male senior high school students’ writing is more varied and cohesive. Moreover, there is a distinct difference in the usage of personal accounts to explain viewpoints, as the female students across junior high and senior high are prone to use personal experiences as a way of developing their arguments. The male students in both junior high as well as in senior high do not do this as often, as they instead tend to argue from rational thought or a scientific basis. This does not mean that the female students are not rational, it only means that they approach the task differently, taking more stock in personal stories and experiences, which arguably also make the girls’ texts more readable and interesting in general.

In her study, Bergman found that the female students displayed a greater degree of altruism in their texts compared to the male students (2010, p. 23). This is evident in my data as well. Even though the topic is quite abstract, the female students do find ways to express compassion to an extent. For example, some female students feel ghosts are something positive since they see ghosts as a sort of second chance, because they can set things right and take care of unfinished business. Through the female students’ greater emphasis on personal experiences in their writing, they also exhibit a certain degree of altruism since the personalized stories often deal with shared experiences with friends and siblings.
6.4 Risk-taking in contrast with content and accuracy

It is difficult to argue whether a particular student is highly adept at risk-taking, based solely on a single anonymous text sample. One could even make the assumption that the fact that the essays are submitted anonymously affects the students in certain ways. For example, they may write with a greater degree of carelessness since the essays are not graded and no one will ever know who wrote them. As such, the nature of the assignment may have made the students take more risks, but without non-anonymous text samples to compare these essays with, it is impossible to say how much or even if the anonymity has affected the students at all.

Nevertheless, my data can be interpreted from different points of view. The male students in junior high school have fewer and also shorter error-free T-units than the female junior high school students. As Bergman argues, if a student takes fewer risks it should also mean that the student generally writes more error-free T-units, that at the same time are shorter in length (2010, p. 16). This could conceivably mean that the boys in junior high take more risks than the girls do. Moreover, this can also be directly linked to the fact that boys tend to dominate in language classrooms and can be assumed to have a lower affective filter since they are generally less afraid to make mistakes in front of their peers (Murphy and Elwood 1998, p. 177). However, when taking the subordinate clause index into account, the female students in junior high show a distinct advantage, even though they use an overabundance of nominal *that*-clauses. Furthermore, when looking at the junior high school students’ essays from an overall perspective, it becomes clear that the male students’ lower proportion of error-free T-units does not in all probability stem from a greater degree of risk-taking, but from a general lack of knowledge of basic grammatical structures. As such, simply because the male students write fewer error-free T-units, it does not necessarily mean that they have a lower affective filter and take more risks.

As pointed out, in senior high school the male students write longer error-free T-units than the female students do, but the proportion of error-free T-units is about the same and the subordinate clause index numbers are nearly identical between the two genders. Does this mean that the female students take more risks in their writing? Since the male and female students have quite similar T-unit length, I would argue against such a statement.

Casanave was able to visualize progress in the writing of the students who participated in her study (1994, pp. 194–197). However, Casanave’s study is longitudinal and she actively promoted risk-taking with the students through her teaching. The students in the data I have researched have presumably not been instructed and encouraged to take risks. Furthermore, since I do not know them and have not seen more of their writing, it makes it extremely difficult to assess their affective filters and risk-taking behavior. In a sense, this material alone cannot visualize risk-taking behavior.
7. Discussion

The results of this study show that there are differences between the two genders, both syntactically and stylistically. Whether these differences are intrinsically gender-dependent is difficult to answer, however, as there are several other factors that need be taken into account, such as age and socioeconomic and linguistic background (Ehrlich 1997, p. 437; Swann 2003, p. 630). Nevertheless, my study provides us with some interesting results, since they both stand in opposition to and complement previous research of syntactic development. For example, Johansson and Geisler (2011, p. 146) could not find any significant differences in syntactic maturity between the genders, while my, admittedly limited, study shows that there are differences between boys and girls. In junior high school, the female students outperform the male students in the syntactic indices based on error-free T-units as well as in the subordinate clause index. This seems to be in line with previous research into gender-based differences in SLA and to the situation in Swedish schools (Lynn and Wilson 1993; Ehrlich 1997; Statens offentliga utredningar 2009; Payne and Lynn 2011). In senior high school the roles are reversed, as it is the male students who outperform the female students in both average error-free T-unit length and proportion of error-free T-units. However, the differences are less marked than in junior high school and are more in line with the results in Johansson and Geisler’s research (2011). Whether these differences are indicative of a greater gender-based pattern in linguistic ability is difficult to speculate upon. Quite simply, more data is necessary to verify any findings in this essay.

In junior high school, the female students’ subordinate clause index is quite high, especially compared with previous studies (cf. Hunt 1966, p. 737; Bergman 2010, p. 14; Johansson and Geisler 2011, p. 150). In addition, the female junior high school students make fewer errors in the usage of relative pronouns in relative clauses and also use subordination correctly. One could argue that this proves that the girls in junior high have a greater degree of syntactic maturity than the boys do. However, the argumentative nature of the topic “Do you believe in ghosts?” has led both the female and male students to utilize a great many nominal that-clauses in their writing. Therefore, one could question whether the subordinate clause index is an appropriate syntactic tool for measuring syntactic maturity in the junior high school students’ writing, as the SCI does not differ between different kinds of subordination. Can a student that has a high SCI, but frequently uses constructions such as I think (that) or I believe (that) really be said to have a higher degree of syntactic complexity than a student who has a much lower SCI but uses a more varied array of subordinate clauses? A future study into high school students’ usage of subordinate clauses could possibly shed some more light on differences in syntactic maturity between the genders.

By using a Chomskyan perspective and a universal grammar approach, it would seem that the female students in junior high school and the male senior high school students have more access
to their universal grammar because of their advantage in error-free T-units. Consequently, these students could be seen as more adept at resetting the parameters of their first languages than their gendered counterparts. However, much information is lost since the first languages of these students are not known. As such, no conclusions can be drawn about interference and transfer from the L1. Moreover, it should be safe to assume that the students have had access to the same L2 input in the classroom, but one must also consider the L2 input that the learners receive outside the classroom through movies, music and the Internet. It is conceivable that the students receive vastly different L2 input outside the classroom, depending on their interests and language backgrounds. Therefore, it is difficult to speculate upon the degree of access the students have to universal grammar.

In addition to syntactic differences, there are also patterns in stylistic differences between the female and male students in this study. In senior high school, the difference in syntactic complexity between the genders is not as pronounced as it is in junior high school. However, the boys in senior high accentuate their linguistic proficiency by displaying advanced vocabulary and phrasemes. This speaks to a point that Gail makes when he criticizes the strong focus the T-unit has on syntax (1980, p. 56). The difference in syntactic maturity between the two genders may not be that pronounced in senior high school, but by looking at the material it becomes self-evident that the male students, much in part to their strong vocabulary, have a greater degree of linguistic ability. As such, there is a clear discrepancy between a student’s syntactic maturity and his or her actual linguistic proficiency.

The strongest indicator of stylistic differences between the genders quite possibly lies in the boys and girls’ different styles of writing. The male students, particularly in junior high school, tend to have a very sparse, concise and strict style of writing, especially when compared to their female counterparts. The comparison that the teacher in Murphy and Elwood’s study makes between boys’ writing and a Panzer division is not far off from the truth (1998, p. 178). Further, the female students in both junior and senior high have a stronger focus on personal experiences in their essays, while the male students to a greater degree try to rationalize why they do or do not believe in ghosts, which corresponds to previous research (Ibid., p. 174 f.). It is hard to say whether these aspects are gender-related in origin though, as more samples are necessary to make any definite assumptions.

Naturally, there are similarities in the boys and girls’ writing as well. At the junior high school level, both genders tend to “write as they speak” (Johansson and Geisler 2009, p. 186). The girls’ usage of run-on sentences is probably not limited to English, and is more likely a symptom of their linguistic ability in their L1. The boys’ incorporate spoken language expressions and slang into their writing, which is not odd at all considering the influence that different types of media has on English language learners.

Risk-taking behavior is an extremely important aspect of second language acquisition as it plays a large factor in whether a learner achieves a native or near-native level of linguistic com-
petence in the L2 (Saville-Troike 2006, p. 89 f.). This study employed a risk-taking perspective and aimed to find risk-taking behavior through syntax-based research. However, it is extremely difficult to establish patterns in risk-taking without having access to more material by the same students and even then the students would have to be instructed in taking risks in their writing, in order to be able to visualize risk-taking in a second language (cf. Casanave 1994). As such, my study is quite limited and no specific conclusions can be drawn based on the material used.

From a pedagogical perspective, risk-taking is very much a factor in Swedish schools, as the new English curricula in Lgr 11 and Gy 2011 both have a strong focus on communicative competence and not grammatical accuracy (Skolverket 2011). This simply means that the focus does not lie on near-native competence, but on being able to communicate effectively in English; in short, to be able to make yourself understood and understand others. Since the curricula have such a strong emphasis on communicative competence, it could conceivably be effective to incorporate risk-taking more strongly in language teaching. Casanave, for instance, found that the students in her study began to write with much more fluency and depth when they started taking more risks (1994, pp. 194–197). In other words, the students’ communicative competence increased, although at the expense of their grammatical accuracy (Ibid., p. 193).

The affective filter needs to be lowered in order for the learner to endeavor into any type of risk-taking behavior. By creating a friendlier classroom climate and reaffirming students of their progress, this can be achieved (Oxford and Ehrman 1993, p. 200). Finally, I agree with Casanave when she argues that:

> It also points to the importance of the relationships between individual teachers and their students. Students will see growth in their writing when teachers demonstrate to them that there is much to identify in good writing in addition to grammatical accuracy, syntactic complexity, and a sophisticated vocabulary. (Casanave 1994, p. 199)

Considering the fact that the English curricula in Swedish schools have such a strong emphasis on communicative competence, it becomes self-evident that teachers need to visualize different kinds of language progression in their students’ writing, and not only focus on grammatical aspects and vocabulary.
8. Conclusion

In this study, I aimed to research differences in Swedish high school students’ writing using material from the Uppsala Learner English Corpus. Specifically, I wanted to find out if any gender-based differences in the students’ writing could be observed from a syntactic as well as a stylistic standpoint. Furthermore, I wanted to research whether any form of risk-taking behavior could be found in the students’ essays. By using different markers of syntactic maturity, such as the T-unit and the subordinate clause index, I was able to quantify syntactic differences between the two genders. The female students in junior high school and the male students in senior high school outperformed their respective counterparts in several syntactic indices. I also employed a qualitative perspective, in order to discern stylistic differences as well as risk-taking behavior in the students’ essays. I found that there were noticeable disparities between the genders. For example, the male senior high school students displayed a much richer vocabulary and usage of phrasemes in their writing compared to the female senior high students. Moreover, there was a clear difference in the level of personalization as regards to content, since the female students across both junior and senior high tended to base their writing much more on personal experiences.

This study largely deals with the use of syntactic indices as tools for measuring syntactic maturity. However, I found that there was a discrepancy between the syntactic indices and linguistic ability. For instance, the female students in junior high have a higher subordinate clause index compared to the male students, but this is largely a result of their excessive use of nominal that-clauses. Further, in senior high the boys and girls are relatively equal in most syntactic indices, but the male students’ writing is much more sophisticated in comparison, because of their complex and varied vocabulary. As such, it is arguable that the syntactic indices cannot accurately express the true linguistic nature of the students’ writing. I realize Hunt never intended for the T-unit to show anything other than syntactic maturity, but I still think the T-unit should only be used in conjunction with other measures, be they quantitative or qualitative.

Based on the results of this study, the differences between boys and girls seem to be more discernible in junior high school, both syntactically as well as stylistically. While the results are interesting, the sample data used is much too small to draw any definite conclusions. In retrospect, a focus should perhaps have been put on either junior or senior high school in order to have a larger sample pool to base any conclusions on. I would like to perform an expanded study in the future, using a much larger text sample. It is also regrettable that the data in ULEC is not coded for first language background, as that can be a vital piece of information in the understanding of a particular student’s linguistic ability, especially when using a universal grammar-based perspective.

Even though I was not able to discern any risk-taking behavior in the data I researched, I still think that risk-taking is an extremely important phenomenon in second language acquisition,
especially considering the strong focus that the new curricula in Swedish schools has on communicative competence. Thus, I think that it would be extremely interesting to perform a longitudinal study involving risk-taking, similar to Casanave’s study. One could, for example, follow a set of students in junior or senior high school over time, keeping journals of their writing and see how they develop, perhaps while the teacher emphasizes syntactic development and risk-taking with one class and more traditional language teaching with another class.

Drawing from personal experience, I believe risk-taking and lowering the affective filter to be vital parts of learning a second language, which is why I will try to create a non-threatening classroom environment and show the students that there is more to language development than perfect accuracy. However, I do not think that risk-taking is an end-all solution to success in a second language. Obviously, risk-taking should be promoted in moderation, as teachers should not disregard grammatical accuracy altogether. There is a balance to be had in everything, even English language teaching.
9. References

9.1 Primary sources

The Uppsala Learner English Corpus. Uppsala University: Department of English.

9.2 Secondary sources

9.2.1 Literature


9.2.2 Internet