Connectives in advanced Swedish EFL learners’ written English – preliminary results

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Abstract
The purpose of this study is to investigate how advanced Swedish EFL learners use connectives in argumentative essays in comparison to how American University students use them in their writing. The data were taken from the International Corpus of Learner English (ICLE): the Swedish sub-corpus and the control corpus of American university student essays. The aim is to examine the use of three types of connectives: (1) adverbial conjuncts (e.g. therefore, in particular); (2) certain style and content disjuncts (e.g. actually, indeed); and (3) some lexical discourse markers (e.g. result, compare). The function of these connectives was classified according to a model combining features from Quirk et al.’s (1985) and J.R. Martin’s (1992) systems of classification. In this paper, the model of classification and the quantitative analysis of the data are presented together with the results from a holistic grading of a smaller sample of the data.

1 Introduction

Connectives function as cohesive “signposts” in discourse that help guide the reader or listener through the message by signalling how successive units are related (Leech & Svartvik 1994: 177). Some examples of connectives are: but (indicates contrast), because (reason) and therefore (result). Such expressions have been described as markers of logical or semantic relations between units of discourse by Halliday & Hasan (1976). Results from studies that have attempted to show that connectives actually contribute to a better understanding of discourse are, however, contradictory (see for instance Flowerdew & Tauroza 1995; Mauranen 1993: 163-165; Hartnett 1986: 151; Mosenthal & Tierney 1984). Yet, some results indicate that connectives may be very important in terms of how a text is perceived. Mauranen (1993: 167) found that a sample of academic writing with connectives present was perceived to be more logical, convincing and authoritative than the same sample with all the connectives removed.

That connectives cause problems for language learners has been revealed in several studies. One example is Granger & Tyson (1996), who found clear evidence of overuse and underuse of individual connectives in their study of adverbial connectives in student essays from the French ICLE sub-corpus. They also found evidence of semantic, stylistic and syntactic misuse of connectives.
Another example is Wikborg & Björk (1989) who established that in Swedish students’ expository essays, both Swedish and English, one of the most common reasons for coherence breaks in the texts was underuse and/or misuse of connectives. Interestingly, the essays written in English were not significantly poorer than those written in Swedish, in this respect. Wikborg & Björk’s results seem, thus, to indicate that Swedish students are inexperienced in producing expository writing in Swedish. The students’ inexperience is subsequently reflected in their English writing.

What might be one source of their problems is that connectives are often optional. Connectives enhance coherence relations in a text by marking them explicitly but do not create them. As a result, connectives used wisely by a good writer may aid the communicability of a text but used poorly they create confusion (Hartnett 1986). Another factor that may create problems for Swedish learners is that connective usage has been shown to be closely linked to register and discourse type (see Biber 1988 and Altenberg 1984, 1986). Add to this the fact that language and culture-induced variability in connector usage have been established (Mauranen 1993: 168-170) and it becomes clear that learning to use connectives appropriately is a very complex task indeed.

Results from contrastive research on Swedish/English connective usage, indicate that there is a high degree of correspondence between the conjunct systems of the two languages. Altenberg (1999; 253) notes that “as grammatical categories, English and Swedish conjuncts correspond in slightly more than 70% of the cases in the material” ². Altenberg (ibid.) also observed that “from the point of view of their language systems, English and Swedish have a similar range of connecting words and phrases to signal semantic relationships between units of discourse”. Thus, there seem to be no signs leading to the expectation that Swedish learners should find English connectives particularly problematic.

However, some potentially challenging areas might be identified from Altenberg’s results. For example, the overall frequency of conjuncts in Altenberg’s Swedish data was greater than in the English data, and this tendency was particularly evident in the appositive, listing and contrastive semantic categories of conjuncts. ³ The suggestion that conjuncts might be used more frequently in Swedish texts is supported by the fact that Altenberg found that conjuncts were omitted more frequently in the English translations of Swedish original texts than in the Swedish translations of English original texts. However, no indications of an overall overuse of conjuncts by advanced

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1 Quirk et al.’s (1985) term.
2 Altenberg’s results are based on data from The English-Swedish Parallel Corpus (ESPC). This corpus consists of source texts in English and Swedish and their translations from English into Swedish and from Swedish into English (40 text samples from each language, totaling about 2 million words). The source texts and translations are aligned sentence by sentence and prepared for searching and browsing. For a description of the corpus, see Aijmer et al. (1996).
3 See Quirk et al.’s (1985) classification of conjunctive roles.
Swedish EFL learners could be found by Altenberg & Tapper (1998) in their examination of conjunct usage in a sample of the Swedish sub-corpus of the ICLE\(^4\) corpus compared with the usage in the British LOCNESS sub-corpus. In fact, their results point to a general underuse of connectives by the Swedish students. Overall, indication of mother tongue influence on the Swedish learners’ use of adverbial connectives was found in this study. One of the major problems for Swedish learners was stated to be their lack of register awareness (ibid: 92). Thus, results from previous studies conflict and cannot be used for making predictions about what the results will show in the present study.

2 Aim

In this study the usage of adverbial connectives and some lexical connectives in advanced Swedish EFL\(^5\) learners’ written English is compared to the usage in American university students’ written English. The study consists of two complementing units; the first part, Section 5, is the quantitative starting point of a larger study which will provide a more detailed analysis of the connective usage in the Swedish EFL learner essays in the ICLE corpus. Consequently, the present study will mainly describe the differences in connective usage between the non-native speakers (NNS) and native speaker (NS) students in terms of over- or underuse of connectives. I will use the terms “overuse” and “underuse”, but I call attention to the fact that these terms will be used only as descriptive labels; the American student essays are not necessarily seen as a norm for Swedish learners to strive for, only as a point of comparison. I will here follow Ringbom (1998:191), who regards the LOCNESS essays as being the “least unsuitable” for comparisons with the ICLE corpus.

In the second part of the present study, Section 6, the results of a holistic scoring of two sub-samples of the Swedish and American student essays is presented. The results from the scoring session will then form the base of an examination of whether a correlation between the frequency of adverbial connectives and writing proficiency can be found in the NNS and NS essays respectively. Moreover, I will present the model of the semantic connective roles that my analysis was based on in Section 4.

The present study is an extension of an earlier one (Altenberg & Tapper 1998), where in the present study the sample size will be three times as great as in the former one, and where further varieties of connectives will be added. In all, the following questions will be addressed:

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\(^5\) ENL: English as native language.
Non-native varieties: ESL: English as a second language; EFL: English as a foreign language; FOL: English as an official language.
• Do advanced Swedish EFL learners use connectives to the same extent as native-English speaking American university students?

• Do they use them to express the same semantic relations as the American students?

• Do Swedish EFL learners use the same individual connectives as the American students, and to the same extent as the American students?

• Can any differences in preference between using adverbial connectives or their clause-integrated lexical counterparts of the same form be established for either group?

• Can any link between the frequency of connectives and assessed writing proficiency be established for either of the student groups?

3 Material

The main strengths of using corpora in linguistic research have been identified by among others Biber, Conrad & Reppen (1994: 169). They state that computerized corpora “provide large databases of naturally occurring discourse, enabling empirical analyses of the actual patterns of use in a language; and, when coupled with (semi-) automatic computational tools, the corpus based approach enables analyses of a scope not otherwise feasible”.

However, as is the case for all research methods, there are potential limitations of a corpus-based approach. One major disadvantage lies in the ways in which linguistic information can be retrieved (see for instance Leech 1998: xviii). When investigating large corpora, you are for all practical purposes limited to investigate linguistic features which are possible to search for by computer. There are in principle two factors that control the searchability of a corpus. First, restrictions are set by the available search and retrieve software; second, corpora that have not been annotated in some way, e.g. tagged or parsed, primarily leave the researcher to search for those linguistic features that are visible in the electronic record of the text (ibid.).

A recent addition to available corpora is learner corpora, which are computerized collections of learner language data. Learner corpora are an important complement to already existing types of corpora, and the potential pedagogical implications of explorations of computerized learner corpora has been stated by Milton & Tsang (1993: 215):

If the corpus-linguistic techniques which have been employed so successfully to NS writing can be used, with modification, to assist the analysis of NNS writing, we can demonstrate to students, teachers and textbook writers precisely how NNS written
language differs from (and is similar to) native-speaker varieties. These methods might help provide an empirical measure of the effectiveness of pedagogical techniques currently employed in teaching students to understand and approximate NS writing styles.

The International Corpus of Learner Language (ICLE) corpus contains essays written by English language learners with many different language backgrounds (see Granger et al. 2002). Each sub-corpus contains about 200,000 words, representing approximately 400 essays of 500 words each. All learner writers have submitted detailed learner profiles where information about the learner’s sex, native language, education, and under which conditions the essay was written is provided. (See Granger 1996: 71 for a reproduction of the learner profile). A native English control corpus (LOCNESS) is also included consisting of what is described as comparable types of essays written by American and British university students.

As is true of all research material, the ICLE corpus has both its advantages and its disadvantages. One advantage is that it consists of computer readable data. This form enables research with a much wider scope than is generally possible with non-computerized data. However, the fact that the data is computer readable does not mean that manual analysis of the search results or a smaller part of the data is not required. Indeed, manual analysis of the research data is generally a necessary element of all studies of learner language, but, as has already been mentioned, in this study I will only present the quantitative results from an analysis of the Swedish and American sub-corpora. One significant disadvantage with the ICLE corpus is that it is a statistically non-representative sample of a population. Thus, in spite of the fact that the ICLE corpus is a comparatively large sample of learner language data, great care must be taken when attempting to draw any conclusions about general learner behavior from results generated by investigations of the ICLE corpus.

The material used in this study was taken from the Swedish sub-corpus of the ICLE corpus and the American LOCNESS sub-corpus. The Swedish sub-corpus, at the time of analysis, consisted of 279 essays of what is described as argumentative writing in the ICLE manual. However, this definition seems to be based on the writing prompts and not on any discourse analysis made of the texts themselves.

The essays were written by Swedish EFL students from Lund University and Gothenburg University in their third or fourth semester of English studies, which leads us to another problem regarding using the ICLE corpus for SLA research. In the ICLE corpus “advanced” refers to university students of English, usually in their third or fourth year of study, who therefore make relatively few morphosyntactic errors but for whom a significant number of discourse level problems remain” (Granger 1996: 18). However, there is no documentation of

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6 See Connor & Lauer (1988) for a detailed discussion of the vagueness of this term.
any test carried out in order to ascertain that the different learner sub-corpora, for example, the French and Chinese ones, are comparable in terms of learner advancement.

The Swedish student essays have a mean length of 570 words and the sample in all amounts to approximately 159,000 words. I will from now on refer to this sample as SWICLE. The American sub-corpus in its turn consists of 175 argumentative essays which have a mean length of 850 words and form a sample of approximately 149,000 words. The essays were written by American students from the University of Michigan, the University of South Carolina, Marquette University, and Indiana University at Indianapolis. This sample I will refer to as LOCNESS.

The American control corpus was chosen in favor of the British control corpus when a careful examination of the topics of the essays in the three sub-corpora and a reading of a random selection of essays, indicated that the American control corpus appeared to be somewhat more comparable to the genre of the Swedish sub-corpus than the British reference corpus.

4 Model

Syntactically, connectives can have different forms. They can be coordinators (e.g. and), subordinators (e.g. since), adverbial connectors (e.g. however, consequently, by the way) or certain clause-integrated expressions (e.g. an example is, this brings us to, the result is) (see Winter 1977 and Halliday & Hasan 1976). This study will focus on adverbial connectives and some clause-integrated connectives which from now on will be referred to as adverbial and lexical connectives respectively.

In this study I will use a synthesis of Quirk et al’s (1985) and Martin’s (1992) models. The reason for conflating the two is twofold: Quirk et al’s model is not finegrained enough regarding the classification of connectives, and Martin’s model makes a distinction between internal- and external relations which will be disregarded. The model is presented in Figure 1.

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7 External relations apply between things referred to in a text whereas internal relations apply between elements which are constitutive of the text itself, for example speech acts. (Halliday & Hasan 1976: 241, Knott 1996: 19)
(1) Additive
   (a) listing: ordering (e.g. first(ly), second(ly), to begin with)
       terminating (e.g. finally, last(ly), last of all)
   (b) equative (e.g. equally, likewise, similarly)
   (c) reinforcing (e.g. furthermore, in addition, moreover)

(2) Clarifying
    reformulating
    (i) abstraction: exhaustive (e.g. that is, i.e., in other words)
        exemplifying (e.g. for example, for instance, such as)
    (ii) generality
        local: generalizing (e.g. in general, generally)
        particularizing (e.g. in particular, particularly, specifically)
        global (e.g. to sum up, in short, in conclusion)

(3) Contrastive
   (a) replacive (e.g. better, rather, more accurately)
   (b) alternative (e.g. alternatively, alias)
   (c) comparative (e.g. in comparison, by (way of) comparison)
   (d) antithetic (e.g. conversely, instead, oppositely)
   (e) concessive: dismissive (e.g. in any case, anyway)
       counterexpectation (e.g. however, nevertheless, though)

(4) Resultive
   (a) concluding (e.g. as a consequence, as a result, so, therefore)
   (b) inferential (e.g. in that case, otherwise, if...then)
   (c) explanatory (after all)

(5) Transitional
   (a) exchange punctuating (e.g. oh, well)
   (b) turnbuilding: framing (e.g. now, well, okay)
       sidetracking (e.g. by the way, anyway)

(6) Corroborative (in fact, actually, as a matter of fact, indeed)

Figure 1. The classification of connective roles

However, the term “corroborative” is taken from Ball (1986) (see Granger (1996) for discussion.). As clause-integrated lexical items of connection would also be included in this study, only non-clause-integrated adverbial connectives were included in this new classification; i.e. expressions such as in addition to this and the result of this. Connectives denoting a temporal relationship were not included. In accordance with Granger (1996), these were regarded as external to argumentative text types. The final classification covered 170 adverbial connectives.

The aim with the model was to develop a detailed systematic classification of connectives, which both would make the distinction between different semantic
roles as clear as possible in order to facilitate the analysis, and provide a more
detailed tool for identifying differences in the usage of connectives in the EFL
learners’ and the NS students’ writing.

5 Comparing Swedish EFL learners’ and American
students’ use of connectives – first quantitative results

5.1 The overall frequency of adverbial connectives

Table 1\(^8\) displays the overall frequency of adverbial connectives in the Swedish
and American data. The table shows that the Swedish learners use far more
adverbial connectives in their essays than the American students (93 vs. 73
examples per 10,000 words). The difference is statistically highly significant and
this result is contrary to the findings of Altenberg & Tapper (1998) who reported
that the Swedish learners in the ICLE corpus underused conjuncts compared to
the British students in the LOCNESS corpus. However, Altenberg & Tapper
examined a much smaller sample of essays than the present study and a shorter
list of connectives. Another reason behind the contradictory results may be that
different NS student corpora were used as reference in the two studies.
Altenberg & Tapper used the British sub-corpus, whereas the American sub-
corpus was used in the present study.

The Swedish learners’ overuse of connectives might be caused by some kind
of influence from the Swedish learners’ native language use since Altenberg
(1999) noted that conjuncts were more frequent in his Swedish data than in his
English data, as will be discussed in more detail in Section 5.3.

It can also be observed in Table 1 that the Swedish learners used slightly more
types of connectives than the American students (93 vs. 85). The Swedish
learners thus vary their use of connectives more than the American students in
the ICLE corpus. Even though this is not a negative feature in itself, since
variety in writing is something to strive for, it may contribute to the “foreign-
soundedness” of a text if connectives expressing similar cohesive relationships
are used interchangeably with no regard for the individual connectives style-
sensitivity. As Crewe (1990) has shown, textbooks may lead ESL learners astray
in this area since what is sometimes offered there are lists of what is said to be
interchangeable connectives. If these lists then are coupled with instructions to
vary the use of these connectives, the result may likely be “foreign-sounding”
texts (ibid: 318).

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\(^8\) The chi-square test was used in order to evaluate these results. The limit of significance chosen was
p= 0.01.
Connectives in advanced Swedish EFL learners’ written English

<table>
<thead>
<tr>
<th></th>
<th>SWICLE</th>
<th>LOCNESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tokens</td>
<td>1481</td>
<td>1096</td>
</tr>
<tr>
<td>Tokens/10,000</td>
<td>93</td>
<td>73</td>
</tr>
<tr>
<td>Types</td>
<td>93</td>
<td>85</td>
</tr>
</tbody>
</table>

χ²=59.0, df=1, p<0.01

Table 1: Overall frequency of adverbial connectives in SWICLE and LOCNESS

5.2 The frequency of semantic types of adverbial connectives

The semantic functions of the connectives in the material were analyzed using the classification presented in Figure 1. The subdivisions of the main categories will not be examined in detail in the present study, but the 6 main categories are presented in Table 2.

<table>
<thead>
<tr>
<th>Category</th>
<th>SWICLE n</th>
<th>n per 10,000</th>
<th>LOCNESS n</th>
<th>n per 10,000</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contrastive</td>
<td>397</td>
<td>24.8</td>
<td>335</td>
<td>22.3</td>
<td>n.s.</td>
</tr>
<tr>
<td>Resultive</td>
<td>315</td>
<td>19.7</td>
<td>275</td>
<td>18.4</td>
<td>n.s.</td>
</tr>
<tr>
<td>Clarifying</td>
<td>303</td>
<td>19.0</td>
<td>183</td>
<td>12.2</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Additive</td>
<td>210</td>
<td>13.1</td>
<td>180</td>
<td>12.1</td>
<td>n.s.</td>
</tr>
<tr>
<td>Corroborative</td>
<td>204</td>
<td>12.8</td>
<td>95</td>
<td>6.3</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Transitional</td>
<td>52</td>
<td>3.2</td>
<td>28</td>
<td>1.9</td>
<td>n.s.</td>
</tr>
</tbody>
</table>

Table 2: Distribution of semantic types of adverbial connectives in SWICLE and LOCNESS

Here we can see that the distribution of the different semantic categories is nearly identical in the Swedish data and the American data. The contrastive relations are most frequently used followed by the resultive, the clarifying and the additive relations. Transitional relations are rare in both sub-corpora. We can also see in Table 2 that the Swedish learners’ overall overuse of connectives pervades all the semantic categories. Their overuse is, however, particularly noticeable in the clarifying and corroborative categories where the differences in usage between the Swedish and American students are highly significant.

The Swedish learners’ overall overuse of clarifying connectives is primarily due to a striking overuse of connectives in the clarifying: reformulatory: abstraction subcategory. The Swedish learners’ overuse of clarifying connectives may be due to influence from Swedish usage since Altenberg (1999) also found a considerably higher frequency of additive conjuncts in his

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9 This contains the same connectives that are incorporated in Quirk et al.’s appositive category, plus some additional connectives expressing the same relation (e.g. for example, that is, such as). The two categories can therefore be said to be relatively comparable. This comparability needed to be established to justify a cautious comparison between the results presented here and the results from the Altenberg (1999), and Altenberg & Tapper (1998) studies which used Quirk et al.’s framework.
Swedish data. Altenberg & Tapper also found an overuse of appositive conjuncts by the Swedish learners in their material, but this turned out to be due to the fact that the British students preferred a connective which is not classified as a conjunct in Quirk et al. (1985): *such as*. This connective is, however, included in the classification of connectives used in the present study.

The Swedish learners’ overuse of corroborative connectives in the present study is not reflected in the Altenberg & Tapper study. Within the scope of the present study it is difficult to comment on what this overuse might be due to. The French learners in the French ICLE sub-corpus also overuse this category of connectives, but this overuse was mainly related to transfer from French according to Granger & Tyson (1996: 22). However, Granger & Tyson found that the German learners also overused corroborative connectives to some extent (ibid.). The fact that overuse of corroborative connectives have been found in three learner varieties leads to the tentative impression that this overuse may be a shared learner language feature.

Perhaps, as Altenberg & Tapper (1998: 90) hold, this tendency to overuse corroborative connectives among some learners can be ascribed to their “argumentative style”. Altenberg & Tapper support their hypothesis by referring to observations from Biber & Finegan (1988) who showed that corroborative connectives are prevalent in genres that generally reflect the speaker/writer’s personal convictions. More “faceless” and objective genres such as expository prose, on the other hand, were shown to have a low frequency of these connectives. Several other studies have also shown that many of the learner sub-corpora in the ICLE corpus – and in some cases the Swedish sub-corpus especially – contains writing that is more informal in style than the native English-speaking student writing (see for instance Virtanen 1998; Petch-Tyson 1998 and Granger & Rayson 1998 and Altenberg 1997). It is evident that some research remains to be done in this area in order to provide any satisfactory explanations for this very interesting overuse of corroborative connectives by learners’ in the ICLE corpus.

5.3 The frequency of individual adverbial connectives

Even though only slight differences in the usage of the semantic functions by the Swedish learners and American students in the ICLE corpus were found, delving deeper into the classification, down to individual connectives, exposes some interesting differences. The distribution of the top ten connectives in the two corpora is displayed in Table 3. Just as Altenberg & Tapper (1998: 86) found for Swedish learners and British students, the present material reveals that the Swedish learners and the American students rely mostly on the same connectives. Only four connectives used by each student group are not present in the top ten list of the other group. Those connectives are presented in bold in Table 3. However, as the table shows, the Swedish learners rely heavily on three
individual connectives. Furthermore, the American students rely on their ten most frequent connectives to a higher extent than the Swedish learners do since the top ten connectives represent 61 per cent of the total number of the connectives in the American data compared to 53 per cent in the Swedish data.

<table>
<thead>
<tr>
<th>Connectives</th>
<th>SWICLE</th>
<th>LOCNESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>however (contrastive)</td>
<td>129</td>
<td>174</td>
</tr>
<tr>
<td>for example (clarifying)</td>
<td>125</td>
<td>81</td>
</tr>
<tr>
<td>of course (corroborative)</td>
<td>98</td>
<td>78</td>
</tr>
<tr>
<td>therefore (resultive)</td>
<td>75</td>
<td>68</td>
</tr>
<tr>
<td>so (resultive)</td>
<td>55</td>
<td>56</td>
</tr>
<tr>
<td>then (resultive)</td>
<td>55</td>
<td>53</td>
</tr>
<tr>
<td>actually (corroborative)</td>
<td>47</td>
<td>45</td>
</tr>
<tr>
<td>thus (resultive)</td>
<td>45</td>
<td>42</td>
</tr>
<tr>
<td>that is (clarifying)</td>
<td>43</td>
<td>38</td>
</tr>
<tr>
<td>such as (clarifying)</td>
<td>40</td>
<td>35</td>
</tr>
<tr>
<td>Total</td>
<td>712</td>
<td>670</td>
</tr>
</tbody>
</table>

Table 3: The top ten adverbial connectives in SWICLE and LOCNESS

Yet, despite the general similarities found in the top ten lists for the two groups there are clear differences in the usage of some specific connectives. In Tables 4 and 5, the connectives that were highly significantly over- or underrepresented in the Swedish sub-corpus are presented.

<table>
<thead>
<tr>
<th>Connectives</th>
<th>SWICLE</th>
<th>LOCNESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>of course (corroborative)</td>
<td>98</td>
<td>9</td>
</tr>
<tr>
<td>for example (clarifying)</td>
<td>125</td>
<td>56</td>
</tr>
<tr>
<td>then (resultive)</td>
<td>55</td>
<td>23</td>
</tr>
<tr>
<td>of course (contrastive)</td>
<td>40</td>
<td>13</td>
</tr>
<tr>
<td>well (transitional)</td>
<td>34</td>
<td>8</td>
</tr>
<tr>
<td>still (contrastive)</td>
<td>25</td>
<td>3</td>
</tr>
</tbody>
</table>

For all items: df=1, p<0.001

Table 4: The overrepresented adverbial connectives in SWICLE

<table>
<thead>
<tr>
<th>Connectives</th>
<th>SWICLE</th>
<th>LOCNESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>if...then(resultive)</td>
<td>19</td>
<td>78</td>
</tr>
<tr>
<td>also (additive)</td>
<td>11</td>
<td>53</td>
</tr>
<tr>
<td>yet (contrastive)</td>
<td>14</td>
<td>45</td>
</tr>
</tbody>
</table>

For all items: df=1, p<0.001

Table 5: the underrepresented adverbial connectives in SWICLE

As can be seen, six adverbial connectives were significantly overused by the Swedish learners and four connectives were significantly underused. The first
overused connective, *of course*, is also the most frequently used connective in the Swedish data overall. Judging from the top ten list of connectives found in the American data, the American students preferred two other connectives included in this study to *of course*: *in fact* and *actually*. The Swedish learners’ overuse of *of course* observed in this study is reflected in the Altenberg & Tapper study. Interestingly, the French learners represented in the ICLE corpus also overuse the connective *of course* as reported by Granger & Tyson (1996: 22). In addition, they showed that the German learners in the ICLE corpus also overused *of course* (ibid.). The fact that overuse of *of course* has been found in three learner varieties leads to the suggestion that this overuse may be a shared learner language feature as has already been discussed in section 5.2.

Regarding the Swedish learners’ overuse of the connective *for example*, the American students seem to prefer the connective *such as* to give examples, as can be seen in Table 3. This connective was, in turn, significantly underused by the Swedish learners. Perhaps the fact that there is a corresponding connective in Swedish of a very similar form to *for example, till exempel*, plays a part here. What is more probable, however, is that this overuse reflects an aspect of the Swedish learners’ argumentative style where exemplifying seems to be a characteristic trait. A characteristic which may be tied to Swedish usage, since Altenberg (1999) found a considerably higher frequency of appositive conjuncts\(^{10}\) in his Swedish data. Altenberg & Tapper also found an overuse of appositive conjuncts by the Swedish learners in their material, but this turned out to be due to the fact that the British students also preferred the connective *such as*.

The connective\(^{11}\) *well* is featured in spoken English discourse. This overuse of *well*, again, may reflect the Swedish learners’ more informal writing style. Also, in the Swedish sub-corpus, *well* followed directly stated questions in 22 of the 34 found instances; a construction which contributes to a more informal style of writing if frequently used (Virtanen 1998: 105). Virtanen’s study of the frequency of direct questions in the ICLE corpus showed that the Swedish learners in the corpus used direct questions significantly more frequently than the English students (ibid.: 98).

In the case of the connective *still*, the American students seem to prefer the more formal (Altenberg 1986: 18) connectives *however* and *yet* to indicate contrast to judge from their top ten list of connectives, a fact that is also reported of the British students in the LOCNESS corpus by Altenberg & Tapper (1998: 86). In turn, *yet* was significantly underused by the Swedish learners.

The overuse of the connective *then* by the Swedish learners seems to be linked to the underuse of another connective. Where the Swedish learners

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\(^{10}\) This term is from Quirk et al. (1985: 635). It is the semantic conjunctive role which is held to ‘express the content of the preceding item or items in other terms’ or ‘has the effect of specifying a list’ (ibid.). Some of the conjuncts in this class are: *namely, for example, for instance* and *that is*.

\(^{11}\) *Well* is classified as a connective in both Quirk et al. (1985: 501, 633) and Martin (1992: 218-220).
preferred to develop the argument with the connective *then*, the American students seemed to favor the *if...then* correlation, a construction which was infrequent in the Swedish data (only 19 instances). According to Quirk et al. (1985), this construction “contributes both to stylistic elegance and to textual clarity”.

The underused connective which has not been discussed so far, *also*, seems to be caused by the Swedish learners' partiality to use the connective *furthermore* for adding a new point to an argument. This connective was also significantly overused by the Swedish learners. This is quite a surprising finding – especially taking into consideration Altenberg & Tapper’s hypothesis that the Swedish students lack register awareness in their writing. The connective *furthermore* is generally considered to be more formal than, for example, *also* by most grammars and style guides.

Based on the results from this quantitative analysis of the connective usage in the Swedish sub-corpus and the American sub-corpus of the ICLE corpus, only tentative explanations of the found instances of underuse and overuse by the Swedish learners can be put forward at this time. It is, however, clear that the Swedish and the American students prefer different individual adverbial connectives to signal the same cohesive relation.

### 5.4 The frequency of lexical connectives

Crewe, Wright & Leung (1985: 61) suggest that many logical connectives are “abstract and opaque text organizers and not fixed, concrete lexical items”. Also, connectives are not integrated in the clause but are peripheral elements that can be added or removed without changing the structure of the clause (see for instance Quirk et al. 1985: 631-633 and Leech & Svartvik 1994: 231). Adding an adverbial connective successfully to a text was thus hypothesized to be a more demanding conscious effort than using more transparent and explicit forms of connectives, reflecting the writer’s ability to organize and choose the best cohesive means for the construction of an effective and forceful argumentation (Crewe 1990: 322-323). An interesting aspect to investigate in EFL learner language was thus considered to be the combined usage of adverbial connectives and lexical connectives. Therefore, in addition to adverbial connectives, those clause-integrated lexical items of connection referred to as vocabulary 3 in Winter’s (1977) framework of clause relations were included. From this group those which have corresponding connectives of the same form (e.g.: *result, compare, conclude*) were selected for a closer examination. These lexical connectives were singled out because in these cases differences can readily be established between preferred forms in the learner and native student samples.

Only the instances where the lexical variants are used as connectives were included in the analysis. It was hypothesized that some instances of the under- or overuse of adverbial connective forms by the Swedish learners might be
attributed to their partiality to the corresponding lexical connective form. The verb forms of these items were excluded, mainly for practical reasons: the systematic retrieval of the verb forms from such a large corpus as the ICLE was not within the scope of the present study. In Table 6 the distribution of lexical and adverbial connectives of the same form in the Swedish and American data is presented. There are very few instances of most of the lexical connectives examined in the present study, and most of the corresponding adverbial connectives were also infrequently used. This might be due to the fact that many of them are more formal connectives as *in contrast* and *as a consequence*. However, two interesting tendencies can be seen. Both the Swedish and the American students preferred to express a resultive connection with a clause-integrated expression. Constructions containing the lexical connective *result* were considerably more frequently used by both student groups than the adverbial connective *as a result*.

The tentative hypothesis put forth in Section 4, that instances of over- or underuse of adverbial connectives in the Swedish data might be explained by a preference for the lexical connective, was not supported by the results from the analysis of the lexical connectives included in this study. However, as can be seen in Table 6.

<table>
<thead>
<tr>
<th>Lexical form</th>
<th>SWICLE n</th>
<th>LOCNESS n</th>
<th>Adverbial form</th>
<th>SWICLE n</th>
<th>LOCNESS n</th>
</tr>
</thead>
<tbody>
<tr>
<td>addition</td>
<td>0</td>
<td>0</td>
<td><em>in addition</em></td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>example(s)</td>
<td>45</td>
<td>67</td>
<td><em>for example</em></td>
<td>125</td>
<td>56</td>
</tr>
<tr>
<td>instance(s)</td>
<td>0</td>
<td>2</td>
<td><em>for instance</em></td>
<td>32</td>
<td>12</td>
</tr>
<tr>
<td>conclusion</td>
<td>5</td>
<td>2</td>
<td><em>in conclusion</em></td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>contrast</td>
<td>0</td>
<td>3</td>
<td><em>in contrast</em></td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>consequence</td>
<td>5</td>
<td>1</td>
<td><em>as a consequence</em></td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><em>consequently</em></td>
<td>24</td>
<td>5</td>
</tr>
<tr>
<td>result(s)</td>
<td>24</td>
<td>27</td>
<td><em>as a result</em></td>
<td>3</td>
<td>5</td>
</tr>
</tbody>
</table>

Table 6: The distribution of lexical and adverbial connectives of the same form in SWICLE and LOCNESS

The American students, to some extent, preferred the lexical to the adverbial form of *example*. The Swedish learners, on the other hand, did not use the lexical form of *example* to the same degree as the adverbial form, but it was frequently enough used not to allow for the Swedish learners’ overuse of the adverbial form to be explained by the American students’ preference of the lexical form. Thus, the results yielded from this preliminary study of lexical connectives show that it may be fruitful to explore this aspect of Swedish EFL learners’ coherence marking further.
6 The holistic rating of a sub-sample from SWICLE and LOCNESS

6.1 Introduction

In order to establish any pedagogical applications from the results of a study of Swedish EFL learners' connective usage compared to NS American students it was seen as essential to establish which are good essays and which are less so in the data. A method that has been used frequently for including a quality assessment dependent variable to assess the relative merits of an independent variable, such as text features, is holistic assessment (see for instance Connor 1991; 1995 and Connor & Lauer 1988). Holistic ratings provide a general quality score based on an overall impression, taking both the syntactic quality and the organisation into account. Since the usage of connectives is related to successful text organization, holistic assessment was considered to be a suitable rating method for this study. Also, it has been shown that holistic raters – even raters not used to scoring ESL and EFL writers – “place more weight on content and organisation than surface errors” (Carlisle & McKenna 1991).

The holistic scoring procedure used in this study is the Test of Written English (TWE), which is part of the TOEFL examination. The TWE scoring guide consists of six levels of scores, and both rhetorical and syntactical criteria are included in the scores. In the TWE scoring procedure, raters are trained to use the TWE scoring guide. Each text is scored by two raters independently and any inconsistencies in the scores are resolved by a third reading (Reid 1993: 239). The three raters who performed the holistic scoring for this study were all native speakers of English with extensive experience in ESL and EFL teaching. All were trained in the TWE essay scoring procedure and the test-leader had rated TOEFL essays using the TWE scale for several years at the time of scoring the essays used in the present study.

The following sections of this paper introduce the material that was subjected to holistic scoring and present the results the holistic scoring generated. In Section 6.3.2, the relationship between essay length and received score is explored. In Section 6.3.5, an analysis is performed concerning whether any link between the frequency of connectives in the essays and assessed writing proficiency can be established for the Swedish or American students.

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12 The criteria an essay have to meet in order to receive the next to highest score, 5, is presented (see Reid 1993: 239 for the entire TWE guide) here:

“5 Demonstrates competence in writing on both the rhetorical and syntactic levels, though it will probably have occasional errors. A paper in this category may address some parts of the task more effectively than others; is generally well organized and developed; uses details to support a thesis or illustrate an idea; displays facility in the use of language; demonstrates some syntactic variety and range of vocabulary.”

13 The holistic scoring of the essays was made possible by the generous assistance of Professor Ulla Connor, IUPUI, Indianapolis.
6.2 Material

A sub-sample of 106 essays was selected from the data: 53 essays from the SWICLE and LOCNESS corpora respectively. The selection was based primarily on length, since previous research indicates that there may be a relationship between essay length and received score in ESL writing assessment (see Schneider & Connor 1990 and Gaies 1980). The results from research on the relationship between essay length and received score in NSE writing assessment have, however, been inconclusive (see McCulley 1985; Witte & Faigley 1981). Based on the fact that previous work has not been able to rule out a potential relationship between length and received score for NSE writers, while research on EFL writers indicates that there may be a relationship, a conscientious approach in the present study appeared to be to limit the effects this variable could have on the assessment as much as possible. Consequently, the shortest and the longest essays in the ICLE corpus were not included and a sample with essays of similar range and similar mean length was selected.

Another factor, apart from essay length, that was deemed important was the inclusion of essays from more than one university in both the SWICLE and the LOCNESS samples. Further, the two samples include both timed and untimed essays, or rather – as is generally the case – essays written in an exam setting and essays written at home. Finally, for practical reasons, in order to facilitate the scoring procedure, the two samples were selected to consist of as many essays on the same topic as possible. The final sample that was extracted after this very delicate selection procedure is presented in Figure 2.

**The Swedish sample:** 30,595 words; 53 essays. Average length: 577, range: 333–1286
27 untimed essays from Lund University all on the same topic:
   Integration or assimilation
26 timed essays from Lund University and the University of Gothenburg on the following topics:
   Integration or assimilation (13)
   Racism in everyday terms (9)
   Censorship (4)

**The American sample:** 30,531 words, 53 essays. Average length: 576, range: 231–1201
27 essays from Indiana University at Indianapolis on the following topics:
   Crime does not pay (10)
   Money is the root of all evil (7)
   Feminists have done more harm to the cause of women than good (5)
   A man/woman’s financial reward should be commensurate with their contribution to the society in which they live (5)
13 essays from the University of Michigan on the same general topic:
   Great inventions and discoveries of the 20th century and their impact on people’s lives:
   The computer (7), Television (6)
9 essays from the University of South Carolina on the following topics:
   Abortion (3)
6.3 A comparison of received TWE scores in the Swedish and American sub-corpora of student essays

6.3.1 Overall comparison of received scores

Perhaps contrary to what could be considered to be the expected results from an assessment of native and non-native writing, the results from the holistic scoring indicate that the Swedish learners in this sample, on the whole, are as skilled writers as the American students. As can be seen in Table 7, the median are the same for the two student groups (4.5) and the mean scores are very close (4.66 vs. 4.63). This indicates that the two groups seem to be matched in terms of writing competence. Moreover, these results suggest that the Swedish sub-corp of the ICLE corpus contains essays from advanced learners of English (see Section 3 for discussion).

<table>
<thead>
<tr>
<th></th>
<th>mean</th>
<th>median</th>
</tr>
</thead>
<tbody>
<tr>
<td>Swedish</td>
<td>4.66</td>
<td>4.5</td>
</tr>
<tr>
<td>American</td>
<td>4.63</td>
<td>4.5</td>
</tr>
</tbody>
</table>

t=0.0527, df=104, p=n.s.

Table 7: The means and medians for the Swedish and American essays

The relative frequency of the scores the Swedish and American student essays received are presented in Table 8. Neither the Swedish nor the American student essays received any scores below 3, which, according to the TWE scoring guide, indicate that all the essays in the sample at least “demonstrate some developing competence in writing”. Table 8 clearly shows how similarly the Swedish and the American student essays are distributed among the scores. A higher number of lower scores (below 4.0) was found in the American sample than in the Swedish sample (3 vs. 1). These low scores in the American sample could, however, be due to differences in the compiling procedures for the Swedish ICLE and the American LOCNESS essays by the ICLE team. The timed essays in the Swedish sample (graded exam essays) only included essays with scores above, or equal to, passing. No lower graded essays were included. The untimed Swedish essays and all the American essays, on the other hand, were not selected taking any restrictions based on previously assessed essay quality into
account. The figures presented in Table 9 support this hypothesis, since the lowest score for the Swedish sample is found among the untimed essays (3.5).

<table>
<thead>
<tr>
<th>Score</th>
<th>Swedish sub-sample</th>
<th>American sub-sample</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>n</td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1.5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2.5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>3.5</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>14</td>
<td>15</td>
</tr>
<tr>
<td>4.5</td>
<td>15</td>
<td>8</td>
</tr>
<tr>
<td>5</td>
<td>16</td>
<td>15</td>
</tr>
<tr>
<td>5.5</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>6</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>53</td>
<td>53</td>
</tr>
</tbody>
</table>

Table 8. The relative frequency of received score for the 53 Swedish and American essays from the ICLE and LOCNESS corpora.

<table>
<thead>
<tr>
<th></th>
<th>Number of essays</th>
<th>Essay length range</th>
<th>Score range</th>
<th>mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>timed Swedish essays</td>
<td>26</td>
<td>333-654 words</td>
<td>4.0-6.0</td>
<td>4.58</td>
</tr>
<tr>
<td>untimed Swedish essays</td>
<td>27</td>
<td>374-1286 words</td>
<td>3.5-6.0</td>
<td>4.74</td>
</tr>
</tbody>
</table>

$t=1.0198$, $df=51$, $p=n.s.$

Table 9: The means for the timed/untimed Swedish essays

However, as can be seen in Table 9, overall, the untimed essays had a higher mean than the timed essays (4.74 vs. 4.58). It is not a statistically significant difference, but still deserves to be commented on. A plausible explanation for this disparity lies in the writing situation. The untimed essays were not exam essays; i.e. not written under any time pressure. Thus, the writer did not have any problems with exam stress or a limited time factor, which demands much of the writer’s planning and organisation skills. The writer had the opportunity to write at his or her own pace, and the unrestricted time allotment allowed for longer periods of reflection over the content and argumentation. Moreover, dictionaries, grammars and spellchecking software could be taken advantage of by (at least) the ambitious students.

6.3.2 Correlations between received score and essay length

The correlations between the holistic rating score and essay length are shown in Table 10. It can be seen that the correlation is very low for both the Swedish and American student essays. Only 2 per cent and 7 per cent respectively of the variation in the scores might be explained by essay length. However, the nature
of the plots of the rating versus the essay length led to an impression that a relationship might exist between received holistic score and essay length up to a “critical length” in the data. Especially the plot for the Swedish student essays was suggestive, since it indicated that a relationship between score and essay length perhaps could be found if the four longest essays were excluded from the Swedish data, thus reducing the essay length to less than 700 words. The plot for the American essays showed no such similar indication, still this sample was also tested for essays shorter than 700 words, which in this case involved excluding 15 essays. The results of these calculations are found in Table 10.

<table>
<thead>
<tr>
<th>Length and source</th>
<th>Number of essays</th>
<th>r</th>
<th>r²</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>American sub-sample total</td>
<td>53</td>
<td>0.15</td>
<td>0.02</td>
<td>n.s.</td>
</tr>
<tr>
<td>Swedish sub-sample total</td>
<td>53</td>
<td>0.27</td>
<td>0.07</td>
<td>n.s.</td>
</tr>
<tr>
<td>American essays &gt;700 words</td>
<td>38</td>
<td>0.56</td>
<td>0.31</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Swedish essays &gt;700 words</td>
<td>49</td>
<td>0.97</td>
<td>0.94</td>
<td>&lt;0.001</td>
</tr>
</tbody>
</table>

**Table 10: The correlation coefficients between essay length and received TWE score for the Swedish and American essays**

This manipulation of the data yielded a very high correlation between essay length and holistic score in the Swedish data. As much as 97% of the variability in the holistic score for the Swedish EFL learners could be ascribed to essay length. The correlation for the American sample was only moderately high, with 31% of the variability in the score due to essay length. Thus, the results of this study support previous work to some extent and suggest that a correlation between essay length and score in EFL writing exist up to a critical length. However, a similar relationship was not found for the American data. Schneider & Connor (1990: 419) present a possible explanation to these differences in results concerning EFL and NSE writing:

The consistently strong association between length and higher ratings in ESL essays may indicate the greater importance of control of syntactic structures and lexical knowledge among ESL writers relative non-ESL writers. Below college level, length clearly distinguishes between higher and lower rated essays written by native English speakers. However, because older and more educated native speakers generally control the language, other factors, such as style, sophistication of language and degree of development, are likely to contribute more to judgements of college-level writing than length alone.

### 6.3.3 Score distribution among the different topics

The titles of the essays used in this sample give an indication of which writing prompts could have been used to elicit them (see Figure 2.). The topics are different in the Swedish and American data: the Swedish essays deal with controversial issues central to Swedish society and, the American essays, for the
most part, deal with controversial issues central to American society. In all probability, this ensures that any culturally induced misunderstandings of the prompts should not be present in the data. However, during the holistic scoring procedure, it was not possible to take the NS raters’ potential culturally induced reaction to the topics into consideration when selecting the data or the raters. Care was taken to present the essays to the raters looking as similar as possible. All of the essays were computer printouts with the same type print, type size, margins etc., and there was no information about the nationality of the writer was included. However, even though the raters did not know if an essay was written by an EFL or an NSE student, this could easily be gleaned from the content. Therefore, the score variation among topics required some examination.

The means for the different topics are presented in Table 11.

<table>
<thead>
<tr>
<th>Topic</th>
<th>Number of essays</th>
<th>mean</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Swedish topics:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Integration or Assimilation</td>
<td>40</td>
<td>4.80</td>
</tr>
<tr>
<td>Racism in Everyday Terms</td>
<td>9</td>
<td>4.22</td>
</tr>
<tr>
<td>Censorship</td>
<td>4</td>
<td>4.25</td>
</tr>
<tr>
<td><strong>American topics:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Money is the Root of All Evil</td>
<td>7</td>
<td>4.36</td>
</tr>
<tr>
<td>Crime does not pay</td>
<td>10</td>
<td>4.65</td>
</tr>
<tr>
<td>Feminists have Done More Harm…</td>
<td>5</td>
<td>4.50</td>
</tr>
<tr>
<td>A Man/Woman’s Financial Reward…</td>
<td>5</td>
<td>5.00</td>
</tr>
<tr>
<td>Great Inventions:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Computer</td>
<td>7</td>
<td>4.43</td>
</tr>
<tr>
<td>The Television</td>
<td>6</td>
<td>5.00</td>
</tr>
<tr>
<td>Abortion</td>
<td>4</td>
<td>4.00</td>
</tr>
<tr>
<td>Capital Punishment</td>
<td>5</td>
<td>5.10</td>
</tr>
<tr>
<td>Legalization of Marijuana</td>
<td>4</td>
<td>5.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>106</td>
<td></td>
</tr>
</tbody>
</table>

Table 11: The means for the different topics of Swedish and American essays

As can be seen, they range from 4.22 to 5.10, which may indicate that some subjects are more difficult to write about than others. Moreover, the consequence of one of this study’s limitations discussed previously (the NS raters’ reaction to the topics) can possibly be seen here. The Swedish topics *Racism in Everyday Terms* and *Censorship* present the lowest means of all. The topic *Integration or Assimilation* present a fairly high mean but is not one of the highest. These results may indicate either that racism and censorship are exceptionally difficult subjects to write about or that the NSE raters reacted negatively to the EFL writers’ argumentation in relation to these topics. A third possible explanation may be that the essays dealing with these topics are exam essays written by students from only one Swedish university. These essays were written under a quite severe time limit, which may have influenced the relative quality of the essays negatively.
6.3.4 Scoring results vs. overall frequencies of adverbial connectives

The overall frequency of adverbial connectives in the sub-samples from the SWICLE and the LOCNESS corpora is displayed in Table 12. Even on this level, in a sample of only 30,000 words, the Swedish learners’ overuse of adverbial connectives can be noticed.

<table>
<thead>
<tr>
<th>Number of connectives</th>
<th>n</th>
<th>n/1000 words</th>
</tr>
</thead>
<tbody>
<tr>
<td>Swedish sub-sample</td>
<td>230</td>
<td>7.5</td>
</tr>
<tr>
<td>American sub-sample</td>
<td>196</td>
<td>6.4</td>
</tr>
</tbody>
</table>

$\chi^2=2.6$, df=1, p=n.s.

Table 12: The relative frequency of connective usage in the Swedish and the American sample

Table 13 shows the number of connectives per essay in the data. It is noteworthy that the American student essays had a wider range of connectives per essay (0–17) than the Swedish student essays (0–9). Moreover, the American data had a high number of essays that had very few connectives or, even, none at all. In the Swedish data, 4–5 connectives per essay was the most frequent value. This circumstance may reflect what Cherry & Cooper (1980) found in their study of what cohesive ties were used by average and superior NSE writers in fourth, eighth, twelfth grade and college. Their results indicated that as writers mature they seem to rely more on lexis and less on reference and conjunction. All in all, connective usage seems to be not only a matter of EFL proficiency but closely connected with the individual writer’s style and compositional technique.

6.3.5 Correlation between the frequency of connectives and assessed writing proficiency

The potential existence of a correlation between various kinds of cohesive ties and writing ability has been studied extensively since the publication of Halliday & Hasan’s (1976) *Cohesion in English*. Overall, no such correlation has been found for NSE students (see e.g. Mosenthal & Tierney 1984, Hultman & Westman 1977), but some studies report that such a relationship can be found in NNSE student writing. Jafarpur (1991) holds that the number of cohesive ties per essay is a meaningful indicator of writing quality for advanced learners of English; and Linnarud (1979) found that there seems to exist a connection between high scores and connective frequency in Swedish high school student English essays. However, Linnarud’s data was limited, and no correlation calculations were performed. The results from Mauranen’s study (1993: 168), which indicated that connectives may have a rhetorical effect since they make a difference to the effect the text has on its readers, added to the merit in examining whether any relationship between the number of connectives per essay and received score could be found in the Swedish or American data. More
specifically, Mauranen found that when two texts, identical in all aspects except connective usage – in one version, all the connectives were excluded – were presented to a group of test subjects, the subjects found the text version without any connectives clear and easy to read. However, when the subjects subsequently were presented with the second version of the same text including connectives, the subjects felt a dramatic difference between the two versions.

<table>
<thead>
<tr>
<th>Number of connectives per essay</th>
<th>Swedish sub-sample</th>
<th>American sub-sample</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>0</td>
<td>2</td>
<td>3.8</td>
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<tr>
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</tr>
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</tr>
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</tr>
<tr>
<td>5</td>
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</tr>
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<td>3</td>
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<tr>
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</tr>
<tr>
<td>8</td>
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</tr>
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<td>1</td>
<td>1.9</td>
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</tr>
<tr>
<td>17</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>53</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 13: The number of connectives per essay in the Swedish and American samples

The version with added connectives was found to be more easy to read, and, more interestingly, was perceived to be more logical, more authoritative and convincing that the other version. One of the subjects even commented that the manipulative effect of the added connectives was so great that it was in fact potentially dangerous (ibid.) Thus, it seemed fruitful to study the present data in the same terms to discern whether a relationship between the number of connectives per essay and received score could be found in this fairly large sample of essays. Correlations between the number of connectives per student essay and holistic scores are presented in Table 14. Here it can be seen that there is only a moderate correlation between the number of connectives per essay and score in the Swedish data (0.48) and a very low correlation in the American data (0.12). Only 23 per cent of the variation in the scores the Swedish student essays received could be explained by the frequency of connectives in the essays. In the American data, none of the variation could be ascribed to the number of
connectives per essay. To conclude, a high frequency of connectives was not found to be an indicator of good writing quality for either the Swedish EFL student writers or the NS American student writers in the present study.

<table>
<thead>
<tr>
<th>Source</th>
<th>r</th>
<th>r²</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Swedish sub-sample</td>
<td>0.48</td>
<td>0.23</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>American sub-sample</td>
<td>0.12</td>
<td>0.02</td>
<td>n.s.</td>
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</table>

Table 14: The correlation coefficients between number of connectives/essay and received TWE score for the Swedish and American essays

7 Concluding remarks

The aim of this paper was to investigate the different usages of connectives in advanced Swedish EFL learner essays and American university student essays, and the quantitative results indicate that differences can, indeed, be found in the connective usage of Swedish learners and American students. The advanced Swedish EFL learners represented in the ICLE corpus tended, on the whole, to overuse adverbial connectives compared to American university students. Also, the Swedish learners used slightly more types of connectives than the American students. The Swedish learners, thus, varied their use of connectives more than the American students did.

Only slight differences in the usage of the different semantic roles of connectives were found. The distribution of the different semantic categories was nearly identical in the Swedish data and the American data. The contrastive relation was most frequently used, followed by the resultive, the clarifying and the additive relations. However, the Swedish learners’ overall overuse of connectives pervaded all the semantic categories. Their overuse was particularly noticeable in the clarifying and corroborative categories.

Below the surface similarities, in quantitative terms, differences in the usage of individual connectives in the Swedish learner essays and the American student essays were found. The Swedish learners and American students, in some cases, relied on different kinds of connectives to express the same coherence relations, but the Swedish learners and the American students relied mostly on the same connectives – only four connectives used by each student group was not present in the top ten list of the other group:

In the second part of the study, results from a holistic scoring of a sub-sample of the data indicated that the Swedish learners were as skilled writers as the American students – the two groups seemed to be matched in terms of writing competence. Moreover, the scoring results only showed a moderate correlation between the number of connectives per essay and score in the Swedish data, and a very low correlation in the American data. Thus, the results from the present study showed that a high frequency of connectives was not found to be an indicator of good writing quality for either group of student writers.
8 References


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Appendix 1

SWICLE highest score essay
562 words
Score: 6.0

Integration or assimilation? Sweden's dilemma.

In an era when singleness of mind, total mobilization of effort and resources, whole hearted commitment - personified in the athletic and business heroes on screen, billboards or in print - are key to success, the motto "moderation in all things" may sound a bit out-dated and reactionary. Living by this principle of holding a position at the center of the tension between two extremes, two poles could seem to be a bit like "to eat and have it, too", or the pitiful state of those without drive and initiative, unable to "grab the ball and run with it". But it is my belief that, in an ever increasingly complex and competitive society where the zone of fair equality and peaceful coexistence is shrinking pushing people towards barricaded ghettos with extreme conditions, the need to constrain these forces of polarization is paramount. Therefore, Sweden must find a workable way to mingle assimilation and integration.

On the one hand, the people considering themselves "native Swedes" may feel that only assimilation is acceptable. This land is theirs, and the saying of old "when in Rome, do as the Romans do" still applies. Immigration must be restricted to the very few that literally would save their lives by escaping their own country, but the present conditions simply do not allow for 'outsiders' to crowd their way into the Swedish society. There are financial as well as ethnic/cultural reasons for this position. The equal value of human life is not the point; it is simply a matter of preserving peace and prosperity by not mixing in elements that may rock the equilibrium. The world would not benefit by having one more nation with unrest and conflicts.

At the same time, others may feel that integration is necessary because it is not workable to force people to abandon and forget their ethnic and religious heritage. There is no inherent right in the universe that would justify one people to exclude others, and the world's situation at be does not allow for rigid nationalism. For the survival of us all, we must make room for each other and not just physical space. Regardless of religious affinity or other morally obligating persuasion, there seems to be a consensus worldwide that human life must be protected and that the basic, inalienable rights apply to all. As a result, a nation like Sweden may, therefore, have to open up their community to people from other places.

Therefore, however difficult it may be, Sweden must moderate in the struggle between assimilation and integration and move towards, not only allowing but encouraging a society to emerge where the "indigenous" people can and want to live in "neighborly love" with immigrants. For the new settlers it will mean adjusting to the people and their ways who already are a part of this community, but not to the extent that they must bury their past and be reborn a native Swede. Swedes, on their part, will have to become flexible and tolerant, and they must be willing to recognize and enjoy the benefits that may come with a changing society. It is not only for the migrating people that the price is costly; so also for the nation that receives them. And it is this price that Swedes will have to pay, the less begrudgingly the lower it will be!
A man/woman’s financial reward should be commensurate with their contribution to the society in which they live

In "first-world" cultures around the globe, the value of a human being has become equated with the dollars he or she generates in the marketplace--i.e., in the job he or she performs for monetary compensation. The amount of that financial reward, unfortunately, has become equated with worth as a person. However, most of the traditional household roles formerly performed by women exclusively (but now handled by people of both sexes) have never been compensated by the dollar. This poses a problem, since undoubtedly those at-home tasks contribute services to society equally valuable in comparison to marketplace "jobs". Therefore, in order for society to fully acknowledge the value of both types of jobs--in the home and outside the home, some sort of compensation should be made for "home-making service" as well as for he or she who works outside the home.

The career with a capital C is traditionally seen as the route to performing a service to society worth rewarding with a paycheck. Certainly doctors, lawyers and Indian chiefs contribute invaluable resources to human civilization and deserve to be compensated for their labors. Teachers, engineers, artists, politicians and all those who enrich our lives and our cultures, and on whom we depend, are indispensable to society. Whether they be male or female has no bearing on the size of their reward; "equal pay for equal work" is a well-worded and time-honored phrase.

But what is "equal work"? It is fairly easy to establish equity between marketplace jobs with duties and responsibilities that are roughly similar. That is, a teacher of sophomore high school English and a teacher of senior high school English perform comparable tasks and therefore should be equally compensated. But how do we compare raising a family of four children over a period of twenty-five years to the job of an neurosurgeon over the same period of time? I know of no culture on this globe that pays a woman (or a man, for that matter) a yearly salary of $50,000 for nurturing and educating children from the cradle to near-dependence. And yet this contribution to society in so immense as to be practically immeasurable. In fact, many of the ills of society in the U.S. today have been traced by study after study to the lack of firm guidance and support from the family.

For the better part of this century, the bulk of that familial guidance service was provided by the at-home female who did not demand financial compensation, and of course, it remains an unpaid job today, whether it's Mom or Dad who stays at home. In the 90s, however, a person who chooses the tough "homemaker" position is made to feel a bit ashamed that he or she has taken the option of a non-marketplace, non-public and non-financially rewarded job. Perhaps this is due to the fact that women have successfully entered the once male-dominated workworld, and thus the stay-at-home Mom feels torn or ambivalent because the media makes her feel behind the times. On the other hand, maybe it's simply due to the fact that the crucial task of raising children has no dollar value attached to it, and is therefore symbolically worthless in our market-driven culture.
Our choice, then, is to decide whether mothers, or even childless homemakers, for that matter, should be financially rewarded, or whether our society needs to re-examine its notions of worthy societal contributions. How about making the paycheck out to the couple, or to the entire family, instead of the individual person (it, of course, the worker is married)? Perhaps this is a solution worth its salt since it communicates physically, materially, that each member of a partnership is an equally worthy contributor.

**SWICLE lowest score essay**

374 words  
score: 3.5

*Integration or Assimilation*

Since the Middle Ages Sweden has received many people of foreign backgrounds. Some have been completely assimilated in the Swedish society. Others have stayed in their own language and cultural spheres. Since the 50s Sweden's government policy has been assimilation or at least the idea of assimilation. A great number of Finnish people immigrated to Sweden in the late 50s and 60s due to lack of labour. A majority of these immigrants rather easily assimilated mostly due to similar social and cultural backgrounds. Their process of assimilation has not, so far, been very successful. Some critics even call it a failure. The problem, in my opinion, is that, for some reasons, Swedish authorities and employers do not realize what good resources these people are for the Swedish society.

In spite of the fact that they very often are skilled or university graduates employers do not usually employ them. Jobs they do get are simple and certain skills or knowledge is not required. Many foreigners work under these conditions. Even when they attend Swedish language classes in their spare time reaching a higher level of proficiency of Swedish, considering speaking, writing and understanding the language they do not get better jobs.

Sweden has over the centuries been a very closed and united nation. Its inhabitants have looked upon people from strange countries with great suspect. This might be one of the reasons Swedish companies which need trained people and academics mostly do not employ non Europeans.

However, I think that assimilation is the right way to go. Though it has to be modified to work out. A mutual respect and understanding have to be built up between foreigners and Swedes, and we have to realize that immigrants and refugees from remote nations cannot completely assimilate.

On the other hand integration instead of assimilation would not solve the problem. It would probably mean a development towards ghettos, as has been and still is the situation in the USA, creating severe social, economic and racial problems. If the immigrants' and refugees' skill and knowledge are not taken seriously, there would be a great danger of developing the same situation here in Sweden as in the USA. I don't think any Swedish would welcome that.
Money is the root of all evil

It's difficult to justify this saying in a world where money is power and power is everything. Without money nothing works. We went off the barter system years ago. So if one wants to eat, have someplace to sleep, have transportation and clothing, the almighty dollar is a must.

It's probably more correct to say that, "Absolute power corrupts absolute". Once one's basic and comfort needs are met, what's next, power or the power to influence. This begets the will for more power and the circle goes on. Unless the individual has a good work ethic and good sense, the power can become intoxicating to the point of it being the obsession that controls a person's life.

Anything that comes easy most probably won't be as appreciated or valued as something that comes with effort. Money makes things happen, and quickly. If one has to work hard for their salary, they most likely will spend it more wisely than if someone always had plenty of money and never had to work for a living.

This brings up another theory of how people use money. Some use it to live and others live to use it. Money can be either a slave for us or it can make us slaves. Many people rate the quality of life and success by a dollar figure that they made last year. Others rate success one heir more substantive accomplishments that agree with their sense of values, of which money is not number one. The people who rate their success by that dollar figure also must compete and be competitive with others. The person who rates success on substantive accomplishments can stand alone and have self-satisfaction.

Money is something that our society has made indispensable. It is for us to use, not for it to use us. We are to be the masters and use it for our needs and good. It is not to be our master.