

## A CORPUS-BASED EXPLORATION OF CONNECTOR USAGE IN NATIVE AND NON-NATIVE ENGLISH WRITING

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The usage of connectors in English writing has been shown to be difficult for nonnative learners who have been found to overuse and misuse these devices. We explored overuse of connectors and positioning of connectors in a corpus-based study, which used two corpora: essays by native speakers and essays by nonnative speakers from a range of native language backgrounds, with a special focus on German native speakers. Our findings showed that English and German writers do not differ significantly in the frequency of use of connectors or their positioning within a sentence. We conclude with some suggestions for further research.

KEYWORDS: nonnative English writing, sentence connectors, corpus linguistics

Nichtmuttersprachlern des Englischen fällt es häufig schwer, Konnektoren in englischen Texten zu benutzen. Viele Studien belegen, dass Nichtmuttersprachler Konnektoren entweder zu häufig oder sinngemäß falsch einsetzen. Die vorliegende korpus-basierte Studie untersucht zum einen die Häufigkeit der benutzen Konnektoren und zum anderen die Position der Konnektoren in einem Satz. Dazu wurde ein Korpus erstellt, das sich aus englischen Texten von englischen Muttersprachlern und Nichtmuttersprachlern zusammensetzt. Die Ergebnisse der Studie zeigen, dass sich die Texte der englischen Muttersprachler und der deutschen Nichtmuttersprachlern nicht signifikant in Häufigkeit und Positionierung der benutzen Konnektoren unterscheiden. Abschließend werden Vorschläge für weiterführende Untersuchungen gemacht.

SCHLAGWÖRTER: Konnektoren, Korpuslinguistik, Spracherwerbsforschung

### INTRODUCTION

Connectors such as ‘thus’, ‘therefore’ and ‘however’ are useful to structure texts and make links between topics and concepts. Types of connectors and examples are given in Table 1. The usage of connectors is a known area of difficulty for nonnative speakers

(NNSs) to master in terms of overuse and misuse and Crewe (1990:317) stated “the misuse of logical connectives is an almost universal feature of ESL students’ writing”.

In a corpus-based study, Granger et al. (1996) expected to find that their NNSs of English, all French native speakers, overuse connectors in their English writing in comparison to native speakers of English. They based their expectation on their personal experience of marking student essays and also from their observation that French uses connectors in greater density than English. However, rather than a general pattern of overuse, their comparison of essays by native and French writers of English showed a more complex blend of overuse of some connectors, such as those which introduce examples, add points to an argument and corroborate an argument, and underuse of others, such as those connectors that introduce a contrast or develop an argument. They also found that their NNSs overused sentence initial connectors in comparison to native English speakers.

Table 1. List of connectors categorized by function (based on Trebits 2009: 202).

<b>Connector Category</b>	<b>Connectors</b>
Additive	in addition, besides, furthermore, additionally
Adversative/disjunctive/ contrastive/ concessive	though, although, while, yet, however, nevertheless, nonetheless
Causal	because, since, in view of, as a result, consequently, that’s why
Temporal	as long as, until, after that, at the same time, meanwhile, next, when
Continuative/ transitive/ changing subject	anyway, regarding, as regards, with reference
Hypothetical/ concessive	if, provided that, unless, in case, in that case, just in case, if so, if not, provided that, as though
Clarifying/ focusing/appositive	for example, in particular, for instance, actually, I mean, in other words

#### METHOD

The current study explored the use of connectors and their positioning within a sentence written by native and nonnative speakers of English from a range of language backgrounds (but with a particular focus on German native speakers) using a corpus of argumentative essays of 800 to 1000 words. The details of the corpus are presented in Table 2. The corpus was specially compiled for the purposes of this study and it consists of essays taken from two larger corpora. The native speaker essays were taken from the Michigan Corpus of Upper-level Student Papers (MICUSP) (Römer et al. 2009). The MICUSP is a collection of essays written by students at the University of Michigan and has a total size of about 2.6 million words. All essays were given an A grade, the highest grade in the United States. The nonnative speaker essays were taken from the International Corpus of Learner English (ICLE), which consists of texts written by nonnative speakers of English with different native language backgrounds

(Granger et al. 2009). ICLE contains about 3.7 million words in total and the students originate from 16 different countries. The learners' level of English is classified as "higher intermediate and advanced" undergraduate (Granger 2009: 4). The current corpus consists of 120 texts; 15 essays per native language group; and 1,093 words per essay on average.

Table 2: Composition of the current corpus. The English native language essays were taken from MICUSP; all nonnative speaker essays were taken from ICLEv2.

<b>Native Language</b>	<b>Number of texts</b>	<b>Total words per essay</b>	<b>Mean words per essay</b>
English	15	18,321	1,221
German	15	16,728	1,115
French	15	15,103	1,007
Norwegian	15	17,868	1,191
Polish	15	15,364	1,024
Russian	15	16,790	1,119
Spanish	15	15,617	1,041
Swedish	15	15,425	1,028
<b>Total</b>	<b>120</b>	<b>131,216</b>	<b>1,093</b>

## RESULTS

To control for the differences in word length of the essays, the analysis of the frequency of use for connectors was normed according to the following formula: raw count/total words \* 1000 = number of occurrence per thousand words.

The program AntConc (Anthony, 2012) was used to conduct the frequency of use analysis of the connectors listed in Table 1. Table 3 shows the distribution of total number of connectors as a function of native language and connector type.

Table 3: The distribution of total number of connectors (per 1,000 words) as a function of native language and connector type.

Connector Category	German	Swedish	Spanish	French	English	Polish	Norwegian	Russian
Additive	0.00	0.65	0.64	0.46	0.60	0.91	0.11	0.12
Adversative/ disjunctive/ contrastive/ concessive	4.18	2.27	2.31	2.71	4.86	2.99	2.46	1.55
Causal	2.21	2.53	4.16	2.71	2.78	3.64	1.79	2.26
Temporal	5.44	3.24	3.14	1.85	3.38	2.08	2.13	2.26
Continuative/ transitive/ changing subject	0.30	0.19	0.64	1.85	0.11	0.07	0.50	0.06
Hypothetical/ concessive	3.89	6.48	3.71	3.51	2.13	3.19	3.30	2.50
Clarifying/ focusing/ appositive	1.26	1.82	1.60	2.85	0.93	0.78	1.34	1.07
<b>Total</b>	<b>17.28</b>	<b>17.18</b>	<b>16.20</b>	<b>15.96</b>	<b>14.79</b>	<b>13.67</b>	<b>11.64</b>	<b>9.83</b>

Because of our particular interest in German writers of English, statistical analysis was conducted only for the nonnative German and the native English writers. There was no significant difference in general word count for the German and English essays, ( $U = 96.000$ ,  $N_1 = 15$ ,  $N_2 = 15$ ,  $p = 0.512$ ). There was no significant difference in total number of connectors used in the German and English essays ( $U = 109.500$ ,  $N_1 = 15$ ,  $N_2 = 15$ ,  $p = 0.902$ ). Thus, in our corpus, German learners of English do not appear to overuse connectors in contrast to English writers.

The data were also analysed for usage of connectors as a function of position across the different nonnative and native English speakers. These data are shown in Table 4.

Table 4. Mean number of connectors as a function of sentence position and native language.

<b>Native Language</b>	<b>Sentence Initial</b>	<b>Sentence Medial</b>	<b>Sentence Final</b>
German	3.23	13.57	0.48
Swedish	4.34	12.65	0.06
Spanish	5.31	10.82	0.06
French	5.16	10.53	0.26
English	5.02	9.72	0.05
Polish	4.56	8.92	0.20
Norwegian	3.75	7.56	0.34
Russian	3.51	6.19	0.12
<b>Mean</b>	<b>4.36</b>	<b>10.00</b>	<b>0.20</b>

Again, because of our focus on German learners of English, statistical comparisons were conducted for this group in comparison to native speakers. There was no significant difference between German and English writers for position of connector (initial, medial, final), all  $p > 0.05$ , indicating similar patterns of connector placement for the native and German learners of English; connectors appear most commonly in the medial position and least commonly in the sentence final position.

#### DISCUSSION

The current study compared connector usage in essays written by native and nonnative speakers of English, with a particular focus on comparison of native English speakers and German writers of English. In terms of frequency of use, there was no statistical difference between German and native English writers. There was also no statistical difference between the two groups for positioning of the connectors within a sentence.

These findings diverge from those found by Granger et al. (1996) who found a complex pattern of overuse (and misuse) and found that connectors were most often placed in the initial position by French writers of English. One potential reason for the difference between our findings and those of Granger et al. are the native languages under consideration: German and French. In their study, Granger et al. made some comparisons between German and French nonnative speakers of English and found that German nonnative speakers generally used fewer connectors than the French nonnative speakers. However, in our data, German nonnative speakers generally used more connectors than the French nonnative speakers of English (see Table 3). The

current findings also diverge from the second author's experience of marking university essays, in which connectors are often overused and misused.

Our current study used count data as a proxy for overuse, which may be a methodological shortcoming. The use of average number of connectors per essay may not be an accurate indicator of overuse. Overuse may be better determined by readers (native and nonnative) indicating whether the connector is superfluous. In addition, the current study did not explore the (mis)use of connectors in the corpus. A qualitative analysis might prove revealing in that though German writers of English in our corpus may not diverge from native English speakers quantitatively in their connector use, they may diverge qualitatively.

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