A Corpus-Based Study on Attitudinal Stance in Native and Non-Native Academic Writing

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Abstract: *Although objective voice is extensively considered among the fundamentals of academic writing, author stance, 'the way academics annotate their texts to comment on the possible accuracy or creditability of a claim, the extent they want to commit themselves to it, or the attitude they want to convey to an entity, a proposition or the reader' (Hyland, 2005), seem to be involved in the production of scientific research papers. That is, no matter how academics, especially those who work in the field of social sciences, endeavour to employ impersonal expressions for the sake of objectivity, they inevitably adopt a certain stance while reporting their findings and sometimes even making suggestions for further research. This study investigates the use of attitudinal stance devices in Academic English by native and non-native academic authors of English. Being corpus-based in design, it reports the results of the Contrastive Inter language Analysis (Granger, 1996) administered to doctoral dissertations written by Turkish-speaking, Spanish-speaking and native academic authors of English. Frequencies attitudinal stance devices were separately calculated for each corpus and a log-likelihood test was applied to see whether the authors in concern significantly differ with respect to the use of these devices.*

Keywords: *Academic writing, Author stance, attitudinal stance device.*

1. INTRODUCTION

Attitude designates the way the writer passes on values in light of appreciation, judgment and affect (Hunston & Thompson, 2000). According to Gray and Biber (2012), attitudinal stance includes attitudes, evaluations and/ or personal feelings and emotions. Likewise, Conrad and Biber (2000) suggest that it indicates feelings or judgments about what is said or written. Arrese and Perucha (2005) propose that it involves mainly judgments about the necessity and degree of requirement of the occurrence of a certain state of affairs, as well as speaker's/ writer's desire for and/ or commitment to the realization of what is expressed in the proposition. Hyland (2005) advocates that writers are better able to develop or highlight their position, stance or authority by using items that both position writers (i.e., hedges, boosters, attitude markers and self mentions) and align with their readers (i.e., reader pronouns, personal asides, appeals to shared knowledge, directives and questions). He goes on to say by signalling an assumption of shared attitudes, values and reactions to the material, writers both express a position and pull readers into a conspiracy of agreement so that it can often be difficult to dispute these judgments. Within this framework, he defines attitude markers as the indicators of 'the writer's affective, rather than epistemic, attitude to propositions, conveying surprise, agreement, importance, frustration and so on, rather than commitment'. He argues that attitude is most explicitly marked by attitude verbs (e.g. *agree, prefer*), stance adverbs (*unfortunately, hopefully*) and adjectives (appropriate, logical, *remarkable*) and that it can also be expressed throughout a text by the use of subordination, comparatives, progressive particles, punctuation, text location ad so on. Table 1 incudes attitudinal stance devices in academic English mostly found in Biber (2006).

Table1. *Attitudinal Stance Devices (Adapted from Biber et al., 2006, p. 92)*

ASD	E.g.
Adjective	It is **essential** that the blade angles match their angles closely at all radii.
Adverb	*Sadly*, it is still known if there are infinitely many regular primes.
Noun	These figures lead to an **expectation** that the main application area would be in the office environments.
Verb	I **wish** it was Friday though.

The present study focused on the use of attitudinal stance devices found in doctoral dissertations produced by native academic authors of English (NAEs, hereafter), Turkish-speaking academic authors of English (TAEs, henceforth) and Spanish- speaking academic authors of English (SAEs, hereafter). Accordingly, three research questions were formed to investigate whether these groups significantly differ in conveying their attitudes in their academic writing.

1. Do Turkish-speaking academic authors of English and native academic authors of English significantly differ with respect to the use of attitudinal stance devices?

2. Do Spanish-speaking academic authors of English and native academic authors of English significantly differ with respect to the use of attitudinal stance devices?

3. Do Turkish-speaking academic authors of English and Spanish-speaking academic authors of English significantly differ with respect to the use of attitudinal stance devices?

The following section is intended to report and comment on findings of the previous studies conducted on the use of attitudinal stance devices across academic writing produced by native speakers as well as speakers of various languages.

1.1. Previous Studies

Not many studies have been carried out on the use of attitudinal stance devices in academic English. Blagojević (2009) examined the expressions by which the authors from English and Serbian writing cultures reveal their attitudes towards the content they report in their academic research articles. He analysed academic articles from the three academic disciplines (sociology, social psychology and philosophy) and found that more or less the same linguistic forms are used for expressing authors' attitudes in the articles written in both languages. He also suggested that Serbian writers more readily express their attitudes than their English colleagues. In a corpus-based study, Hatzitheodorou and Mattheoudakis (2009) investigated stance in argumentative essays written by Greek advanced learners of English in order to reveal how they organise their texts and present their attitude, and found that Greek learners point to their attitude mainly by using lexical chunks such as *it is true that, it is a fact that*, and *it is obvious that*. They also report that using such chunks allows students to defer commitment to the stated proposition, thereby presenting it as a commonly accepted fact, and this technique is considered to be culturally induced as it is a typical rhetorical convention commonly followed in L1 writing. Hyland (2005) analysed 240 published research articles from eight disciplines and insider informant interviews. He concluded that interpretative variation increases and writers must rely to a greater extent on a personal projection into the text in the soft disciplines through self-mention and attitude markers to invoke an intelligent reader and a credible, collegial writer. In another study on authorial stance, Adams and Quintana-Toledo (2013) explored the occurrence of adverbial stance markers in the introduction and conclusion sections of legal RAs and reported that attitudinal markers are not only used as comments qualifying the information from the author's perspective, but also as guides for the audience towards specific intended interpretations as envisaged by the authors. They also found that these markers seem to play a prominent role in the rhetorical machinery of the RAs analysed: they are not simply aimed at qualifying the information presented from the authors' point of view in various ways; most importantly, they aim to create affective appeals or, in other words, appeals to readers' emotions, inviting them to accept their discourse in the same way the authors entertain it.

2. METHODS

The present study is corpus-based in design. It primarily aims to find out whether native and non-native academic authors of English significantly differ in the use of attitudinal stance devices and includes the analysis of attitudinal stance devices that are frequently reported to occur in the written academic registers in Biber's study (2006). Three sets of data were constructed with the collection of doctoral theses written by native and non-native academic authors of English between 2005 and 2012 (NACE: Native Academic Corpus of English; TACE: Turkish Academic Corpus of English; SACE: Spanish Academic Corpus of English). Considering the possibility that those who supervised the theses in concern might have been involved in the writing process, the sections of abstract, introduction, review of literature, methodology, and references were excluded from the data. It included the sections of findings, discussion, conclusion, pedagogical implications / implications to English Language Teaching and suggestions for further research. Finally, it is noteworthy that all titles, subtitles, tables, figures, quotations and paraphrases were excluded from the data. Table 2 shows the size of the corpora investigated throughout this study.

Table2. *Corpus Size*

Corpus	Dissertation (N)	Word (N)
NACE	45	671.475
TACE	48	675.072
SACE	43	668.256
Total	146	2.014.873

Wmatrix (Rayson, 2009) and a log-likelihood calculator were selected as data analysis instruments in this study. For the first three stages of the study, over two million words were analysed through Wmatrix and frequency of the types was individually counted for each set of data. Subsequently, the native and non-native corpora were compared with respect to the frequencies of attitudinal stance devices adopting the Contrastive Inter language Analysis method (Granger, 1996). The items in question are illustrated in Table 3.

Table3. *Attitudinal stance devices (Adapted from Biber, 2006, p. 92)*

ASD	Types
Adjective	*afraid, amazed, aware, concerned, disappointed, encouraged, glad, happy, hopeful, pleased, shocked, surprised, worried*
Adverb	*amazingly, astonishingly, conveniently, curiously, hopefully, even worse, fortunately, importantly, ironically, rightly, sadly, surprisingly, unfortunately*
Noun	*grounds, hope, reason, thought, view*
Verb	*agree, anticipate, complain, concede, ensure, expect, fear, feel, forget, hope, mind, prefer, pretend, require, wish, worry*

A total number of 47 attitudinal stance devices were examined over three sets of corpora comprising more than two million words. The following section is designed to offer findings and the related discussion on them.

3. FINDINGS AND DISCUSSION

To begin with, it is considered useful to note that two out of 47 types were not found in any corpora (i.e., *encouraged, even worse*). As for individual corpora, 36 types were found in NACE, 34 in TACE and 43 in SACE. Table 4 displays frequency distribution of attitudinal stance devices in three corpora.

Table4. *Frequency Distribution of Attitudinal Stance Devices in Three Corpora*

	NACE (L1)	TACE (L2)	SACE (L2)
Corpus Size in words	671.475	675.072	668.256
Attitudinal Stance Device (n)	1279	2194	1483
n per 10.000	19.0	32.5	22.2
T/t ratio (%)	0.2	0.3	0.2
Attitudinal Stance Device (n)	36	34	43

n= raw frequency of attitudinal stance devices

T/t ratio= Type/token ratio; percentage of number of attitudinal stance devices (types) in total of words (tokens) in each corpus

As seen in Table 4, attitudinal stance devices were mostly found in TACE, followed by SACE and NACE, respectively. Namely, they appeared approximately 33 times in every 10.000 words in TACE, 22 times in SACE and 19 times in NACE, indicating they were overused by both groups of non-native academic writers against their native colleagues. Figure 1 illustrates the distribution of semantic classes of these devices across three corpora.
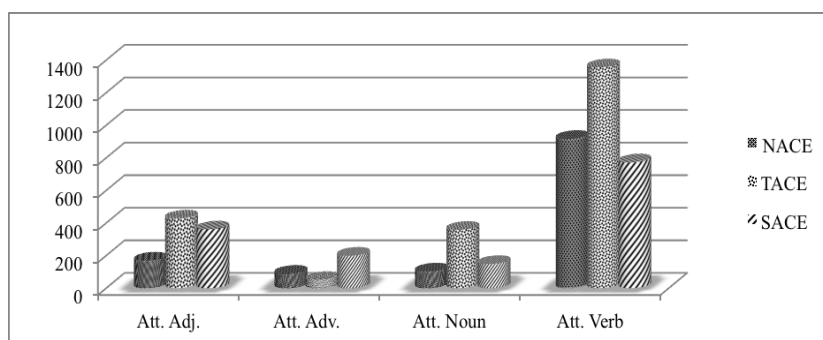

Fig1. *Semantic distribution of attitudinal stance devices in three corpora*

As shown in Figure1, three corpora are similar in that attitudinal verbs constitute the mostly frequented class in each. An interesting finding of the study is that all semantic classes except attitudinal adverbs occurred most frequently in TACE, and the adverbs appeared most frequently in SACE. Figure 2 depicts the distribution of attitudinal adjectives in three corpora.
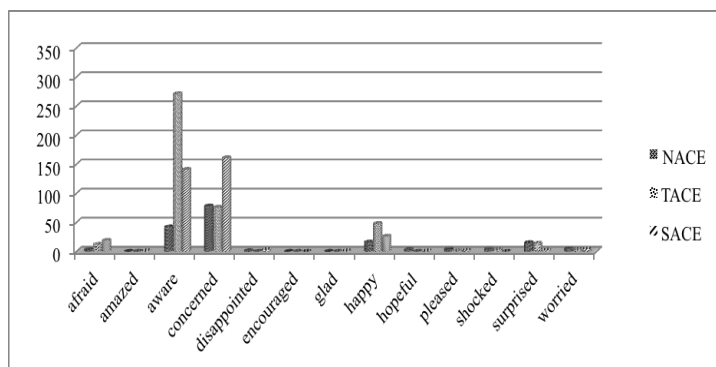

Fig2. *Attitudinal Adjectives in Three Corpora*

It is seen that three corpora display a notable resemblance both in the use of most frequented items (i.e., *aware, concerned*) and least frequented ones (i.e., *disappointed, encouraged, glad, hopeful, pleased, shocked* and *worried*). The following are the extracts taken from each corpus to illustrate the items in concern.

[Be *aware* that learning how to teach is a life-long, on-going process and that the practicum is just the first step of a long journey in professional growth.]   Extracted from <TACE-AU-2010-MA>

[As far as (b) is *concerned*, sound processing resources are needed for the languages supported by the application.] Extracted from <SACE-UPM-2011-EMP>

[It is easier, if one is *concerned* about dramatically unbalancing resources, to be relatively conservative about gift giving.] Extracted from <NACE-UE-2010-GR>

Attitudinal adverbs were the least frequently found items in all three corpora. Namely, they constitute only 2.3% of the all attitudinal stance devices in TACE, approximately 7% in NACE and 13.5% in SACE. Figure 3 presents the distribution of individual items over three corpora.
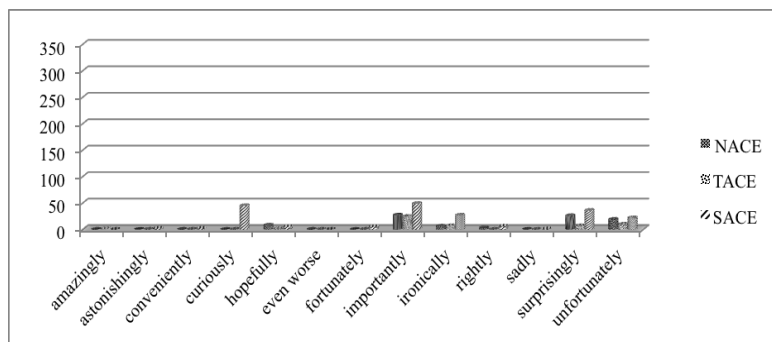

Fig3. *Attitudinal Adverbs in Three Corpora*

As illustrated in Figure 3, most of the types falling into the category of attitudinal adverbs occurred less than ten times in all corpora (i.e., *amazingly, astonishingly, conveniently, hopefully, even worse, fortunately, rightly* and *sadly*). The result in concern is not considered surprising since the most frequently used types (i.e., *importantly, surprisingly* and *unfortunately*) appeared less than 50 times in each set. The following extract was taken from SACE in order to exemplify one of these items.

[It follows that the cultural characteristics of a text translated into a target language may influence not only the way textual units are organized in discourse but, more *importantly*, how they are understood, and as we have seen in different examples this is perfectly applicable to humour.]   Extracted from <SACE-UPF-2012-JFMB>

Attitudinal nouns comprise another least frequented semantic class in three corpora, constituting 8% of those in NACE, 10% in SACE and 16% in TACE. Figure 4 displays their frequency distribution in the corpora in question.
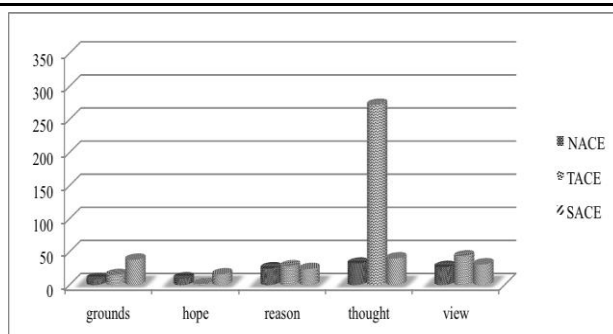
Fig4. *Attitudinal Nouns in Three Corpora*

[It has been discussed that humorous language helps people express their ideas, ***thoughts***, feelings or a message not directly but in a humorous way.] Extracted from <TACE-GU-2010-CY>

[G1-4's statements also support a ***view*** that transmission of practice does not reside with one individual.] Extracted from <NACE-UL-2011-CWM>

[This fact could be explained on the ***grounds*** that German doctors find it easier to write English papers.] Extracted from <SACE-UPV-2008-ARV>

Attitudinal verbs constitute the largest semantic class in three corpora. For instance, approximately 72% of attitudinal stance devices in NACE are comprised of these verbs, 62% of those in TACE and more than half of the items in SACE. Figure 5 shows the distribution of these types in three corpora.
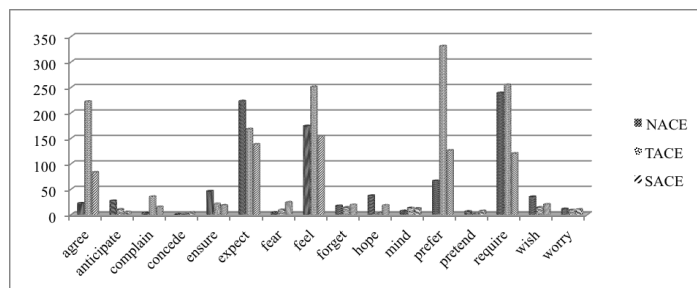

Fig5. *Attitudinal Verbs in Three Corpora*

Figure5 depicts that three corpora, once again, indicate similarities in the use of mostly found attitudinal verbs such as *expect, feel, prefer* and *require*, and that of the least frequented types such as *anticipate, complain, concede, ensure, fear, forget, hope, mind, pretend, wish* and *worry*. The following are extracted from the corpora to illustrate the most frequented types in each.

[She failed in the formation of the required word order (OSV) in 5 of the sentences out of 9 as she ***preferred*** the base order (SOV) instead of object scrambling.] Extracted from <TACE-HU-2008-AAB>

[Previous research on L2 interaction has also shown that the maintenance of mutual understanding ***requires*** interactional work on the part of the participants involved.] Extracted from <NACE-NU-2011-AB>

[The main cause to fear the forest is that all the characters, regardless whether they are farmers or city-dwellers, ***feel*** that they do not really belong in that place. Extracted from <SACE-UZ-2012-MPBA>

In order to see whether the differences in concern are statistically significant, three corpora were compared using a log-likelihood test. Results of the test administered between TACE and NACE are presented in Table 5.

Table5. *LL Ratio of Attitudinal Stance Devices in TACE and NACE*

Att. Stance Devices	TACE (N)	NACE (N)	LL Ratio (*p< 0.05)
Att. Adjectives	428	170	+113.68
Att. Adverbs	51	89	-10.65
Att. Nouns	359	103	+148.82
Att. Verbs	1356	917	+82.99
Total	2194	1279	+239.07

Table5 suggests that all except one semantic class were considerably overused by TAEs against NAEs. Particularly attitudinal nouns were found in TACE three and a half times as frequently as in NACE. In return, attitudinal adverbs were slightly underused by TAEs when compared to NAEs. All results were statistically confirmed ($p< 0.05$). The test was repeated between SACE and NACE, and the related results are shown in Table 6.

Table6. *LL Ratio of Attitudinal Stance Devices in SACE and NACE*

Att. Stance Devices	SACE (N)	NACE (N)	LL Ratio (*p< 0.05)
Att. Adjectives	361	170	+71.19
Att. Adverbs	200	89	+44.28
Att. Nouns	149	103	+8.67
Att. Verbs	773	917	-19.69
Total	1483	1279	+16.08

As can be seen, attitudinal stance devices were mostly overused by SAEs in comparison to NAEs; however, the difference calculated between SACE and NACE in terms of these devices are not found as significant as the ones counted between TACE and NACE. In response, as in the case of TACE and NACE, attitudinal adjectives and nouns appeared more frequently in SACE than NACE. Attitudinal verbs, on the other hand, were more frequented in the native corpus than SACE. The findings were approved by log-likelihood results ($p< 0.05$). Lastly, results of the test administered between the non-native corpora are demonstrated in Table 7.

Table7. *LL Ratio of Attitudinal Stance Devices in TACE and SACE*

Att. Stance Devices	TACE (N)	SACE (N)	LL Ratio (*p< 0.05)
Att. Adjectives	428	170	+112.45
Att. Adverbs	51	89	-10.83
Att. Nouns	766	420	+87.35
Att. Verbs	1356	917	+80.93
Total	2194	1483	+131.23

As for the log-likelihood results for TACE and SACE, it is seen that attitudinal adverbs were slightly underused and all the other semantic classes were remarkably overused by TAEs as opposed to SAEs, which were also approved by statistical results ($p< 0.05$). The following section offers general conclusion, limitations of the study and suggestions for further research.

4. CONCLUSION

The present study has revealed that both native and non-native authors tend to use more or less the same linguistic forms to express their attitudes while writing academically, which is in line with Blagojević (2009), and that they used the majority of the types at similar proportions in their own right. It has also shown that non-native academic authors of English are more inclined to convey their attitudes than the native group in their academic writing. In other words, it has indicated that they want to appeal to their readers' emotions and invite them to accept their discourse in the same way they themselves entertain it, which confirms the finding of Blagojević (2009) who reports Serbian writers more readily express their attitudes than those with English as L1, and that of Adams and Quintana-Toledo (2013). Considering what Hyland (2005) comments on writing in the soft disciplines, the non-native groups seem to use attitude markers to invoke an intelligent reader and a credible, collegial writer more frequently than the native group. The findings in concern might be attributed to cultural differences between the groups in question; namely, as postulated by Blagojević (2009) the non-native authors might have stuck to the writing habits they acquired within their writing culture while writing academically, or they might have stemmed from a variety of social, and psychological factors embedded in the two writing cultures.

4.1. Suggestions for Further Research

The present study is limited to the inquiry of doctoral dissertations written by Turkish-speaking, Spanish- speaking and native academic authors of English between 2005 and 2012. The data investigated here is confined to the field of English Language Teaching, English Language and Literature, Applied Linguistics and Modern Languages. So, it is believed that much broader corpora which include works of Turkish-speaking, Spanish-speaking and native academic authors of English produced prior to 2005 within various fields might be constructed and examined with respect to other

aspects of academic writing. Likewise, author stance might be scrutinised through spoken productions of academics in such events as conferences or symposiums. Finally, reasons why attitudinal stance devices were overused by non-native academic authors of English in comparison to the native academic authors might be explored in further studies.

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