

A Comparative Analysis of Interactional Metadiscourse Markers in Research Article Introductions*

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The purpose of this study is to examine interactional markers such as hedges, boosters, and attitude markers employed in English-authored research article introductions and Korean-authored English texts in the field of Applied Linguistics. The corpus for this study was comprised of 38 research article introductions selected from an international journal, *Applied Linguistics*, and 57 English research articles written by Korean-authors collected from a national journal, *Korean Journal of Applied Linguistics*. Hyland's (2005) model of interactional resources was used as the basis for the analysis. The results showed that hedges were the most heavily used interactional marker in the two language groups. The cross-cultural analysis revealed that a slightly higher frequency of hedges was found in English-authored English texts and more boosters and attitude markers were used in Korean-authored English texts. Korean writers tended to highlight their claims in an assertive tone and to involve the readers in the writers' argument. This study suggested that the cultural contexts of publication may influence L2 writers' use of hedges, boosters and attitude markers in writing academic texts.

[genre analysis/second language writing/English for academic purposes/
장르분석/제2언어작문/학문목적영어교육]

I. INTRODUCTION

The genre-based contrastive studies based on Swales' move analysis framework focus on distinguishing certain rhetorical patterns and significant linguistic features or styles in the two different languages. This language analysis for specific purposes can be designed

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to provide a basis for prioritizing teaching items in English for academic purposes (EAP) materials (Swales, 1990). Evidently, academic writing involves interpretive statements. Making claims should be done “cautiously, accurately and modestly to meet discourse community expectations and to gain acceptance for their statements” (Hyland, 1996, p. 477). One of the important linguistic features in academic writing is metadiscourse markers such as hedges or boosters.

A number of studies argued that hedges, boosters, and attitude markers are the most frequently employed interactional markers in studies of academic texts (Gillaerts & Van de Velde, 2010; Hinkel, 2002, 2005; Hirano, 2009; Hyland & Tse, 2004; Khabbazi-Oskouei, 2013; Milagros del Saz Rubio, 2011; Yakhontova, 2002; Yang, 2013). However, the appropriate use of metadiscourse features in academic writings is not simple because writing English research papers may require non-native English speaking (L2) students to have highly sophisticated levels of proficiency in writing. In addition, writing English academic papers as a foreign language can be a significant burden (Hanauer & Englander, 2011; Willey & Tanimoto, 2012). In some cases, L2 writers may include linguistic features valued in their own culture and possibly face difficulties in producing acceptable academic texts in English. Therefore, the L2 writers need to understand prototypical pragmatic features established by the specific discourse community.

In a seminal genre analysis study, Swales (1990) analyzed research article (RA) introductions in the fields of molecular physics, electronics, chemical engineering, neurology, radiology, educational research, educational psychology, management, and language. He discovered similarities and differences in the RA introductions. Extensive research demonstrated that the introductory section in a research article is troublesome (Hirano, 2009; Loi & Evans, 2010; Milagros del Saz Rubio, 2011; Samraj, 2002; Swales, 1990). L2 writers will have “an unnerving wealth of options” in the introductory portions of texts because they need to make decisions about a sincere or an authoritative stance in making claims, the amount of background information, ways of the appeal to the readership, or the directness in the texts (Swales, 1990, p. 137).

Regarding the linguistic and cultural variations in research article writing, some studies such as Mur-Dueñas (2011) claimed that L2 writers (e.g., Spanish or Chinese writers) tended to use more boosters and less hedges when publishing RA in the domestic journals, which can strengthen their claims and express the writers’ commitment. The purpose of this study aims to investigate hedges, boosters, and attitude markers in research article introductions, and to examine to what extent Korean RA introductions are different from English RA introductions with regard to the use of three types of metadiscourse markers in the field of Applied Linguistics.

II. LITERATURE REVIEW

1. The Concept of Metadiscourse

The concept of ‘metadiscourse’ was introduced by Harris (1970) and later developed by Williams (1981). Metadiscourse was defined as “writing about writing, whatever does not refer to the subject matter being addressed” (Williams, 1981, p. 226). Recently, Khabbazi-Oskouei (2013) argued that it is important to make the distinction between the ‘primary’ (propositional) and the ‘secondary’ discourse (metadiscourse marker). As shown in examples 1 and 2, an adverb, ‘*really*’, in the first sentence can be considered to be a metadiscourse marker. However, in the second sentence ‘*really*’ can be considered to be proposition:

- (1) “*Really*, it was terrible.”
- (2) “It was *really* terrible.” (Khabbazi-Oskouei, 2013, p. 94)

Although Khabbazi-Oskouei (2013) attempted to make this distinction, Hyland (2005) argued that the division between propositional and non-propositional resources can be still blurred. A new model of metadiscourse was developed by Hyland (2005). His model of metadiscourse advocated a new view of metadiscourse as interpersonal. Hyland and Tse (2004) claimed that metadiscourse is “interpersonal in that it takes account of the reader’s knowledge, textual experiences and processing needs and that it provides writers with an armoury of rhetorical appeals to achieve this” (p. 161). As shown in Table 1, metadiscourse is comprised of the two dimensions of interaction. Interactive markers such as transition or code glosses are to guide readers through the arguments in their RAs, whereas interactional markers such as hedges or boosters are to engage readers in the writers’ argument.

TABLE 1
A Model of Metadiscourse (Hyland, 2005, p. 49)

Category	Function	Examples
INTERACTIVE	Help to guide reader through the text	Resources
Transition	Express semantic relation between main clauses	in addition, but, thus, and
Frame markers	Refer to discourse acts, sequences, or text stages	finally, to conclude
Endophoric markers	Refer to information in other parts of the text	noted above, see Fig, in section
Evidentials	Refer to source of information from other texts	according to X, Z states
Code glosses	Help readers grasp functions of ideational material	namely, e.g., such as, in other words
INERACTIONAL	Involve the reader in the argument	Resources
Hedges	Withhold writer's full commitment to proposition	might, perhaps, possible, about
Boosters	Emphasize force or writer's certainty in proposition	in fact, definitely, it is clear that
Attitude markers	Express writer's attitude to proposition	unfortunately, I agree, surprisingly
Engagement markers	Explicitly refer to or build relationship with reader	consider, note that, you can see that
Self-mentions	Explicit reference to author(s)	I, we, my, our

2. Linguistic and Cultural Variations in the Use of Metadiscourse Markers

A number of cross-cultural studies investigated the metadiscourse features in academic texts (Attarn, 2014; Gillaerts & Van de Velde, 2010; Hinkel, 2005; Hirano, 2009; Hyland, 1998; Hyland & Tse, 2004; Milagros del Saz Rubio, 2011; Mur-Dueñas, 2011; Yakhontova, 2002; Yang, 2013). For instance, Attarn (2014) investigated the use of interactive and interactional markers in ESP research articles written by Iranian and native English writers. Results of the study showed that both groups used more interactive features in RAs. Milagros del Saz Rubio (2011) investigated metadiscourse markers of research article introductions (RAIs) in the field of agricultural sciences such as biology or biotechnology. The corpus for the study was comprised of 28 research articles published during 2007 and 2009. The most pervasive interactional marker was hedges (84.6%) as shown in Figure 1.

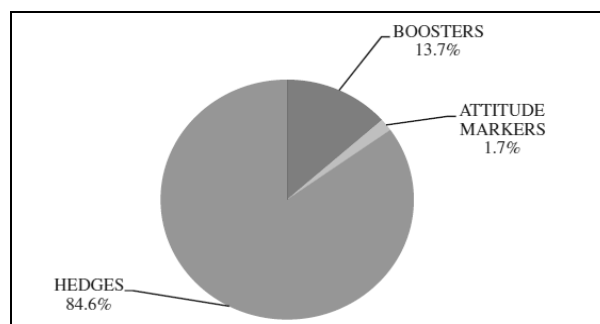


FIGURE 1 Metadiscourse Items in RAs (Milagros del Saz Rubio, 2011, p. 264)

Examining linguistic and cultural variations in research article writing, Mur-Dueñas (2011) examined metadiscourse features in a single discipline, business management. In this study, 12 English texts written by Spanish writers and 12 texts written by English writers based at various North-American institutions were examined. The results showed that Spanish writers tended to use more boosters to make their claims in an assertive tone and less hedges to express the writers' full commitment. It was suggested that the linguistic and cultural contexts of publication seem to influence writers' use of interactional features when writing the research articles in English.

Based on an analysis of 240 dissertations written by postgraduate students, Hyland and Tse (2004) reported that a notably higher use of hedges was found in Applied Linguistics and Public Administration but a lower use of hedges was found in Computer Science (see Table 2). Although boosters and attitude markers were more balanced across disciplines, there was a somewhat lower use of attitude markers in the fields of Electronic Engineering (10.6 tokens per 10,000 words) and Biology (15.5 tokens per 10,000 words).

TABLE 2

Interactional Markers by Discipline per 10,000 Words (Hyland & Tse, 2004, p. 172)

Items	Applied linguistics	Public admin	Business studies	Computer science	Electronic engineering	Biology
Hedges	111.4	109.7	93.3	55.8	61.5	82.1
Boosters	37.9	29.5	29.8	29.4	28	30.5
Attitude markers	20.3	26.1	20.7	16.2	10.6	15.5
Totals	172.6	165.3	143.8	101.4	100.1	128.1

Hinkel (2002) investigated the frequencies and uses of 68 linguistic and rhetorical features in timed essays written in English by 1457 undergraduate students from six language groups and compared them with those by native English speakers. The results of the study showed that boosters, engagement markers, and self-mention were more

frequently used in L2 texts, while hedges were used less frequently. She explained this high frequency of boosters in L2 texts by the fact that overstatements in some rhetorical traditions can be considered as appropriate. It was speculated that essays written by Korean, Japanese, and Chinese students were often over-hedged and uncertain possibly because of their national writing traditions. However, her study showed that boosters were significantly frequent in the L2 writers' texts to strengthen their claims and emphasize the truth of a statement.

Hu and Cao (2011) examined hedges and boosters both in English and in Chinese RA abstracts. They collected 649 RA abstracts from 8 journals of applied linguistics and found that the empirical RA abstracts used more boosters than those of non-empirical RA abstracts. In addition, the RA abstracts published in English-medium journals included hedges more frequently than those published in Chinese-medium journals. However, Chinese RA abstracts in the Chinese-medium journals used more boosters than their matching English versions. Yang (2013) also analyzed hedges in the RA abstracts. A corpus of 20 RAs published during 2001-2002 in the fields of biology, agriculture, medicine, cell and molecular biology was used. Chinese RA and corresponding Chinese-authored English RA of the same journals were compared with the English-medium RA corpus adopted from Hyland (1998). The study showed that hedges were employed most frequently in English RA, almost twice as frequently as in Chinese-authored English RA. Yang speculated that Chinese authors' English proficiency may not be highly developed at the discourse level.

Examining 120 RAs in English and in Chinese, Bloch and Chi (1995) focused on one of the metadiscourse markers, 'evidentials'. It was found that the Anglo-American writers tended to use more 'evidentials' in their writing. Generally, a consistent distribution of citations were used to provide background, support claims, and criticize other studies across the physical and social science fields in English and the physical sciences in Chinese. Examining cultural variations in the use of citations, they reported that Chinese academic writing reflected an uncritical dependence on references based on the Confucian values of harmony and knowledge telling. This practice was explained by a typical of classical Chinese rhetoric which values transmission rather than creativity.

One of the interesting studies was conducted by Gillaerts and Van de Velde (2010). They investigated hedges, boosters, and attitude markers in the 72 RA abstracts in three decades of abstract writing. Dealing with the diachronic changes, they found that the overall use of the markers dropped in the past 30 years (Figure 2). They attempted to explain this reduction in the number of boosters and attitude markers by "a converging move of (applied) linguistics towards the hard sciences with a growing emphasis on empirical studies in the field of applied linguistics" (Gillaerts & Van de Velde, 2010, p. 136).

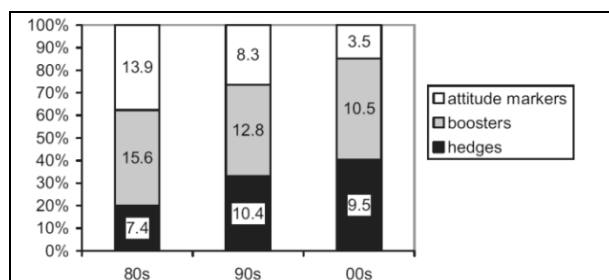


FIGURE 2 Interactional Markers in Abstracts (Gillaerts & Van de Velde, 2010, p. 135)

It can be noted that the overall use of hedges increased in 1990s. Although the number of hedges was dropped slightly in 2000s, there was not a dramatic reduction as in attitude markers. A growing emphasis on empirical studies in applied linguistics areas may cause the use of boosters and attitudes markers but hedges appeared to be a crucial pragmatic feature in writing a research paper.

A few studies were conducted to examine English academic texts written by Korean writers (J. Kim, 2008; C. K. Kim, 2009; M. L. Ryoo, 2008; E. Shim, 2005; C. J. Uhm, J. A. Kim, H. Nam, & Y. Oh, 2009). For example, C. K. Kim (2009) studied metadiscourse features in argumentative texts of a newspaper and students' English texts. A corpus of a British newspaper (*The Guardian*) and English argumentative texts written by 84 Korean university students were analyzed. More hedges and boosters were used in English argumentative texts than Korean students' texts. This can be explained by the writers' English proficiency. Possibly, the British newspaper writers may have an awareness of pragmatic features in writing an argumentative text, whereas Korean students' English proficiency may not be developed at the discourse level.

Another study was conducted by C. J. Uhm et al. (2009). Metadiscourse features in RA were analyzed in a corpus of 100 RA discussion sections of applied linguistics (50 English-authored English RAs and 50 Korean-authored English RAs). They found that the most frequently used interactional marker by both groups was hedges and English-speaking writers used more boosters than Korean students in order to emphasize the writers' certainty. This result was in line with Abdollahzadeh's (2003) study, which revealed English writers used higher instances of boosters and attitude markers than Iranian writers in the writing of RA discussion sections in the area of applied linguistics. It should be noted that a plausible explanation can be sub-genre variations in research articles. The sub-genres such as the introduction or the discussion sections of research articles may influence the writers' use of the linguistic features. Then, the nature of sub-genres of journals conventions should be discussed. This study is to analyze the use of hedges, boosters and attitude markers in academic research article introductions and to find out any linguistic or

cultural differences in the two different language groups in the field of applied linguistics. The research question of this study is to what extent Korean RA introductions are different from English RA introductions with regard to the use of three types of metadiscourse markers in the field of Applied Linguistics.

III. METHODS

The corpus for this study was comprised of 38 research article introductions written by English authors selected from an international journal, *Applied Linguistics*, and 57 English research articles written by Korean authors selected from a national journal, *Korean Journal of Applied Linguistics*. The two journals were selected because they are representative of the referred journals in the area of applied linguistics. Table 3 presents the length of texts and a total number of words.

TABLE 3
Description of the Corpus

	English sub-corpus	Korean sub-corpus
No. of RAIs	38	57
Length of texts (range)	80~1792	204~1781
Average length of RAIs	640.7	517.4
Total No. of tokens	24,346	29,494

As the basis for the analysis, Hyland's (2005) model of interactional resources was selected. According to his model, there are five interactional resources such as hedges, boosters, attitude markers, self-mention, and engagement markers. In this study, two markers were ignored because personal pronouns (self-mention) are avoided in favor of impersonal constructions (e.g., *it is argued*, rather than *I argue*). Also, engagement markers were ignored because they are hardly distinguishable from attitude markers (Gillaerts & Van de Velde, 2010). Therefore, the three markers (hedges, boosters, and attitude markers) were analyzed, employed in English RA introductions in the area of applied linguistics.

As shown in Table 4, hedges such as *might* or *perhaps* are interactional markers to express the writers' tentativeness in academic writing. Next, boosters such as *definitely* or *indeed* can be included to highlight the writers' confidence. Lastly, attitude markers such as *unfortunate* or *surprising* are used to express the writers' personal evaluations or feelings to proposition. Some examples are as following:

(3) Hedges

While the written report will often be made public to some extent, perhaps in the

trainee's portfolio of work, or as part of standardization meetings amongst mentors and trainers, the conference is largely hidden from view... (ERA#1)

(4) Boosters

Indeed, several studies including Salager-Meyer (1991) showed that textual comprehension diminishes when a text has a deficient rhetorical structure. (KRA#22)

(5) Attitude markers

This is not particularly surprising given that formulaic sequences are often difficult to intuit (Fox, 1987). (ERA#12)

TABLE 4

Interactional Markers (Hyland, 2005, p. 49)

Interactional markers	Function	Examples
Hedges	To withhold writer's full commitment to proposition	<i>might; perhaps; possible; about</i>
Boosters	To emphasize force or writer's certainty in proposition	<i>in fact; definitely; it is clear that</i>
Attitude Markers	To express writer's attitude to proposition	<i>unfortunately; I agree; surprisingly</i>

A list of formal items for each interactional resource was adopted from Hyland's model (see Appendix). Any interactional items used in quoted sentences or in excerpts were excluded. Then, the data coding was carried out in two stages. In the first stage, a concordance program, *AntConc 3.2.4w*, was used to identify the markers in the RA introductions. Ninety-five texts were scanned through the program and the frequency of each marker was counted. In the second stage, textual analyses were conducted by the researcher and a co-coder independently according to Hyland's model. Any inconsistencies in identifying markers were settled through discussions.

IV. RESULTS

Metadiscourse markers are a significant pragmatic feature in the writing of academic texts. Taking an appropriate stance and highlighting the authors' important points on the propositional information in a text may require a highly sophisticated level of proficiency in English and a high-level of academic writing skills. In this study, hedges, boosters, and attitude markers in RA introductions were examined. As several studies showed that hedges are the most frequently employed interactional marker in studies of academic texts (Gillaerts & Van de Velde, 2010; Khabbazi-Oskouei, 2013; Milagros del Saz Rubio, 2011;

Yang, 2013), the most frequently used interactional marker in this study was hedges and a lower use of boosters and attitude markers was identified (Figure 3).

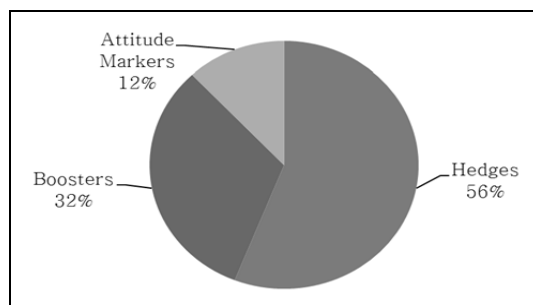


FIGURE 3 Distribution of Interactional Items

Table 5 presents cultural variations in the use of hedges, boosters, and attitude markers in the applied linguistics journals. This cross-cultural analysis showed that more hedges (135 tokens per 10,000 words, 59%) were found in English-authored research article (ERA) introductions than the Korean-authored English texts (116.6 tokens per 10,000 words, 52%). Compared with ERA, Korean-authored English texts (KRA) included a slightly higher use of boosters and attitude makers, speculating that Korean authors, perhaps, favor to highlight important points in an assertive tone and to show their confidence in the writing of RA introductions. These results are consistent with several cross-cultural studies such as Vassileva (2001) and Mur-Dueñas (2011). Generally, L2 writers in writing RA introductions seem to favor to use more boosters to strengthen their claims and somewhat less hedges to express the claims tentatively, as compared with their L1 counterparts.

TABLE 5

Frequency of Interactional Makers

Items	ERA		KRA		Total
	Raw number	Per 10,000 words	Raw number	Per 10,000 words	
Hedges	328	135(59%)	344	116.6(52%)	672(56%)
Boosters	165	68(30%)	220	74.6(34%)	385(32%)
Attitude markers	60	25(11%)	90	30.5(14%)	150(12%)
Total	553	228	654	221.7	1207

The results for each category will be described.

1. Hedges

Hedges are a crucial aspect of academic writing to present writers' claims prudently and play an important role in the writing of academic texts as "a means of conveying indirectness, opening a rhetorical space for alternative views and avoiding responsibility for the certainty of a proposition" (Hyland, 2005, p. 132). By using hedges, the writers can take a tentative stance and modulate the degree of certainty in order to contribute to an interactional relationship with the readers. Textual analyses of hedges revealed that both groups heavily depended on a range of modal verbs such as 'may' or 'would', or adverbs such as 'often' or 'perhaps'. As can be seen in examples 6 and 7, the statements were hedged to withhold the writers' full commitment by including the modal verb, 'may'. In fact, it is possible that comparable complaints strategies can be performed in Arabic and English cultures (example 6) and a Korean learner cannot create a translation equivalent for Korean words (example 7).

(6) This study may further show whether complaints are performed differently in Arabic language and culture than, for instance, in American or British English. (ERA#13)

(7) At first, a learner may create a translation equivalent to bear in Korean to remember that the English word bear and Korean word... (KRA#17)

As shown in examples 8 and 9, the statements were hedged by including *largely* and *often* to soften the points. If no hedged statements were used as in examples 8a and 9a, the writers could be confronted by the readers' rejections and not be able to persuade them of the validity. The inclusion of hedges can leave space open for possible refutations and recognize alternative opinions or different viewpoints to avoid making a strong generalization. As a result of a higher incidence of hedges in ERA introductions, it can be assumed that a more tentative stance is likely to be common in RA introductions of the international English-medium journal.

(8) While the written report will often be made public to some extent, perhaps in the trainee's portfolio of work, or as part of standardization meetings amongst mentors and trainers, the conference is largely hidden from view... (ERA#1)

(9) However, the qualifications and characteristics of NESTs in EFL contexts, which are an important component of who they are, have been largely ignored despite the apparent popularity of NESTs in ... (KRA#12)

(8a) ... the conference is hidden from view...

(9a) However, the qualifications and characteristics of NESTs in EFL contexts...
have been ignored despite the apparent popularity of NESTs ...

2. Boosters

Boosters can be used to highlight the writers' certainty in the propositional information in a text. The results showed that boosters were more commonly present in KRA introductions than in ERA introductions (Table 5). For instance, the verb, *show*, was used frequently in reporting the findings of the studies as in examples 10 and 11. A few instances were found in ERA introduction as in 12 and 13. A point should be made that the booster, *show*, was often used to report findings of the study. When the given evidence is convincing and supported by enough evidence, boosters can be employed to express the writers' certainty. If evidence is not enough, boosters should be used cautiously. As Hu and Cao (2011) pointed out, a frequent use of boosters may be the writers' intention of maximizing "authorial visibility" (p. 2806) and a strong tone of certainty.

(10) Novice learners will show less accuracy than experienced learners. (KRA#19)

(11) Second language (L2) learners show a wide range of variation in the ability to comprehend sentences in the target language. (KRA#24)

(12) Findings show that ELF interactants at times avoid (i) building consensus, ii) letting ungrammatical constructions pass, and... (ERA#15)

(13) The results showed that the self-perception of L2 writing competence was the most powerful predictor of L2 writing anxiety, ... (ERA#10)

As can be seen in an example 14, the writers attempted to strengthen the relationship between evidence and claims and to convince readers to believe that several studies will support the writer's viewpoints. This sentence was boosted by two boosters, *show* and *indeed*. It is indicated that the results of these previous studies are greatly convincing and supported by enough evidence. In example 15, the sentence was emphasized by a booster, *of course*. Instead of hedging, i.e., sociolinguists may be sensitive to, a boosted statement can encourage the readers to agree with the fact that the sociolinguists are sensitive to the dimensions of linguistic variation. Here, possible rejections from the readers could be anticipated.

(14) Indeed, several studies including Salager-Meyer (1991) showed that textual comprehension diminishes when (KRA#22)

(15) Sociolinguists are, of course, sensitive to the dimensions of inter- and intrapersonal linguistic variation and have expended considerable energy... (ERA#9)

According to a Swales' CARS (Creating a Research Space) model for RA introductions, it is common that expert academic writers highlight the significance of the study, create a niche in research territory, and then emphasize how the study can occupy the niche in writing the RA introductory section. It is often established by boosters such as '*find*', '*establish*' or '*demonstrate*' (examples 16 and 17). As revealed in Hinkel's (2002) study, boosters were significantly frequent in the L2 students' English texts to strengthen their claims and emphasize the truth of a statement. The high frequency of boosters in L2 texts was explained by the fact that authorial certainty or exaggeration can be seen as effective ways of persuasion in some rhetorical traditions (Hinkel, 2002). The higher use of boosters in English texts written by Korean writers may be acceptable in Korean academic contexts of publication.

(16) This study establishes the greater sensitivity of children's auditory perception. (KRA#18)

(17) This paper demonstrates how fine-grained research on learners' behavior becomes possible when video technology is combined with... (ERA#14)

3. Attitude Markers

The use of attitude markers is to consider readers' attitudes to the argument and directly invite them to respond. This can contribute to "the development of a relationship with the reader to help realize affective appeals" (Hyland, 2005, p. 82). According to Abdi, Rizo, and Tavakoli (2010), attitude markers are "of an evaluative nature" (p. 1676). The writers can provide a personal evaluation of what they are expressing surprise or sympathy in their writing. For instance, a sympathetic feeling on the lack of studies on vocabulary knowledge and listening comprehension was expressed as in example 18. Perhaps, it simply indicates a lack of studies on the particular topic without the marker, *unfortunately*. Expressing personal evaluations or feelings can draw the readers into the argument and get them to share the writer's viewpoints on an importance of the issue or a feeling of surprise (examples 19 and 20).

(18) Unfortunately, very few studies have focused on vocabulary knowledge and listening comprehension (in either the L1 or the L2), and so we lack such information about spoken language. (ERA#20)

(19) The most important issue in second language (L2) education is to lead learners to a successful achievement of the target language by... (KRA#3)

(20) This is not particularly surprising given that formulaic sequences are often difficult to intuit (ERA#12)

Textual analyses showed that more attitude markers occurred in the KRA introductions than in ERA introductions (30.5 vs. 25 tokens per 10,000 words). This suggests that Korean writers tend to convey their attitudes towards arguments by means of attitude markers. In contrast, Abdollahzadeh (2003) found that Iranian writers tend to use fewer boosters and attitude markers than English writers in the area of applied linguistics. However, it should be noted that the discussion sections of RAs were analyzed in the study.

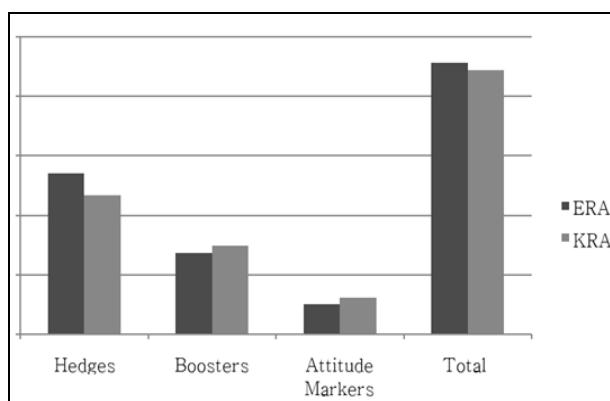


FIGURE 4 Frequency of Interactional Markers

Figure 4 shows somewhat notable differences in two language groups. The different sub-genres such as introduction or discussion sections may have an influence on the writers' use of the interactional markers. Generally, L2 writers in this study tend to use fewer hedges and more boosters and attitude markers when writing RA introductions in English, indicating greater detachment and more commitment (Vassileva, 2001).

V. CONCLUSION

This study examined hedges, boosters, and attitude markers employed in the English-authored RA introductions and Korean-authored English texts in the field of Applied Linguistics. The most frequently used interactional marker in this study was hedges in the two language groups. The cross-cultural analysis of the interactional resources showed that Korean writers tend to use higher instances of boosters to make the claims in an assertive tone and lower instances of hedges to express their full commitments in the writing of RA introductions. The frequent use of boosters may indicate the writers' intention of maximizing "authorial visibility" (Hu & Cao, 2011, p. 2806) in their academic texts. It can be speculated that Korean writers are expected to be more visible when writing RA introductions in the national English-medium journals. In contrast, a higher incidence of hedges in ERA introductions suggested that a more tentative stance is likely to be common in RA introductions of the international English-medium journal. Cultural contexts of publication may influence L2 writers' use of interactional features in writing academic texts (Mur-Dueñas, 2011).

One thing should be noted that the disciplinary variations in the writing of RA introductions need to be discussed. As Milagros del Saz Rubio's (2011) reported, hedges were used dominantly (84.6%) in the field of agricultural sciences but hedges in the area of applied linguistics were less used (56%) than the agriculture sciences. Also, attitude markers were hardly used (1.7%) in the field of agriculture sciences. Therefore, hedging, booster, and attitude markers in academic writing should be used appropriately according to the expectations of the specific academic discourse community.

Although it is still controversial whether the disciplinary values overrule cultural differences, it should be noted that variations across disciplines may influence the use of metadiscourse markers in the writing of academic texts (Hyland & Tse, 2004; Samraj, 2002). As discussed earlier, Hyland and Tse (2004) showed that a notably higher use of hedges was found in Applied Linguistics and a lower use of hedges was found in Computer Science. Boosters and attitude markers were more balanced across disciplines but a somewhat lower use of attitude markers and boosters was found in the fields of Electronic Engineering, which is consistent with Milagros del Saz Rubio's (2011) study of agricultural sciences. The analysis of possible cultural and disciplinary variations in two different language groups can assist L2 writers on how to express their positions successfully and how to highlight important findings effectively.

VI. IMPLICATIONS AND LIMITATIONS

Teaching L2 students to use these markers effectively can assist them to develop a sense of awareness of understanding interactional markers and to equip them with the ways to engage with the readers appropriately. Some of the advantages of teaching the metadiscourse markers can be summarized: To increase the persuasiveness of a text; to aid comprehension of text content; to highlight the authors' important points or moderate their certainties on the propositional information in a text; to make readers aware of the subjective interpretation of proposition; to indicate the author's attitude to readers of the text (Hyland, 2005, p. 179). L2 students require a highly sophisticated level of proficiency in writing research papers in English. When they are equipped with how to make their claims effectively or how to highlight crucial points appropriately, they will be able to produce the research papers acceptable to the specific academic communities. One of the limitations of this study is a single disciplinary and a single journal from each group. Further studies should be directed to identify linguistic and cultural differences in this discipline and disciplinary variations in academic writings.

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APPENDIX

Interactional Metadiscourse Features

Hedges	Boosters	Attitude Markers
(certain) extent/amount/level	actually	!(exclamation mark)
about	always	admittedly
almost	believe*(-s/-ed)	agree*(-s/-ed)
apparent*(-ly)	beyond doubt	amazed(-ing/-ly)
appear*	certain	appropriate(-ly)
approximately,	certainly	astonished(-ing/-ly)
argue*(-s/-ed)	clear/clearly	correctly
around	conclusively	curious(-ly)
assume*(-ed)	decidedly	desirable(-ly)
broadly	definite(-ly)	disagree*(-s/-ed)
claim*(-s/-ed)	demonstrate*(-s/-ed)	disappointed(-ing/-ly)
could/couldn't	doubtless	dramatic(-ally)
doubt(ful)	establish(-ed)	essential(-ly)
essentially	evident(-ly)	even x
estimate*(-s/-ed)	find*(-s/-found)	expected(-ly)
fairly	in fact	fortunate(-ly)
feel*(-s/-felt)	incontestable(-ly)	hopeful(-ly)
frequently	incontrovertible(-ly)	important(-ly)
from our/this/my perspective	indeed	inappropriate(-ly)
generally/in general	indisputable(-ly)	interesting(-ly)
guess	know*(-s/-known)	prefer*(-ed/-able/-ly)
in most cases/instances	must(possibility)	remarkable(-ly)
in my/our opinion	never	shocked(-ing/-ly)
in my/our/this view	no doubt	striking(-ly)
indicate*(-s/-ed)	obvious(-ly)	surprised(-ing/-ly)
largely	of course	unbelievable(-ly)
likely	prove*(-s/-ed)	understandable(ly)
mainly	realize(-s/-ed)	unexpected(-ly)
may	really	unfortunate(ly)
maybe	show*(-s/-ed/shown)	unusual(ly)
might	sure(-ly)	usual
mostly	think*(-s/-thought)	
often	true(-ly)	
on the whole	undeniable(-ly)	
ought	undisputedly	
perhaps	undoubtedly	
plausible(-ly)	without doubt	
possible(-ly)		
postulate*(-s/-ed)		
presumable(-ly)		
probable(-ly)		
quite		
rather x		
relatively		
roughly		
seem*		
should		
sometimes/somewhat		
suggest*(-s/-ed)		

suppose*(-s/-ed)
suspect*(-s/-ed)
tend* to/tentative
to my knowledge
typical*(-ly)
uncertain(-ly)
unclear(-ly)
unlikely
usually
would/wouldn't

Examples in: English

Applicable Languages: English

Applicable Levels: Tertiary

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