Move-based Investigation of Appraisal in the Introduction Section of Applied Linguistics Research Articles: Similarities and Differences between L1 and L2 English Texts

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Abstract

Recent research has shown that academic writing is not ‘author-evacuated’ but, rather, carries a representation of the writers’ identity. One way through which writers project their identity in academic writing is stance-taking toward propositions advanced in the text. Appropriate stance-taking has proved to be challenging for novice writers of Research Articles (RAs), especially those writing in a foreign language. To contribute to the literature on stance-taking, the present study compared the move-based use of evaluative resources in the introduction section of L1 (written by native English speakers) and L2 (written by Iranian, non-native writers) English RAs in the discipline of Applied Linguistics. To this end, 100 English Research Article Introductions (RAIs), 50 by L1 writers and 50 by L2 writers, were investigated as the corpus of the study. Categories of analysis were taken from the ‘appraisal framework’ (Martin & White, 2005) and CARS model (Swales, 2004). The results revealed that the two groups of texts were not substantially different in the overall use of appraisal resources in the whole body of RAIs. However,
more detailed analyses of the specific categories of appraisal in each of the rhetorical moves demonstrated that in some cases, especially in moves 1 and 3, L1 and L2 writers made different choices when taking a stance. The findings of this study can serve as a valuable source providing a practical and comprehensive understanding of the use of evaluative resources in RAIs for EAP researchers, teachers, and other professionals involved in the teaching of academic writing.

Keywords: Appraisal, Research Article Introduction, Rhetorical Move, Stance-taking

Academic writing has a central role in the academic discourse community as it is one of the main modes through which the acquired knowledge is communicated. In the last few decades, it has been the focus of researchers’ increasing attention in different disciplines. Hyland (2000) maintains that this shift of interest to academic writing has been driven by two factors: a) the fact that it is writing which produces different characteristics of various disciplines; and b) the fact that writing is one of the principal responsibilities of academics.

Academic writing is a complicated task in which various linguistic, as well as discoursal and rhetorical conventions, should be considered to attain the intended purposes. According to Berkenkotter (1991), research studies conducted on academic writing have consistently shown that “students entering academic disciplines need a specialized literacy that consists of the ability to use discipline-specific rhetorical and linguistic conventions to serve their purposes as writers” (p. 153). That is why researchers have attempted to analyze different genres of academic writing from various perspectives with the aim of extracting their explicit and implicit conventions in order to raise the awareness of the novices in this regard and help them position themselves successfully as credible members in the relevant discourse community (e.g., Abdi & Sadeghi, 2018; Bhatia, 1999; Hyland, 2005b).
The genre of Research Article (RA) is a typically written genre of academic discourse community, which nowadays plays a key role in the academic arena. Writing a good introduction to RAs has proved to be a challenging task since it is the part of the article in which the rationale for conducting the study as well as the significance of the topic should be presented in a way that creates interest in the readers (Swales & Feak, 1994). Therefore, more in-depth analyses are required to raise the awareness of writers about its different discoursal and rhetorical aspects.

Interpersonal meaning has recently become one of the most important and indispensable aspects of academic writing (Hood, 2006) while, a few decades ago, it was considered as undesirable by academicians who mainly favored objectivity in scientific texts (Lachowicz, 1981). Taking an appropriate evaluative stance towards other researchers’ ideas or works is one of the important interpersonal aspects of RAs. Chang and Schleppegrell (2011) maintain that one of the challenging demands for writers in reporting their research results is to represent their own ideas while engaging in the assessment of the findings already reported in that area. In order to highlight the significance of their own results, authors need to “position themselves and negotiate their own voice in the context of utterances made by others in the research community” (Geng & Wharton, 2016, p. 81). However, novice writers, especially non-native ones, seem to have received superficial or abstract training in this regard via being presented with scattered sentence examples or focusing on vocabulary out of its discursive context (Chang & Schleppegrell, 2011). That is why their texts appear to be lacking an appropriate evaluative stance towards others’ ideas (Hood, 2004; Hyland & Milton, 1997). Authors of RAs need to appraise previous research and take a stance towards them while reporting their own research. This is particularly important in the introduction section where authors lay the ground for, and justify the conduction of, their own research mainly via evaluating and
appraising other researchers’ findings in the related literature. That is why the issue of evaluation or stance-taking needs more conscious attention and investigation so as to gain a comprehensive understanding of the use of evaluation resources by RA authors.

**Stance in the Literature**

Stance is defined as the writers’ projection of an authorial presence in order to convey their attitudes and evaluations towards the views being advanced in their texts while interacting with their putative readers (Du Bois, 2007; Johnstone, 2009; White, 2003). According to Biber (2006, p. 99), stance is defined as the expression of “personal feelings and assessments about certain information, how certain they are about its veracity, how they obtained access to the information, and what perspective they are taking.” Besides projecting writers’ epistemic and affective perspectives, stance-taking has also been reported to serve other functions such as creating solidarity with the putative readers (Hunston & Thompson, 2000; Hyland, 2005b) and developing an optimal dialogic space to negotiate propositions more appropriately (Martin & White, 2005; Wu, 2007).

Stance and its related concepts, like *voice* and *evaluation*, have been addressed by many writing scholars in recent years (e.g., Coffin, 2002; Engelbreston, 2007; Hyland & Guinda, 2012; Jaffe, 2009; Soliday, 2011). Stance expression has been investigated in various studies from different perspectives such as hedges and boosters (Abdollahzadeh, 2011; Hyland & Milton, 1997), metadiscourse markers (Adel, 2006; Hyland, 2005a), engagement (Wu, 2007), and appraisal (Chang & Schleppegrell, 2011; Geng & Wharton, 2016; Lancaster, 2014). Also, it has been found to be realized in different forms such as adjectives, adverbs, reporting verbs, nominal constructions, lexical bundles, and so on (e.g., Cobb, 2003; Grant & Ginther, 2000; Hinkel, 2004; Jiang, 2015).
Many studies have been conducted on the use of stance and evaluative resources in academic discourse, some of which are discussed below. For instance, Hyland and Milton (1997) investigated evaluative language expressed in the form of hedges and boosters in argumentative essays written by undergraduate students from Hong Kong and the UK and found that Hong Kongese writers mainly tend to judge other’s ideas using markers of certainty while British writers prefer to use more tentative propositions. In a different study, Abdollahzadeh (2011) investigated stance as expressed through hedges and attitude markers in the conclusion chapter of AL RAs written by Iranian and American writers and found that both groups of writers tend to use hedges more frequently than attitude markers. In another study, Lancaster (2014) analyzed stance-taking by the students of economics at different levels using a subset of the appraisal framework, that is, engagement. He reported that high-scoring students are better than low-scoring ones in the construction of evaluative stance as regards engagement with the readers in their academic writing. Similarly, Hinkel (2003) investigated the use of emphatics and attitude markers by Asian and English student writers and found that Asians use more instances of amplifiers and emphatics in their essays than their English counterparts do.

**Appraisal Framework**

One of the most comprehensive accounts of stance has been provided in the ‘appraisal’ system. Traditionally, interpersonal aspects of texts were studied from the perspective of Systemic Functional Linguistics (SFL) (Halliday, 1994; Halliday & Matthiessen, 2004), which put emphasis mainly on clausal level phenomena and was based on mood and modality. However, Martin (2000) realized that this framework is not appropriate for the analysis of interpersonal meanings. He pointed out that SFL makes no reference to the interpretation of evaluative meaning on the values of various phenomena or
experiences. Therefore, he deemed it necessary to develop an alternative framework for this purpose, which led to the development of the appraisal framework (Martin, 2000; Martin & White, 2005).

In this framework, which is presented in Figure 1, stance markers are related to one of these three interacting domains: attitude, engagement, and graduation. The system extends further detailing more specific strategies to express stance in relation to each of these domains. Stance-taking in the domain of attitude can be related to affect, judgment, and appreciation. In the engagement domain, positions can be heteroglossic or monoglossic, that is, whether they acknowledge the possibility of dialogue at all or not. And finally, in the graduation domain, speakers/writers ‘graduate’ either the force or focus of the propositions. More explanation on this framework is provided in the methods section below.

![Figure 1: Appraisal system (adapted from Martin & White, 2005)](image-url)

This model has been widely employed by many researchers to investigate the ways through which writers/speakers express their evaluations about the propositions being advanced in their texts; Researchers concerned with discourse and conversation analysis (e.g., Ngo & Unsworth, 2015; Page, 2003; Painter, 2003), critical discourse analysis (e.g., Arrese & Perucha, 2006;
Soepriamadji & Vidhiasi, 2012; Tavassoli, Jalilfar, & White, 2019; Wang, 2004; Wang, 2008), and academic discourse (e.g., Hood, 2004; Hood & Forey, 2005; Jalilfar, Hayati, & Mashhadi 2012; Mei & Allison, 2003; Liu, 2013; Pascual & Unger, 2010) have employed this framework in their investigations.

Rationale for Genre-based Analysis of Appraisal

Many researchers involved in academic writing believe that in advanced courses for academic writing, there is a need for the shift of attention to discoursal and rhetorical features of texts (e.g., Charles, 2007; Hood, 2004; Pho, 2008). One of the models frequently used for the discursive analysis of the introduction sections of RAs is the CARS model (Swales, 1990, 2004). This model suggests that the introduction section of RAs consists of three major moves: 1) Establishing a territory, 2) Establishing a niche, and 3) Occupying the niche/presenting the present work. Also, each move consists of a number of steps, which are more specific and provide more detailed information on the discoursal structure of this section.

However, the CARS model only offers some general guidelines for writing a good introduction (Chang & Schleppegrell, 2011). It provides helpful explicit rhetorical guidelines for writing an appropriate introduction. But it can be enriched if the needed linguistic features for achieving the expected rhetorical structure are also explicit. These kinds of studies have been conducted in areas such as metadiscourse markers (e.g., Khedri & Kritsis, 2018) and lexical bundles (e.g., Cortes, 2013) where move-specific use of some linguistic or rhetorical features in the introduction section of RAs has been explored, and the connection between them and the generic moves of the introduction section has been highlighted.

The use of evaluative language in academic texts has also proved to be one of the challenging tasks for novice writers. In order to become an expert writer, it is important for them to coordinate and make use of many different
skills simultaneously rather than possess a series of unrelated skills. That is why focusing on a specific rhetorical feature in relation to other textual aspects is expected to bring about better and more practical results. Bearing this in mind, we think that evaluative language in RAs needs to be considered and analyzed not in isolation, but in connection with other discoursal features of RAs such as their rhetorical move structure.

As discussed above, stance-taking and appraisal have been addressed by many researchers in RAs of different disciplines and their different rhetorical sections such as introduction, discussion, etc. (e.g., Abdollahzadeh, 2011, Hood & Forey, 2005; Jalilfar & Moazzen, 2014; Mei & Allison, 2003). However, to the best of our knowledge, no study has addressed the use of evaluative resources in the rhetorical moves of the introduction section. The only study of appraisal that has followed a move-based approach for the analysis of evaluative language in RAs is Loi et al.’s (2016) study in which the conclusion section of English and Malay RAs has been investigated in relation with CARS model. Of course, there are other studies that have addressed appraisal in different sections of RAs, but they have focused on the sections as a whole, not on relatively smaller and more practical chunks, that is, rhetorical moves.

Regarding the introduction section, perhaps the closest study to the present one is the study conducted by Jalilfar et al. (2012) on the evaluative strategies in Iranian and international RAs. But our study is different from theirs in two aspects. The first difference is that they have just focused on attitude resources and the graduation resources that graded those attitude markers while we have attempted to investigate all of the types and subtypes of appraisal system to gain a more comprehensive understanding of the use of evaluative language in RAs. The second and more important difference is that they have looked at appraisal and the differences and/or similarities between the two groups of texts in the RAs as a whole while we have explored
appraisal resources in the light of CARS model. We believe that the provision of guidelines on the use of appraisal resources in RAIs can be more helpful to novice and nonnative writers when we divide the whole sections into smaller chunks which still maintain a discoursal and textual unity, that is, Swalesian moves. Therefore, we think that there is a need for studies that can extract and make explicit the linguistic and rhetorical conventions related to stance-taking in specific rhetorical moves of RAIs.

While the socially recognized purpose of RAs is to report research findings objectively (Barrass, 2002; Zobel, 2004), recent research has also indicated that this genre is interactional in nature (Hyland, 2004) and includes a projection of the writer’s identity, too (Hyland, 2002; Ivanic, 1998). Therefore, an appropriate representation of identity in a way that neither makes the writing ‘author-evacuated’ nor disrupts the smooth flow of information via overrepresentation of one’s presence is of paramount importance in writing an RA. This, however, is a challenging task for novice writers and becomes even more complicated when a writer writes in a language other than his/her own mother tongue. That is why, as mentioned above, various researchers have attempted to raise awareness about different linguistic, discoursal, and rhetorical aspects of RAs in order to help novice writers to report their research findings appropriately.

To help novice and non-native writers of English RAs in taking an appropriate stance, we aimed in this study to explore and compare the use of evaluative resources in the introduction section of English RAs written by native English speakers (L1 English RAIs) and Iranian, non-native writers (L2 English RAIs) in the field of Applied Linguistics (AL) based on the ‘Appraisal’ framework. We limited our investigation to just one discipline since each discipline has its own rhetorical and linguistic requirements which might not hold true for other disciplines. Furthermore, to provide more practical information, we employed Swales’ (1990, 2004) CARS model to
recognize the move-specific use of evaluative resources by the two groups of writers and compared the obtained results with each other. Therefore, the present study sought to answer the following question: What are the similarities and differences between L1 and L2 writers of English AL RAs as regards the use of appraisal resources in each of the three rhetorical moves of the introduction section?

**Method**

**Corpus of the Study**

As mentioned above, the aim of this study was to investigate the move-specific use of evaluative resources in L1 and L2 English RAs. To this end, a total of 100 English RAs (50 written by L1 writers and 50 by L2 writers) were compiled and their introduction sections were used as the corpus of the study. The sample size was determined with reference to similar studies in the related literature. In studies in which the analyses are done manually, as is the case with the current study, even much smaller samples have been used (e.g., Bruce, 2014; Martin & Perez, 2014; Zheng & Ge, 2015); however, we thought that the inclusion of 100 RAs would provide more dependable insights.

L1 RAs were taken from 5 top tier journals in AL, namely *Applied Linguistics*, *Assessing Writing*, *Language Teaching Research*, *System*, and *Journal of Second Language Writing*. To determine whether the articles are L1 English or otherwise, the affiliation and biodata of their authors were checked. On the other hand, L2 RAs were selected from two of the most highly subscribed journals by Iranian applied linguists, namely, *Iranian Journal of Language Teaching Research* and *The Journal of Teaching Language Skills*. The criteria considered in the selection of articles from these journals were: being empirical; having a stand-alone introduction section following the conventional IMRD structure (Swales, 1990); and being published in the last ten years so as to be considered recent enough. The total number of words of
the corpus was 58,641 after excluding footnotes, headers, tables, figures, and captions. More details are given in Table 1 below.

Table 1.

<table>
<thead>
<tr>
<th>Nom. of RAs</th>
<th>Total no. of words in introductions</th>
<th>Mean length of introductions</th>
</tr>
</thead>
<tbody>
<tr>
<td>L1</td>
<td>50</td>
<td>27,196</td>
</tr>
<tr>
<td>L2</td>
<td>50</td>
<td>31,445</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>58,641</td>
</tr>
</tbody>
</table>

Data Analysis

The categories of analysis for this study were taken from two models: the appraisal system (Martin & White, 2005), and the CARS model (Swales, 1990, 2004). As mentioned above, the appraisal system sees the evaluative stance as realized through one of these three categories: attitude, engagement, and graduation. Each of these categories is further subcategorized to more specific subtypes, which are discussed in detail below.

Stance-taking in the domain of attitude can be related to affect, judgment, and appreciation. Affect is concerned with feelings of un/happiness, dis/satisfaction, etc. Judgement deals with ethical attitudes towards behavior; whether we admire or criticize, praise or condemn a behavior. And appreciation involves evaluations made based on aesthetic or value viewpoints in a specific field. Appreciation itself can be related to expressions about the reaction that an entity creates, its composition, or its value. Another important point about attitudinal evaluations is their polarity, that is, attitude resources can be either positive or negative (Martine & White, 2005).
In engagement, positions can be heteroglossic or monoglossic, that is, whether they acknowledge the possibility of dialogue at all or not. In monoglossia, other voices are not considered by the author while in heteroglossia, they are. Heteroglossic statements themselves are of two types: expansion and contraction. In expansion, authors make allowance for other alternative voices and positions via indicating that their position is one among other possible positions (entertain) or associating propositions to other external voices (attribute). While in contraction, the scope for other voices is restricted either by accepting (proclaiming) or rejecting (disclaiming) a specific position (Martin & White, 2005).
And finally, in the graduation domain, writers ‘graduate’ either the force or focus of the propositions. In force, the intensity or amount of an attitudinal assessment is graduated while in focus, the prototypicality of a phenomenon is graduated with reference to some presupposed core or exemplary instance. The graduation resources can be either upscaling or downscaling the force or focus of a proposition (Martine & White, 2005).

Figure 3: The network of engagement (Martin & White, 2005).

Figure 4: The network of graduation (adapted from Martin & White 2005)
Another set of categories of analysis for the current study was taken from Swales’ (1990, 2004) CARS model. In this model, the rhetorical structure of RAIs has been depicted as consisting of three moves, each consisting of a number of steps. Move is specified by Swales and Feak (2000, p. 35) as “the defined and bounded communicative act that is designed to achieve one main communicative objective”. The original model that was developed in 1990 consisted of the three moves of ‘establishing a territory’, ‘establishing a niche’, and ‘occupying the niche’. In the later version of the model (Swales, 2004), the 3rd move was changed to ‘presenting the present work’. Some changes were also applied in the steps, but since our focus in this study is on moves, we prefer not to include unnecessary details. We focused on moves and not steps since, we believe, too much detailed information can lead to confusion. Therefore, the three moves of the introduction section as proposed in the latest version of the CARS model constituted another group of categories of analysis for the present research.

Table 2.

<table>
<thead>
<tr>
<th>Move 1</th>
<th>Establishing a territory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Move 2</td>
<td>Establishing a niche</td>
</tr>
<tr>
<td>Move 3</td>
<td>Presenting the present work</td>
</tr>
</tbody>
</table>

In the first round of the analysis, the two sets of RAIs were read carefully to distinguish the three rhetorical moves. The identification of moves is easier than distinguishing steps since moves have a more general scope and need less detailed analysis to be identified. However, after coding 20% of the RAIs in the corpus, a second coder was also asked to identify the moves of the same
RAIs for the second time to check the reliability of the coding process. As expected, the two coders were found to be in almost complete agreement in this regard (r=0.99). Therefore, the identification of moves in the rest of the corpus continued with just one coder. After that, the total number of words in each rhetorical move was calculated so that we could normalize the frequency of evaluative resources used in each move and make the texts with various lengths comparable.

In the second round of the analysis, using the appraisal framework proposed by Martine and White (2005), the corpus was analyzed to identify the appraising resources. In order to understand the subtle evaluative meanings, the sentences and clauses were read back and forth, and in many cases, the co-text was also analyzed. Another point that should be mentioned here is that although stance-taking can be expressed via grammatical and paralinguistic devices (Biber, 2006), too, in this study, we only focused on lexical and semantically-marked choices that carry an evaluative appraisal.

Based on Figure 2, attitudinal meanings were identified in the texts and classified as affect, judgement, appreciation, and their subcategories; then, their polarity was determined as being positive or negative. It should be noted that for practicality considerations, we delimited our investigation in this part to the analysis of explicitly-marked, inscribed attitudinal resources.

The coding of engagement resources was done based on Figure 3 above. First of all, the propositions were read through and analyzed to see whether they were monoglossic or heteroglossic. Then, heteroglossic propositions were analyzed further to determine whether they contracted or expanded the dialogic space for other alternative positions. And finally, each of the contraction and expansion types of propositions were coded into their subcategories.
Finally, the analysis of graduation resources was conducted in two dimensions based on Figure 4. First, the propositions were coded based on whether they were grading force or focus; then, their orientation was determined as to whether they were upscaling or down-scaling the force or focus of propositions.

In order to ensure the consistency of coding, after coding 20% of the RAIs in the corpus, an external coder who was an MA graduate of Applied Linguistics familiar with the appraisal framework was asked to code that portion of the corpus for the second time. Before beginning the coding process by the second coder, the overall method of coding was explained to him, and the categories of the model were discussed to refresh his mind on the issue. Then, the RAIs were coded for the second time by him. The results showed a high consistency between the two coders (r= 0.93). This high consistency convinced us to continue coding by one coder with paying closer attention to the propositions carrying more than one type of evaluative meaning, which accounted for the major part of the discrepancies between the two coders.

For the statistical analyses in this study, a modest quantitative approach was adopted as in many other similar studies (e.g., Hood, 2011; Hyland, 2005b; Loi et al., 2016; Thomas et al., 2015; Xie, 2016). More specifically, the normalized frequency of occurrence (per 1000 words) for each type of the appraisal resources was determined in each of the rhetorical moves; then, the percentages of appraisal instances belonging to each category of appraisal were calculated; and finally, the two sets of texts in the corpus were compared with each other to get to an understanding of the move-based variations regarding the use of appraisal resources in L1 and L2 English RAIs in the discipline of AL.
Results and Discussion

In order to gain a general understanding of the use of appraisal resources in L1 and L2 English RAIs in the discipline of AL, we can consider Table 3 below, which represents the overall distribution of the three main categories of appraisal in the introduction sections.

Table 3.

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Attitude</th>
<th>Engagement</th>
<th>Graduation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>mean (/k)</td>
<td>%</td>
<td>mean (/k)</td>
<td>%</td>
</tr>
<tr>
<td>L1</td>
<td>77.7</td>
<td>100</td>
<td>19.8</td>
<td>25.5</td>
</tr>
<tr>
<td>L2</td>
<td>72.9</td>
<td>100</td>
<td>18.8</td>
<td>25.8</td>
</tr>
</tbody>
</table>

Note: /k = frequency per 1000 words, % = percentage of total appraisal resources

As the table shows, it seems that L1 and L2 writers of English RAIs are slightly different as regards the overall frequency of appraisal instances (77.7 vs. 72.9). As for the three main categories of appraisal, attitude and engagement have roughly the same frequency of occurrence in both groups of texts while in graduation, they are relatively different with L1 writers making more use of graduations resources. The percentages, on the other hand, show that L2 writers, in comparison with L1 writers, have used a slightly higher percentage of their total appraisal resources for engagement (51.6% vs. 46.3%, respectively) and a lower percentage of them for graduation (22.6% vs. 28.2%, respectively). Overall, it can be observed that the differences between the two groups of writers as regards the overall use of appraisal resources in RAIs are not substantial. Our findings regarding the overall occurrence of appraisal resources and the three main categories are comparable to the findings of other studies conducted on academic texts (e.g.,
Geng & Wharton, 2016; Xie, 2016). However, as discussed earlier in the introduction section, such general observations do not provide us with practical insights. That is why, in this study, we aimed to go deeper and analyze more specific subcategories of appraisal resources in different rhetorical moves of RAIs, the results of which are presented and discussed below.

**Attitude resources in L1 and L2 AL RAIs**

As discussed in the methods section, attitude resources were investigated in this study from two perspectives: the types of attitude resources and their polarity (whether they carry positive or negative meanings). First, we shall look at the distribution of the subcategories of attitude resources in the rhetorical moves of each set of texts.

**Table 4. Distribution of Attitude Subcategories in L1 and L2 AL RAIs**

<table>
<thead>
<tr>
<th>Categories</th>
<th>Affect /k</th>
<th>Affect %</th>
<th>Judgement /k</th>
<th>Judgement %</th>
<th>Appreciation /k</th>
<th>Appreciation %</th>
<th>Total attitude /k</th>
<th>Total attitude %</th>
</tr>
</thead>
<tbody>
<tr>
<td>L1 Move 1</td>
<td>0.5</td>
<td>2.6</td>
<td>2.4</td>
<td>12.5</td>
<td>16.3</td>
<td>19.2</td>
<td>16.3</td>
<td>100</td>
</tr>
<tr>
<td>L1 Move 2</td>
<td>0.7</td>
<td>2.7</td>
<td>2.7</td>
<td>10.3</td>
<td>22.8</td>
<td>26.2</td>
<td>22.8</td>
<td>100</td>
</tr>
<tr>
<td>L1 Move 3</td>
<td>0.6</td>
<td>4.3</td>
<td>2.1</td>
<td>15.1</td>
<td>11.2</td>
<td>80.6</td>
<td>11.2</td>
<td>100</td>
</tr>
<tr>
<td>L2 Move 1</td>
<td>0.5</td>
<td>2.3</td>
<td>2.2</td>
<td>10.3</td>
<td>19.5</td>
<td>87.8</td>
<td>19.5</td>
<td>100</td>
</tr>
<tr>
<td>L2 Move 2</td>
<td>0.3</td>
<td>1.3</td>
<td>2.4</td>
<td>10.2</td>
<td>20.8</td>
<td>88.5</td>
<td>20.8</td>
<td>100</td>
</tr>
<tr>
<td>L2 Move 3</td>
<td>0.7</td>
<td>6.7</td>
<td>1.2</td>
<td>11.4</td>
<td>8.6</td>
<td>81.9</td>
<td>8.6</td>
<td>100</td>
</tr>
</tbody>
</table>

Note: /k = frequency per 1000 words, % = percentage of total attitude resources

The first and the most conspicuous observation as regards attitude resources in both sub-corpora is that appreciation is the dominant strategy in expressing attitudinal meanings in the texts. Appreciation accounts for over 80% of the total attitude resources employed by the two groups of writers in
all three moves of the introduction section. Affect, on the other hand, is quite rare with the lowest occurrence in the texts, while a few instances of judgement are observed.

Considering that affect resources deal with personal feelings and judgment resources deal with attitudes toward entities or propositions based on some ethical, cultural, or institutional principles (Martin & White, 2005), we can conclude that authors in both groups of texts and in all three rhetorical moves of the RAIs tend to put aside or give little space for the expression of their personal feelings and judgments. The analysis of the corpus shows that even when the authors wanted to express their feeling or judgment, they tried to do it indirectly as in [1] and [2], where authors have expressed their feeling and judgment indirectly via proclaiming and intensifying the attitudes of others.

[1] The roots of such ‘English-only’ policies … can be traced back to the widespread [graduation, force, up-scaling] hostility [attitude, affect, -] towards the tenets of the Grammar-Translation method … (L2-19)

[2] In fact, a consensus [graduation, force, up-scaling] is emerging among private and government stakeholders that gaps in proficiency rates represent what Koretz labels “illusions [attitude, judgment, -] of progress.” (L1-15)

Our findings regarding the infrequent use of affect and judgement resources in RAIs are in line with the results reported by other researchers in the area of academic writing (e.g., Hood, 2004; Lan, 2011). Our findings revealed that L2 Iranian writers are quite familiar with the requirements of academic discourse and its institutionalized principles as regards the lower involvement of personal feelings and judgements in their research report. Similar results have been reported in the case of Chinese L2 writers of English academic theses (Xie, 2016).
As regards attitude as appreciation and its subcategories (i.e., reaction, composition, and valuation), the results also show a similar pattern of use by the two groups of writers in all three moves of the introduction section. Table 5 represents greater details.

Table 5.

<table>
<thead>
<tr>
<th>Categories</th>
<th>Reaction</th>
<th>Composition</th>
<th>Valuation</th>
<th>Total appreciation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>/k</td>
<td>%</td>
<td>/k</td>
<td>%</td>
</tr>
<tr>
<td>L1 Move 1</td>
<td>1.9</td>
<td>11.7</td>
<td>2.5</td>
<td>15.3</td>
</tr>
<tr>
<td>L1 Move 2</td>
<td>3.8</td>
<td>16.7</td>
<td>5.2</td>
<td>22.8</td>
</tr>
<tr>
<td>L1 Move 3</td>
<td>0.5</td>
<td>4.5</td>
<td>3.0</td>
<td>26.8</td>
</tr>
<tr>
<td>L2 Move 1</td>
<td>2.4</td>
<td>12.3</td>
<td>5.5</td>
<td>28.2</td>
</tr>
<tr>
<td>L2 Move 2</td>
<td>2.6</td>
<td>12.5</td>
<td>4.7</td>
<td>22.6</td>
</tr>
<tr>
<td>L2 Move 3</td>
<td>0.2</td>
<td>2.3</td>
<td>2.9</td>
<td>33.7</td>
</tr>
</tbody>
</table>

Note: /k = frequency per 1000 words, % = percentage of total appreciation resources

As can be observed, the general pattern of using appreciation subcategories is more or less the same in both L1 and L2 RAIs; in both of them valuation accounts for the majority of appreciation resources in all rhetorical moves, followed by composition resources with moderate frequency, and reaction resources with the least frequency.

Reaction resources deal with personal and somehow involuntary responses to phenomena (Martin & White, 2005). As was the case with affect, authors in academic discourse tend to avoid the representation of their purely personal and uncontrolled reactions as an institutionalized principle. That is why we have the lowest occurrence for these types of resources in both L1 and L2 RAIs.
In composition, the focus is on the balance and complexity of things (Martin & White, 2005). In move 2 and move 3 of the RAIs, both L1 and L2 writers have somehow similar preferences as regards the frequency and percentage of composition resources. However, in move 1, Iranian L2 writers seem to be more concerned with composition than L1 writers (28.2% vs. 15.3%). Authors in move 1 try to attract the attention of their putative readers and justify the worth of their research (Swales, 1990, 2004). To this end, L2 writers have made more appeals to the complexity of things in a specific area than their L1 counterparts as in [3].

[3] Dörnyei (2001) defined motivation as a concept which is … a multifaceted and highly complex issue. (L2-39)

This finding is more interesting when we consider the distribution of the third subcategory of appreciation, that is, valuation in both groups of texts. Valuation resources are dominant in both groups and in all moves of RAIs. However, L1 authors make more appeals to valuation resources than their Iranian counterparts in move 1 (73% vs. 59.5%) as in [4].

[4] … utility (e.g. for program managers and teachers) is the key standard in judging the quality of evaluative projects. (L1-24)

Therefore, we can conclude that in move 1 of RAIs, the tendency of L1 writers to base their arguments on the value of things is relatively higher compared to L2 writers while for L2 writers, the complexity of issues in a research area matters more. In other words, value is more appealing for L1 writers than L2 writers, while complexity is more appealing to L2 writers than L1 writers. This might stem from differences in cultural and educational backgrounds between Iranians and native English speakers. L2 writers, therefore, need to be more careful in this regard while justifying their own research topic in move 1 of the RAIs.
One final point about attitude resources is their polarity. According to Martin and White (2005), attitudes can be either positive or negative. Table 6 shows the polarity of attitude resources in L1 and L2 AL RAIs.

Table 6. 

<table>
<thead>
<tr>
<th></th>
<th>Positive (%)</th>
<th>Negative (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>L1</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Move 1</td>
<td>78</td>
<td>22</td>
</tr>
<tr>
<td>Move 2</td>
<td>65</td>
<td>35</td>
</tr>
<tr>
<td>Move 3</td>
<td>88</td>
<td>12</td>
</tr>
<tr>
<td>Whole RAI</td>
<td>75</td>
<td>25</td>
</tr>
<tr>
<td><strong>L2</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Move 1</td>
<td>69</td>
<td>31</td>
</tr>
<tr>
<td>Move 2</td>
<td>59</td>
<td>41</td>
</tr>
<tr>
<td>Move 3</td>
<td>66</td>
<td>34</td>
</tr>
<tr>
<td>Whole RAI</td>
<td>66</td>
<td>34</td>
</tr>
</tbody>
</table>

As is predictable, the percentage of negative attitudinal meanings is relatively high in move 2 of both L1 and L2 texts. This is due to the nature of this rhetorical move where inadequacies of the previous studies are discussed to highlight a research gap (Swales, 1990, 2004). As for the overall and move-specific differences between the two groups of texts, it can be observed that L2 writers have resorted to negative attitudes more frequently than L1 writers. The dominance of positive evaluation has been reported to be a characteristic feature of academic writing (e.g., Hood, 2004; Lan, 2011; Soler-Monreal & Gil-Salom, 2011). Iranian writers’ relatively higher use of negative attitudinal resources compared to L1 writers can cause problems in building solidarity with other members of the related discourse community. As Xie (2016) points out in her study, non-native writers who are generally considered peripheral members of the discourse community need to align with expert researchers of the related discipline via constructing mainly positive evaluations of the previous practices. Therefore, L2 writers need to be more cautious in this regard.
Engagement Resources in L1 and L2 AL RAIs

In general, engagement resources can be of two types: either they provide a space for other alternative voices to be propounded in the text or not (heteroglossia vs. monoglossia, respectively) (Martíne & White, 2005). First, we shall take a look at the distribution of heteroglossic and monoglossic resources in the two sub-corpora; after that, different subcategories of heteroglossia will be analyzed in greater detail. Table 7 shows the distribution of monoglossic and heteroglossic resources in the rhetorical moves of L1 and L2 AL RAIs.

The results show that in all, both L1 and L2 writers favor heteroglossia over monoglossia. This shows that both L1 and L2 writers acknowledge the importance of engagement with other alternative voices in their research report. Similar results have been reported by Geng and Wharton (2016).

Table 7. Distribution of Monoglossia and Heteroglossia in L1 and L2 RAIs

<table>
<thead>
<tr>
<th></th>
<th>Monoglossia /k</th>
<th>Monoglossia %</th>
<th>Heteroglossia /k</th>
<th>Heteroglossia %</th>
<th>Total /k</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>L1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Move 1</td>
<td>19.1</td>
<td>43.6</td>
<td>24.7</td>
<td>56.4</td>
<td>43.8</td>
<td>100</td>
</tr>
<tr>
<td>Move 2</td>
<td>15.0</td>
<td>35.7</td>
<td>27.0</td>
<td>64.3</td>
<td>42.0</td>
<td>100</td>
</tr>
<tr>
<td>Move 3</td>
<td>13.9</td>
<td>62.9</td>
<td>8.2</td>
<td>37.1</td>
<td>22.1</td>
<td>100</td>
</tr>
<tr>
<td>Whole RAI</td>
<td>16.0</td>
<td>44.4</td>
<td>20.0</td>
<td>55.6</td>
<td>36.0</td>
<td>100</td>
</tr>
<tr>
<td><strong>L2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Move 1</td>
<td>14.3</td>
<td>32.3</td>
<td>29.0</td>
<td>65.8</td>
<td>44.1</td>
<td>100</td>
</tr>
<tr>
<td>Move 2</td>
<td>15.1</td>
<td>34.2</td>
<td>29.0</td>
<td>65.8</td>
<td>44.1</td>
<td>100</td>
</tr>
<tr>
<td>Move 3</td>
<td>10.1</td>
<td>41.2</td>
<td>14.4</td>
<td>58.8</td>
<td>24.5</td>
<td>100</td>
</tr>
<tr>
<td>Whole RAI</td>
<td>13.1</td>
<td>34.8</td>
<td>24.5</td>
<td>65.2</td>
<td>37.6</td>
<td>100</td>
</tr>
</tbody>
</table>

Note: /k = frequency per 1000 words, % = percentage of total engagement resources

However, looking deeper into the use of monoglossia and heteroglossia in each of the rhetorical moves of RAIs reveals that L1 and L2 writers act differently in move 1 and move 3. In move 1, although both groups have
mostly favored heteroglossia, L2 writers have relied more than L1 writers on this type of proposition (67.7% vs. 56.4%, respectively). In move 3, on the other hand, L2 writers have favored heteroglossia more than monoglossia (58.8% vs. 41.2%), contrary to L1 writers (37.1% vs. 62.9%). In move 3, which involves the specification of the research topic, tools and methods for doing research, and sometimes the expected outcomes (Swales, 2004), Iranians have mostly preferred to acknowledge alternative voices as in [5]. This might be indicative of the lower self-confidence of Iranian writers since they write in a foreign language and consider themselves as peripheral members of the related discourse community (Xie, 2016) and, thereby, try to justify their propositions via reference to other credible voices in the discourse community.

[5] In line with other research on language learning strategies which has tried to identify the features of 'good language learners' (Dörnyei & Skehan, 2005), this study aims to … (L2-13)

As discussed earlier, heteroglossic propositions are of two main types: contraction and expansion (Martin & White, 2005). Figures 5 and 6 show that the tendency to restrict the dialogic space for alternative voices is relatively higher in L2 texts in all three moves of RAIs. It seems that L2 writers need to be careful in this regard since overemphasis on accepting or rejecting others’ ideas without leaving enough space for challenging them does not seem to be a wise choice, especially in a discipline like AL, in which definite conclusions are not easily possible due to the tentative nature of theories and concepts.
As for the specific subcategories of contraction and expansion, Table 8 indicates that the two groups of writers have made similar choices as regards contraction subcategories. They have mostly favored to proclaim statements of external voices in all three moves of the RAI rather than denying or countering them. This shows that acceptance of others’ ideas is far more
favorable than rejecting them while making reference to external voices in RAI s. Iranian writers have followed a similar pattern to L1 writers, showing that they have successfully aligned themselves with the norms and conventions of academic discourse community in this regard.

Table 8.

*Distribution of the Subcategories of Contraction and Expansion in L1 and L2 RAI s*

<table>
<thead>
<tr>
<th>Categories</th>
<th>Contraction</th>
<th>Expansion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>disclaim(%)</td>
<td>proclaim (%)</td>
</tr>
<tr>
<td>L1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Move 1</td>
<td>6</td>
<td>94</td>
</tr>
<tr>
<td>Move 2</td>
<td>4</td>
<td>96</td>
</tr>
<tr>
<td>Move 3</td>
<td>7</td>
<td>93</td>
</tr>
<tr>
<td>L2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Move 1</td>
<td>3</td>
<td>97</td>
</tr>
<tr>
<td>Move 2</td>
<td>4</td>
<td>96</td>
</tr>
<tr>
<td>Move 3</td>
<td>8</td>
<td>92</td>
</tr>
</tbody>
</table>

As for dialogic expansion, L1 writers have mainly tried to distance from propositions of other researchers in move 1 and 2 by attributing them to external voices, as in [6]; while in move 3, they have tended to leave space for external voices (which is the function of entertain resources) mainly by highlighting the tentative nature of their findings via the use of modals, as in [7].

[6] Affective activities are claimed to reinforce the form–meaning connections established during referential activities by helping the learners relate to the …(L1-43)

[7] This very fact might generate certain circumstances in these institutes incomparable to public institutes which are … (L1-19)

L2 writers, however, have shown to be relatively unwilling to attribute propositions to external voices as compared to their L1 counterparts. In all
moves, they have chosen not to be as invisible as L1 writers in this type of propositions. Authors do not always agree with all of the ideas and statements of other researchers in the areas related to their own topic although they have to include them in their research report in order to comply with the disciplinary conventions. To keep distance from the relatively untenable ideas and statements, authors can attribute them to other external voices (via the use of phrases like X believes that, Y claims that, etc.). This is a strategy that L1 writers have used more frequently than L2 writers throughout the RAIs. Therefore, L2 writers need to be more conscious in this regard when referring to other researchers’ ideas and statements.

**Graduation Resources in L1 and L2 AL RAIs**

Graduation in the appraisal system deals with scaling down or scaling up gradable values and is of two types: force and focus (Martin & White, 2005). In the former, the intensity or amount of an entity is graded (e.g., highly important, a widespread problem) whereas in the latter, boundaries of a categorical meaning are softened or sharpened (e.g., actual research) (Martin & White 2005). In the table below, the distribution of graduation resources dealing with force and focus and their orientation in the different rhetorical moves of L1 and L2 English AL RAIs are presented.

Considering the overall pattern of graduation in both L1 and L2 RAIs, the results indicate that the frequency as well as the percentage of the resources dealing with force is considerably higher than those dealing with a focus in all rhetorical moves. Moreover, upscaling choices are dominant in both groups of texts and through all rhetorical moves of the RAIs, a finding which is consistent with the results reported by Thomas et al. (2015) and Xie (2016).
Table 9.

**Distribution of Graduation Resources in L1 and L2 AL RAI s**

<table>
<thead>
<tr>
<th></th>
<th>Force /k</th>
<th>Force %</th>
<th>Focus /k</th>
<th>Focus %</th>
<th>Force/Tot. /k</th>
<th>Focus/Tot. %</th>
<th>Orientation ↑ (%)</th>
<th>Orientation ↓ (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>L1</td>
<td>Move 1</td>
<td>22.9</td>
<td>85.4</td>
<td>3.9</td>
<td>14.6</td>
<td>26.8</td>
<td>100</td>
<td>88</td>
</tr>
<tr>
<td></td>
<td>Move 2</td>
<td>18.8</td>
<td>76.1</td>
<td>5.9</td>
<td>23.9</td>
<td>24.7</td>
<td>100</td>
<td>65</td>
</tr>
<tr>
<td></td>
<td>Move 3</td>
<td>7.5</td>
<td>52.4</td>
<td>6.8</td>
<td>47.6</td>
<td>14.3</td>
<td>100</td>
<td>72</td>
</tr>
<tr>
<td>L2</td>
<td>Move 1</td>
<td>10.8</td>
<td>84.4</td>
<td>2</td>
<td>15.6</td>
<td>12.8</td>
<td>100</td>
<td>89</td>
</tr>
<tr>
<td></td>
<td>Move 2</td>
<td>24.0</td>
<td>87.9</td>
<td>3.3</td>
<td>12.1</td>
<td>27.3</td>
<td>100</td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>Move 3</td>
<td>6.9</td>
<td>73.4</td>
<td>2.5</td>
<td>26.6</td>
<td>9.4</td>
<td>100</td>
<td>78</td>
</tr>
</tbody>
</table>

Note: /k = frequency per 1000 words, % = percentage of total graduation resources, ↑ = up-scaling, ↓ = down-scaling

Despite similarities in the general pattern of graduation, the two groups of writers appear to have subtle and notable differences in details. In move 1, L1 writers have used graduation resources dealing with force more frequently than L2 writers (22.9 vs. 10.8), although the percentages of total resources dealing with force and focus as well as their orientation are similar in both groups. In other words, in order to establish a territory for their research, L1 writers have resorted to the intensity and amount of attitudinal meanings more frequently than L2 writers. Regarding the function of move 1, which is justifying the worth of the research topic and creating interest in the readers (Swales, 1990, 2004), it is very important for authors of RAs to be as much convincing as possible to grab the attention and interest of their putative readers to continue reading the rest of the article. Emphasizing the intensity, amount, and extent of an issue (via the frequent use of appraisal resources dealing with force) is one of the effective strategies to achieve this purpose, as in [8]. Therefore, it seems that L2 writers should be more careful in this regard, since failing to show the widespreadness and intensity of the issues related to the research topic (considering the dominance of upscaling
resources) can lead to a failure in grabbing the interest and attention of the putative readers to continue reading the rest of the article.

[8] The words writers choose matter [attitude, appreciation, valuation, +] because the quality of a piece of writing depends to a large extent [graduation, force, upscaling] on the vocabulary that is deployed in it. (L1-8)

In move 2, total frequencies of graduation resources are similar for both sub-corpora; however, the percentages of total graduation resources used for force and focus indicate that L1 writers are fairly more concerned with focus as compared to L2 Iranian writers (23.9% vs. 12.1%, respectively). On the other hand, downscaling resources in this rhetorical move have increased in both groups of texts, especially L1 texts. Regarding the function of move 2, which is evaluating previous studies in order to highlight a research gap (Swales, 1990, 2004), this result is understandable; authors choose to highlight the research gap by addressing the inadequacies of previous studies via scaling down the values and fulfilments of previous studies. However, L1 writers’ relatively higher use of resources dealing with focus as compared to L2 writers indicates that native writers are relatively more concerned with the degree of specificity and fulfillment, as in [9], while Iranian non-native writers are more concerned with the amount and intensity of inadequacies, as in [10]. That is why the percentage of resources dealing with focus in L1 texts is relatively more than that in L2 texts.

[9] … research findings to date have failed to provide clear evidence that written CF helps learners improve linguistic accuracy over time. (L1-6)

[10] … interculturality is mostly mistaken with concepts such as multicultural, transcultural, or cultural approaches … (L2-47)

In move 3 of the RAIs, the results indicated a higher occurrence of graduation resources in L1 texts (14.3 vs. 9.4). Another noticeable observation
in move 3 was the higher percentage of focus in L1 texts as compared to L2 texts (47.6% vs. 26.6%) while the orientation of the resources was found to be not that much different in the two sub-corpora. Authors in move 3 present their own work by specifying their research topic, methodologies, and sometimes expected results and their possible uses (Swales, 1990, 2004). A review of the two sub-corpora revealed that this difference mainly stems from the fact that L1 writers tend to be more concerned with the specificity of their topic, as in [11], and the degree of fulfillment of their study, as in [12].

[11] It focuses particularly on the difficulties faced by the external evaluators (this author, her colleagues, and students) in managing these different aspects of … (L1-24)

[12] This exploratory study thus tries to build on the current advising literature by attempting to enter the inner world of the language-learning advisor-in-action in order to … (L1-12)

The results, therefore, suggest that L2 writers need to pay more attention to the focus of their study in move 3 of the introduction section. L1 writers have tried to delimit the scope of their study mainly through sharpening the boundaries of their research. They have also tended to somehow scale down the level of fulfillment and actualization of their study by using tentative verbs such as tries to and attempting to in [12]. This finding is in line with the results reported by Hyland & Milton (1997); they found that native writers of English tend to modify their propositions with probability marker while L2 writers are more inclined to be direct and state propositions with more certainty. This might be the result of inadequacies in L2 writers’ linguistic knowledge, as modifying propositions is linguistically more demanding than producing direct statements, or the differences between the two groups of writers as regards their cultural backgrounds and the socio-pragmatic conventions of their mother tongue. Thus, L2 writers need to be more conscious in this regard.
and try to take due measures in move 3 of their research report in order to delimit the scope of their study and fend off unauthorized interpretations from their findings.

**Conclusion**

All in all, our findings indicated that the overall pattern of using appraisal resources by L1 and L2 writers of English RAIs in the discipline of AL is not substantially different in terms of neither frequency nor percentage of the main appraisal categories (Table 3). However, further detailed analyses revealed that there are subtle and interesting differences between them regarding the use of more specific categories of appraisal system in different rhetorical moves of the introduction section. These findings corroborated the methodological approach adopted in this study regarding the analysis of specific appraisal resources in each of the rhetorical moves of RAIs.

Our focus on the RAs of just one discipline in this study helped to provide more detailed and practical insights for novice writers as regards the use of evaluative language. Although this choice laid the ground for obtaining practical insights, it restricted the generalizability of the findings to other disciplines, which can be considered one of the limitations of this study. Further research can be undertaken by other scholars conducting in-depth analyses on the use of evaluative resources in RAIs of other disciplines. Moreover, in the present study, we focused on RAs as one of the most important genres of academic writing. Future studies can focus on other genres of this discourse community and analyze evaluative language in, for instance, book reviews, theses, dissertations, essays, etc.

The findings of this study can be quite useful for EAP instructors and learners, novice writers, researchers, and also material developers and course designers by helping them to detect areas of difficulty in the expression of
stance, raising their awareness about the methods of stance-taking in academic writing, and helping to address the issue of stance-taking more effectively and more comprehensively in writing courses.

References


