Research Paper

Heteroglossic Engagement Resources in Discussion Sections of Good and Excellent Master of Arts Theses Written by Iranian EFL Students in Applied Linguistics

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Abstract
This study compares the use of heteroglossic engagement resources in the discussions of MA theses rated as good versus excellent written by Iranian EFL students majoring in TEFL. Engagement, a subsystem of the Appraisal model within Systemic Functional Linguistics (SFL), deals with writers’ authorial voice and how they position their voice with regard to, and engage with, alternative voices and positions in a communicative context. The final corpus of the study consisted of 24 MA theses in TEFL from four universities in Iran divided into two groups of theses rated as good and excellent based on the scores awarded to them and the raters’ reassessment. In addition to a qualitative analysis, descriptive and inferential statistics were applied to analyze the data. The results showed that heteroglossic resources were not equally employed by the authors. Although there was a correlation between the use of heteroglossic resources in the theses and their assigned rates, authors of excellent theses utilized more expand values compared to good theses. The qualitative analysis revealed that writers of excellent theses were

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more successful in expressing their authorial stance through dialogically contractive and expansive resources. Moreover, the results provide evidence that heteroglossic engagement resources are helpful in writing academically acceptable texts.

**Keywords:** Academic Writing, Appraisal Model, Engagement Resources, MA Theses

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## 1. Introduction

English academic writing plays a vital role in predicting the academic success of students majoring in second or foreign languages. However, it brings about great difficulties for the students whose first language is not English (Salmani Nodoushan & Khakbaz, 2011). In fact, English academic writing is a complex enterprise which is socially constructed and calls for a great amount of practice. One of these challenges is brought up when EFL student writers aim to express argumentation and authorial stance in their writing (Englander, 2006; Flowerdew, 2001). Although guidelines on academic writing often provide some information for EFL learners to follow (Robitaille & Connelly, 2007; Zemek & Rumisek, 2005), it seems to be little regarding authorial positioning in academic texts. Therefore, when such students embark on, for example, writing their theses, they may not be successfully engaged in others’ opinions, which makes their work below par. The reason lies in the fact that an academically written text should reflect how the writer deals with the opinions of others and how s/he interacts with potential readers. Actually, one of the main functions of academic writing for the writers is to express their opinions or attitudes towards people or things, and through written texts, they construct solidarity and alignment with potential or target readers (Thompson, 2001). As a well-established domain
of research, this kind of evaluation and interaction has been viewed and termed differently including attitude (Halliday, 1994), stance (Biber & Finegan, 1989; Hyland, 1999), evaluation (Hunston & Thompson, 2000), meta-discourse (Crismore, 1989), and appraisal (Martin, 2000). However, researchers have been less concerned with evaluation and interaction in EFL/ESL students’ academic writings (Coffin & Hewings, 2004) and much attention has been given to expert texts (Hyland, 2005a). When trying to write academic texts in their courses, Iranian EFL learners may face considerable challenges as to engaging with the expressions of others; they tend to poorly state others' experiences and statements in their own words, and this can be a distinguishing factor when assessing the strengths and weaknesses of their writing (Bahmani et al., 2021; Loghmani et al., 2020; Sharifi et al., 2021). As far as writing research articles, dissertations and theses by EFL learners is concerned, the discussion section can be regarded as a vital section in which the writers’ predicament may be more noticeable because organizing a discussion section seems to be an arduous task, or at least more difficult than other sections when compared to writing other sections of a thesis (Wilkinson, 1991; Swales & Feak, 2003). Similarly, given the argumentative nature of the discussion section (Holmes, 1997; Jalilifar et al., 2012; Peacock, 2002) and the delicate interpersonal meanings and evaluative resources that need to be negotiated by writers in this section, the appraisal model may play a pronounced role in how discussion sections are evaluated. Therefore, the present study attempted to investigate how TEFL students use the resources of engagement as a subsystem of the appraisal model in the discussion sections of their theses.

2. Literature review

2.1 Appraisal Model

Appraisal model is an offshoot of Systemic Functional Linguistics (SFL) in general and its interpersonal metafunction in particular. Martin (2000)
defines Appraisal as “… the semantic resources used to negotiate emotions, judgements and valuations, alongside resources for amplifying and engaging with these evaluations” (P. 145). In the appraisal model, the interpersonal meaning is central not only to the communicative situation but also to the system itself (Martin & White, 2005). That is, linguistic communication is considered in the broadest sense of its meaning (Jullian, 2008). From this perspective, “the basic reason for advancing an opinion is to elicit a response of solidarity from the addressee” (Thompson & Hunston, 2000, p. 143), and it is not merely a personal matter. According to Martin and White (2005, p. 35), appraisal entails the three main categories of Engagement, Attitude, and Graduation. These main systems are further divided into several other sub-systems. The following figure, adopted from Martin and White (2005), represents the appraisal model. In this figure, the square brackets represent either/or choices and the curly brackets represent options with the potential to be co-construed.

*Figure 1. An overview of appraisal resources (Martin and White, 2005, p. 38)*
2.1.1 Engagement

Engagement system is concerned with all the resources that writers can benefit from while using language to express their interpersonal positioning in their texts (White, 2001). According to Hood (2004), engagement is used to refer to how one’s personal state or commitment is expressed. Simply put, engagement tends to be a device with which we can explore the author’s opinion. It covers resources that provide additional voices for discourse by using projection and consists of the two categories of *Monogloss* and *Heterogloss*. Whereas using monogloss resources means leaving no room for other voices and opinions, employing heterogloss resources means making reference to alternative positions and voices (Martin & White, 2005). Heterogloss is further divided into *contract* and *expand* which are in turn branched out into a few other sub-categories, as shown in Figure 2 (Martin & White, 2005) with *contract* including *disclaim* and *proclaim*, and *expand* consisting of *entertain* and *attribute*. It should be noted that in the discussion sections, the justification of the obtained results and their solidarity with the previous studies are of paramount importance and this can mostly be realized by heteroglossic engagement resources. For this particular reason, the present study focused only on this very sub-category of engagement. Since no instances of conditional verbs, rhetorical questions, and hearsays were found in the corpus, these sub-branches of *entertain* were left out in the data analysis of the study.
**2.2 Previous Studies**

Appraisal model has been the framework of analysis in many studies since it has a widespread potential in analyzing different genres such as history (Coffin, 2000; Martin, 1995), reading and critical reading (Liu, 2010; Ruo-mei, 2016; Xinghua, 2010), and parliamentary argumentative discourse (Jakaza, 2013), to name a few. However, studies more relevant to this topic can be traced in registers like academic writing (Alia & Jomaa, 2023; Babaii et al., 2017; Hood, 2004, 2006; Hyland, 2005b; Jalilifar et al., 2016; Jin, 2015; Pascual & Unger, 2010; Sharifi, et al., 2021; Wu, 2007), IELTS writing (Coffin & Hewings, 2004; Nakamura, 2009), argumentative writing (Jalilifar & Hemmati, 2013; Ho, 2011; Lancaster, 2014; Lee, 2006; Liu, 2013; Liu & Thompson, 2009; Mori, 2017; Wu & Allison, 2003; Xinghua & Thompson, 2009) and the discussions, literature reviews and conclusions of

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**Figure 2.** Heteroglossic engagement and its divisions (Adopted from Martin & White, 2005)
RAs, theses and dissertations (Babaii et al., 2015; Bahmani et al., 2021; Deng & He, 2023; Geng & Wharton, 2016; Hamdan & Ahmad, 2023; Jalilifar et al., 2012; Loghmani et al., 2020; Ngongo, 2017; Salmani Nodoushan & Khakbaz, 2011; Xie, 2016).

A more detailed review of just a few studies on students’ theses, dissertations and research articles (RAs) using the appraisal model is given here. Ngongo (2017) investigated students’ theses writing in English by the analysis of text appraisal. Having examined qualitatively 10 English theses “written by undergraduate students who got ‘A’ grade in their theses examination” (p. 67), he found that among the main categories of the appraisal model (attitude, engagement and graduation), the highest frequency belonged to engagement resources. Likewise, regarding the sub-branches of engagement meanings, the obtained results showed that the number of expand meanings was significantly more than that of contract ones (p. 71). In another study, Loghmani et al. (2020) examined 10 doctoral dissertations’ discussion sections written by Ph.D. students of TEFL whose native language was English with the aim of finding how engagement resources were applied. The results indicated that writers inclined to exploit engagement devices which were dialogically contractive rather than dialogically expansive. That is, they would rather limit the different positions. The researchers state that this strategy may augment “writer-reader solidarity” (p. 11) if readers accept the writer is more professional regarding a special realm of study while at the same time it may decrease reader-writer harmony “when readers are resistant, more knowledgeable than authors, or have strong evidence against the author’s positioning” (p. 11). Similarly, Bahmani et al. (2021) in a qualitative study investigated discussion sections of 30 research articles written by American native and Iranian non-native writers to analyze the attitudinal meanings. They employed two coding systems including “Kanoksilapatham’s
Heteroglossic Engagement

(2005) discussion move structure and the modified version of APRAISAL theory (Xu, 2017) for identifying attitudinal resources” (p. 65). Their findings revealed that, regarding the employment of attitudinal resources, RAs written by native authors included “more authorial stance of ATTITUDE” (p. 65) as compared to those written by non-native writers.

Although these studies are a big step ahead vis-à-vis the use of engagement devices in discussion sections, a gap may still exist in the literature since few studies have specifically taken into account, and compared, the heteroglossic engagement resources used in good degree theses as contrasted with excellent degree theses written by Iranian students of TEFL. Therefore, the present study aimed to investigate the possible heteroglossic engagement resources employed by Iranian students of TEFL in the discussion sections of their MA theses and pinpoint the extent to which the use of these resources may affect the partial evaluation of theses, putting aside other factors potentially influencing the evaluation of their theses. In this regard, the following research questions were put forward.

1. What types of engagement resources have been used in MA theses with good and excellent scores written by Iranian students of TEFL?
2. What is the relationship between the use of engagement resources and the evaluation of MA theses as good and excellent?
3. How do the writers of good theses and excellent theses academically articulate their voice using heteroglossic engagement resources and what are some possible idiosyncrasies?

3. Methodology

3.1 The Corpus

The data for the present study were collected from four universities in the west of Iran (Razi University of Kermanshah, Ilam University, Islamic Azad University of Kermanshah and Islamic Azad University of Ilam). En masse, 28 MA theses written by Iranian students of TEFL were randomly selected as
follows: 8 theses (4 with good and 4 with excellent scores) from Razi University of Kermanshah, 6 theses (3 with good and 3 with excellent scores) from Islamic Azad University of Kermanshah, 8 theses (4 with good and 4 with excellent scores) from Ilam university and 6 theses (3 with good and 3 with excellent scores) from Islamic Azad University of Ilam. The random selection was done among MA theses completed within a 5-year period from 2015 to 2020. That is, among the theses whose assessments were also announced qualitatively (e.g., good and excellent score), 28 theses (14 theses with a good and 14 with an excellent score) were randomly selected and the intended parts (i.e., the title page, the result of the evaluation, and the discussion section) were copied by referring to authorities in the libraries of the afore-said universities.

The discussion sections were then extracted and coded by numbers from 1 to 28. That is, numbers 1 to 14 were assigned to discussion sections of good theses (Hereafter GTs) and numbers 15 to 28 to those of excellent theses (Hereafter ETs). However, due to the fact that some other factors may be involved when it comes to the final score/degree of a thesis, the discussion sections of the theses were reassessed by three raters who, to a great extent, were of the same academic status and had the experience of supervising and reviewing MA theses. To this end, the discussion sections of the selected theses were reassessed by the raters to evaluate the manuscripts based on the characteristics of the discussion section of a thesis by assigning a good score (scores between 16 and 17.99) or an excellent score (scores between 19 and 20) considering the by-laws of the Supreme Council for Educational Planning at the Ministry of Science, Research and Technology (approved in 2014). After this stage, inter-rater reliability was computed using the SPSS software (version 26) to ensure the consistency of the assigned scores. Using Pearson correlation coefficient, the value of 0.89 was obtained indicating that the
reliability of given scores was significantly acceptable (Mousavi, 1999). In the next stage, the raters’ assigned scores/degrees were compared to the degrees already given to the theses in defense sessions; the two sets of scores were in perfect harmony except for two cases regarding ETs. To be in line with the raters’ assessment, the two theses (within the excellent group) were removed from the corpus. Similarly, to have equal numbers of good and excellent theses, two good theses were randomly eliminated and therefore the final corpus consisted of 24 discussion sections of theses which, in turn, based on good and excellent degrees, were divided into two groups. Group One included 12 discussion sections qualified as GTs (numbered from 1 to 12) and Group Two comprised 12 discussion sections qualified as ETs (numbered from 13 to 24).

3.2 Procedure

The analysis of the appraisal resources can be conducted either in a top-down or in a bottom-up manner. The former is done by beginning with “prosodies and working down to their realizations” and the latter means commencing with “realizations and working back to the ‘mood’ of a text” (Martin & White, 2005, p. 70). The bottom-up manner was used in the present study.

Since the research included all heteroglossic resources (except for conditional verbs, rhetorical questions and heresays), the abbreviations of the intended resources presented in Table 1 will hereafter be used in order to save space. It should be mentioned that since no cases of conditional verb, rhetorical question and hearsay (as one of the sub-branches of attribute) were found in the analysis of the discussion sections of the examined theses, they are not included in Table 1.
The discussion sections coded from 1 to 12 for GTs and 13 to 24 for ETs were analyzed and annotated manually by the researchers of the present study in two phases. First, one of the researchers precisely examined the texts and underlined the words, phrases and sentences in which tokens of the engagement system were used. For this purpose, the researcher categorized the verbs, adverbs, adjuncts and negations in the related categories and subcategories using the abbreviations in Table 1. For example, it was found that in the subcategory of disclaim, some terms like don’t, doesn’t, didn’t, never, there is nothing …, is not the case, etc. (as deny), and but, even, amazingly, although, in addition to, in contrast, just, only, however, yet, etc. (as counter) were employed. Then, the second researcher investigated the texts for the underlined heteroglossic resources and any inconsistency was decided based on Martin and White (2005).
3.3 Statistical analysis

At first, Kolmogorov-Smirnov test was performed based on GTs (theses with a good degree) and ETs (theses with an excellent degree) sub-corpora. Then descriptive and inferential statistics were applied to the data. Likewise, a qualitative analysis was carried out to find possible patterns or idiosyncrasies used in the GT and ET sub-corpora.

4. Results

4.1 Descriptive analysis

To answer the first research question, i.e., the distribution of the main components of engagement (contraction and expansion) and the sub-categories of each component, it was necessary to ensure the data were normally distributed. For this purpose, Kolmogorov-Smirnov test was performed and with respect to the results of the test, the data were non-parametric (Table 2)

Table 2
One-Sample Kolmogorov-Smirnov Test to Show the Normality of Data

<table>
<thead>
<tr>
<th>N</th>
<th>Kolmogorov-Smirnov Z</th>
<th>Asymp. Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>24</td>
<td>1.647</td>
<td>0.009</td>
</tr>
</tbody>
</table>

Since the obtained significance level in One-Sample Kolmogorov-Smirnov Test is more than 0.05 (Table 2), the distribution of data is not normal.

Regarding the distribution of engagement resources, Table 3 shows the mean of the number of heteroglossic engagement sources and the two main components (contract & expand) in the two groups of GTs and ETs.

Table 3
Mean of the Number of Engagement (Contract and Expand) Resources

<table>
<thead>
<tr>
<th>Mean</th>
<th>Good</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engage</td>
<td>30.25</td>
<td>41.91</td>
</tr>
<tr>
<td>Contract</td>
<td>17.16</td>
<td>19.75</td>
</tr>
<tr>
<td>Expand</td>
<td>13.08</td>
<td>22.16</td>
</tr>
</tbody>
</table>
As Table 3 shows, the mean of the use of heteroglossic engagement resources in GTs is 30.25 while that of ETs is 41.92, indicating that the employment of engagement meanings in ETs is overall higher than that of GTs. Likewise, whereas the mean of the use of contract devices in GTs is 17.16, it is 19.75 for ETs. In addition, the means for the use of expand devices in GTs and ETs are 13.08 and 22.16, respectively. According to the above table, the use of engagement and its two main components is higher in ETs than in GTs. For more clarification, the range, minimum, maximum and mean of the subcategories of contract (disclaim and proclaim) and expand (entertain and attribute) are shown separately for the two groups of theses in Tables 4 and 5.

Table 4
Range, Minimum, Maximum and Mean of Subcategories of Contract (Disclaim and Proclaim) and Expand (Entertain and Attribute) in GTs

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Range</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eng</td>
<td>12</td>
<td>26.00</td>
<td>21.00</td>
<td>47.00</td>
<td>30.25</td>
</tr>
<tr>
<td>Cont</td>
<td>12</td>
<td>17.00</td>
<td>10.00</td>
<td>27.00</td>
<td>17.16</td>
</tr>
<tr>
<td>Disc</td>
<td>12</td>
<td>8.00</td>
<td>1.00</td>
<td>9.00</td>
<td>6.33</td>
</tr>
<tr>
<td>Proc</td>
<td>12</td>
<td>16.00</td>
<td>4.00</td>
<td>20.00</td>
<td>10.83</td>
</tr>
<tr>
<td>Exp</td>
<td>12</td>
<td>17.00</td>
<td>6.00</td>
<td>23.00</td>
<td>13.08</td>
</tr>
<tr>
<td>Ent</td>
<td>12</td>
<td>11.00</td>
<td>4.00</td>
<td>15.00</td>
<td>8.41</td>
</tr>
<tr>
<td>Att</td>
<td>12</td>
<td>6.00</td>
<td>2.00</td>
<td>8.00</td>
<td>4.66</td>
</tr>
</tbody>
</table>

Table 5
Range, Minimum, Maximum and Mean of Subcategories of Contract (Disclaim and Proclaim) and Expand (Entertain and Attribute) in ETs

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Range</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eng</td>
<td>12</td>
<td>56.00</td>
<td>22.00</td>
<td>78.00</td>
<td>41.91</td>
</tr>
<tr>
<td>Cont</td>
<td>12</td>
<td>27.00</td>
<td>8.00</td>
<td>35.00</td>
<td>19.75</td>
</tr>
<tr>
<td>Disc</td>
<td>12</td>
<td>21.00</td>
<td>3.00</td>
<td>24.00</td>
<td>9.91</td>
</tr>
<tr>
<td>Proc</td>
<td>12</td>
<td>16.00</td>
<td>3.00</td>
<td>19.00</td>
<td>9.83</td>
</tr>
<tr>
<td>Exp</td>
<td>12</td>
<td>42.00</td>
<td>10.00</td>
<td>52.00</td>
<td>22.16</td>
</tr>
<tr>
<td>Ent</td>
<td>12</td>
<td>36.00</td>
<td>3.00</td>
<td>39.00</td>
<td>13.66</td>
</tr>
<tr>
<td>Att</td>
<td>12</td>
<td>29.00</td>
<td>2.00</td>
<td>31.00</td>
<td>8.50</td>
</tr>
</tbody>
</table>

According to Tables 4 and 5, the means for contract components (i.e., disclaim and proclaim) in GTs are 6.33 and 10.83, respectively,
while these figures in ETs are 9.92 and 9.83. This means that the use of *disclaim* in GTs is lower than that in their excellent score counterparts (6.23<9.92), and the employment of *proclaim* in GTs is higher than that in ETs (10.83>9.83).

Likewise, the means for *expand* components (i.e., *entertain* and *attribute*) in GTs and ETs are 8.41, 4.66, 13.66 and 8.50, respectively. This shows that GTs employed *entertain* and *attribute* resources less frequently than did ETs (8.41<13.66; 4.66<8.50). Moreover, for a more detailed analysis, the mean scores related to the uses of heteroglossic values including the main components, the sub-categories of the components, and the branches of these sub-categories are compared in Table 6 and Figure 3.

Table 6

*Comparison of the Mean Scores of Using Engagement and All Sub-sets in GTs and ETs*

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>GTs</th>
<th>ETs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Eng</strong></td>
<td></td>
<td>30.25</td>
<td>41.91</td>
</tr>
<tr>
<td><strong>Cont</strong></td>
<td></td>
<td>17.16</td>
<td>19.75</td>
</tr>
<tr>
<td>Disc</td>
<td></td>
<td>6.33</td>
<td>9.91</td>
</tr>
<tr>
<td>Den</td>
<td></td>
<td>3.08</td>
<td>6.41</td>
</tr>
<tr>
<td>Coun</td>
<td></td>
<td>3.25</td>
<td>3.50</td>
</tr>
<tr>
<td>Proc</td>
<td></td>
<td>10.83</td>
<td>9.83</td>
</tr>
<tr>
<td>Conc</td>
<td></td>
<td>0.16</td>
<td>0.18</td>
</tr>
<tr>
<td>Pron</td>
<td></td>
<td>5.41</td>
<td>3.83</td>
</tr>
<tr>
<td>End</td>
<td></td>
<td>5.25</td>
<td>5.75</td>
</tr>
<tr>
<td><strong>Exp</strong></td>
<td></td>
<td>13.08</td>
<td>22.16</td>
</tr>
<tr>
<td>Ent</td>
<td></td>
<td>8.41</td>
<td>13.66</td>
</tr>
<tr>
<td>Prob</td>
<td></td>
<td>6.66</td>
<td>9.66</td>
</tr>
<tr>
<td>App</td>
<td></td>
<td>0.75</td>
<td>2.00</td>
</tr>
<tr>
<td>Opin</td>
<td></td>
<td>0.91</td>
<td>2.00</td>
</tr>
<tr>
<td>Att</td>
<td></td>
<td>4.66</td>
<td>8.50</td>
</tr>
<tr>
<td>Ack</td>
<td></td>
<td>3.75</td>
<td>7.66</td>
</tr>
<tr>
<td>Dist</td>
<td></td>
<td>0.91</td>
<td>0.99</td>
</tr>
</tbody>
</table>
As evident in Table 6, and regarding the major and minor sub-divisions of heteroglossic engagement ties and their distributions in GTs and ETs, ETs were superior to GTs in most of the 12 sub-categories. That is, out of 16 sub-branches of engagement devices, GTs were behind ETs except in the two sub-categories of proclaim and pronounce, which belonged to the major sub-category of contract.

4.2 Inferential analysis

To investigate the second research question, Spearman correlation coefficient was carried out between GTs and ETs for the use of heteroglossic engagement ties in general (Table 7), and for the main sub-categories of contract and expand in particular (Table 8).

Table 7
Spearman Correlation Coefficient between Heteroglossic Engagement and Degree (Good/Excellent)

<table>
<thead>
<tr>
<th>degree</th>
<th>Correlation coefficient</th>
<th>Sig (2-tailed)</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.367</td>
<td>0.01</td>
<td>24</td>
</tr>
</tbody>
</table>
Heteroglossic Engagement

Table 8

Spearman Correlation Coefficient among Contract, Expand and Degree (Good/Excellent)

<table>
<thead>
<tr>
<th>Degree</th>
<th>Contract</th>
<th>Expand</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Correlation coefficient</td>
<td>0.121</td>
</tr>
<tr>
<td></td>
<td>Sig (2-tailed)</td>
<td>0.575</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>24</td>
</tr>
<tr>
<td>Contract</td>
<td>Correlation coefficient</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>Sig (2-tailed)</td>
<td>0.361</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>24</td>
</tr>
<tr>
<td>Expand</td>
<td>Correlation coefficient</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig (2-tailed)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td></td>
</tr>
</tbody>
</table>

According to Table 7, there is a relationship between heteroglossic engagement and the scores assigned; however, the correlation is not strong (ρ=0.367). As shown in Table 8, there is a significant relationship between the score of a thesis and the use of expand (ρ=0.537) at the significance level of p = 0.05, but there is no significant relationship between the score and the use of contract in the theses under study. This means that GTs and ETs used contract resources in such a way that it is impossible to find an explainable relationship between the degree of the theses (good or excellent) and the rate of the use of contraction (ρ=0.121). However, considering the correlation coefficients and the significance level (p≤0.05), the error coefficients are less than or equal to 0.01 for expand, which confirms the confidence level of 0.95. This, in turn, indicates a moderate relationship between the use of heteroglossic engagement resources and the assigned degrees.

To show the possible differences in the use of heteroglossic engagement components in the two groups of GTs and ETs, Kruskal-Wallis Test was used to show the differences in the two groups in ranks. The ranks indicated the differences in the use of contract and expand. The details are shown in Table 9.
Table 9  
*Ranks the Use of Contract and Expand in the Two Groups Using Kruskal-Wallis Test*

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Contract</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>good</td>
<td>12</td>
<td>11.67</td>
</tr>
<tr>
<td>excellent</td>
<td>12</td>
<td>13.33</td>
</tr>
<tr>
<td>total</td>
<td>24</td>
<td></td>
</tr>
<tr>
<td><strong>Expand</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>good</td>
<td>12</td>
<td>8.79</td>
</tr>
<tr>
<td>excellent</td>
<td>12</td>
<td>16.21</td>
</tr>
<tr>
<td>total</td>
<td>24</td>
<td></td>
</tr>
</tbody>
</table>

As Table 9 shows, the mean rank for *contract* in GTs is 11.67, but this rank is 13.33 for ETs. Therefore, there is a difference in using *contract* in the two groups. However, the mean ranks for *expand* in GTs and ETs are 8.79 and 16.21, respectively, which points to a significant difference in using *expand* in the two groups.

Moreover, the Chi-square was calculated through the Kruskal-Wallis Test for *contract* and *expand* in GTs and ETs to find out whether there is a relationship between these heteroglossic resources. The results are presented in Table 10.

Table 10  
*Chi-squares for Contract and Expand in GTs and ETs*

<table>
<thead>
<tr>
<th></th>
<th>value</th>
<th>df</th>
<th>Asymp.Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>chi-square (contract)</strong></td>
<td>0.335</td>
<td>1</td>
<td>0.563</td>
</tr>
<tr>
<td><strong>chi-square (expand)</strong></td>
<td>6.641</td>
<td>1</td>
<td>0.010</td>
</tr>
</tbody>
</table>

Table 10 shows the results of the Kruskal-Wallis Test for the two groups. As shown in the table, the values of Chi-square ($x^2= 0.335$) and the significance level for *contract* in the two groups of GTs and ETs are not significantly different. However, the value of Chi-square ($x^2= 6.641$) at the significance level of 0.01 ($p \leq 0.01$) for *expand* indicates that there is a significant difference between the use of *expand* resources in the two groups. Therefore, we can say that heteroglossic engagement resources were not used equally in GTs and ETs. In addition to the quantitative and inferential
analyses, a qualitative analysis was conducted to see how the writers of GTs and ETs express their possible authorial positions through dialogically contractive or expansive resources.

4.3 Qualitative analysis

To investigate how the writers of GTs and ETs academically articulated their voice by the use of heteroglossic engagement resources and scrutinize possible idiosyncrasies (RQ3), a qualitative analysis regarding the sub-categories of contract and expand resources was conducted. Below are extracts taken from the corpus in which different types of engagement markers were used. The theses from which the sentences were extracted are tagged as T1, T2, T3, etc.

1. The students are assumed not [contract>disclaim>deny] to retreat to the relevant words, ... (T2, GTs)
2. In my analysis, I always had an eye on ideological interface and never [contract>disclaim>deny] overlooked the role of cognition (T3, GTs).
3. … the students’ role and teachers’ role were the aspects of English package which partially were not [contract>disclaim>deny] in line with … (T14, ETs)
4. … but [contract>disclaim>counter] the learning/teaching situations must verify the usefulness of the model in practice which, as you see, the results significantly approved the point (T7, GTs)
5. However, [contract>disclaim>counter] relying on the results we found that incidental learning of vocabulary had a side-effect… (T16, ETs)

Regarding the first sub-category of contract, i.e., disclaim, ETs outperformed GTs in employing deny markers, but in most cases these resources were accompanied by some adverbs in ETs as evident in Extracts 2 and 3. With respect to counter resources, the GTs and ETs were alike although ETs explained possible reasons and mentioned more previous research following counter resources to acknowledge and support their
results. Likewise, both GTs and ETs occasionally used reader reference; that is, GTs used second person pronoun you (Extract 4) and ETs employed first person pronoun we (Extract 5). Extracts 6, 7 and 8 illustrate the use of the second sub-branch of proclaim (concur, pronounce and endorse) for GTs and extracts 9, 10 and 11 do the same for ETs.

6. We can say [contract>proclaim>pronounce] that these results certainly [contract>proclaim>concur] confirm that learning styles can affect … (T7, GTs).
7. The finding of this research further agree with [contract>proclaim>endorse] the argument that students’ beliefs about language learning … (T11, GTs).
8. Indeed, [contract>proclaim>pronounce] as you can see, the results have been undoubtedly in line with Cunningsworth (1995) (T9, GTs).
9. The results obtained from the questionnaire showed that [contract>proclaim>endorse] the flipped learning model for classroom can naturally [contract>proclaim>concur] increase interaction among EFL learners (T17, ETs).
10. It is clear that [contract>proclaim>pronounce] teachers may acquire teaching skills from different sources including teacher-training programs or in-service ones at universities (T15, ETs).
11. In fact [contract>proclaim>pronounce] relying on interviews, some teachers may use their experience of learning English as bases of teaching (T13, ETs).

As proclaim regards, the writers of GTs and ETs exploited different markers to express their voice and convince the readers. For instance, in Extract 8 taken from GTs, although the writer used the pronounce value, he intended to invite readers to be in complete harmony with him by using the adverb undoubtedly. However, this kind of making solidarity may not be common in academic writing because of being face-threatening. On the other hand, and in spite of the fact that the writer of ET in Extract 11 articulated a pronounce value to dialogically narrow down the distance with the readers,
he employed a modal verb of probability (may) to consider the readers’ position.

12. **It is probable that** [expand> entertain> probability] when awareness is acquired, resistance is also observed. So, one can conclude that … (T6, GTs).

13. **It seems** [expand> entertain> appearance] necessary for teachers to endeavour to expand their cognition and beliefs about reading strategies, and … (T3, GTs).

14. **In my opinion**, [expand> entertain> opinion] the role of cognition should not be neglected and … (T5, GTs).

15. **It may be** [expand> entertain> probability] argued that EFL learners taught about pragmatic competence (group 1) had a significantly better performance than pragmatically untrained EFL learners (group 2). This finding is consistent with Kasper and Rose (2002) … (T19, ETs).

16. The analysis of the completed questionnaires along with the interviews revealed that some of the teachers **apparently** [expand> entertain> appearance] were unaware of the flipped learning model classroom… (T17, ETs).

17. Based on **teachers’ ideas** [expand> entertain> opinion], the process of writing can be done and evaluated well in the classes with large populations … (T24, ETs).

Relying on the above-mentioned examples, it seems that ETs were qualitatively more successful than GTs in providing more space for alternative positions by making use of *entertain* markers in general, and *probability* markers in particular. Comparing Extract 12 with Extract 15 shows that student writers of ETs employed the language of probability and enforced the stated position by referring to previous research to support their positions while student writers of GTs sometimes failed to mention previous research. In fact, it seems that GTs used the language of probability like the *contract* resources to close down the discussion, which may not be expected by the readers.
18. Cowan (2005, p. 55) suggests that assessment is the engine which drives students’ learning” (T11, GTs).

19. We may claim that the analyzed textbooks did not follow the rules of natural conversations happening in real situations and… (T2, GTs).

20. As Jones et al. (1997) stated, if one person speaks fewer words than the other one in dialogues, “the silenced interlocutor may have poorer practice opportunities in playing their roles as dialogue participants” (p. 69) (T24, ETs).

21. Horwitz (1987) claimed that inaccurate beliefs about language learning may lead to the deployment of less effective learning strategies (T17, ETs).

Regarding the attribute meanings, although both ETs and GTs used *acknowledge* values to find justification for their results and actually asked readers to be in harmony with their stance, ETs used significantly more *acknowledge* values compared to GTs. Similarly, in terms of *distance* values, it seems that ETs were more successful in taking stance with respect to some of the previous research as shown in extracts 19 and 21. In Extract 19 taken from GTs, the author used the first person pronoun *we* to accompany with a *distance* resource *(claim)*, which is unusual and makes it difficult for readers to realize the authorial position of the writer since the use of first person pronoun *we* in academic writing “may shorten the distance and stress more solidarity with the readers” (Jin, 2015, p. 39).

5. Discussion

This study investigated the distribution of the main resources of heteroglossic engagement and the related sub-categories in the discussion sections of GTs and ETs written by Iranian students of TEFL at four state and Azad universities in Kermanshah and Ilam provinces. More particularly, it examined the possible relationship between the heteroglossic resources...
employed in the discussion sections of MA theses and the scores (good or excellent) assigned to the theses.

According to the obtained results, ETs outperformed GTs regarding the employment of heteroglossic engagement resources in general (41.9>30.25) and the main sub-categories of *contract* (19.75>17.16) and *expand* (22.16>13.08) in particular. Concerning the argumentative nature of discussion sections (Holmes, 1997; Peacock, 2002), the results of the present study are consistent with those of Jalilifar and Hemmati (2013) in which high-graded essays were reported to have used more *expand* resources than low-graded ones. However, when it comes to *contract* resources, their results are apparently contradictory to the present study. That is, low-graded essays generally used more *contract* resources than high-graded essays. However, detailed analyses in their study showed that low-graded essays employed more *pronounce* meanings (as one of sub-categories of *proclaim*) in comparison with high-graded ones. In other words, high-graded essays were superior to low-graded ones in terms of *deny* and *counter* (as the two sub-branches of *disclaim*) along with *concur* (as one of the sub-categories of *proclaim*) but were behind low-graded essays in terms of *pronounce* and *endorse* (as two subcategories of *proclaim*) (p.74). Therefore, with respect to the sub-categories of *contract*, the results of this study are to a great extent in harmony with those of Jalilifar and Hemmati since ETs were better than GTs in terms of *disclaim* (*deny* and *counter*) and *pronounce* (one of the sub-categories of *proclaim*). Of course, a slight difference in the results between the two studies can be observed regarding *concur* and *endorse*. This may be due to the fact that, as found in the present study, ETs cited previous studies more than GTs did to support and justify their results by using some verbs like *confirm* and *demonstrate*, which can be categorized as *endorse*. Likewise, regarding the sub-branch of *concur*, although the difference
between ETs and GTs was not significant, the reason for this difference probably lies in the fact that ETs employed some types of *concur* value with a higher frequency to dialogically show that the obtained results and the previous research enforce their stance. Moreover, one argument that seems plausible regarding the qualitative analysis of the examined theses may pertain to the fact that although both GTs and ETs employed *contract* devices in some parts of the discussion section to dialogically invite readers to be consistent with their stance, ETs were more cautious about readers’ position and face in academic writing. Similarly, the results of this study indicating that GTs (mean rank=11.67) used more *contract* resources, especially the *pronounce* values, than ETs (mean rank=13.33) are partly supported by Wu’s (2007) and Liu’s (2013) studies reporting that low-graded essays exploited more *pronounce* items (a sub-type of contraction ties) as compared to high-graded essays.

Similarities were also found between our results and those of a study by Lancaster (2014) on argumentative texts (i.e., Economy) where high-graded argumentative texts used more *expand* resources than *contract* ones and low-graded texts showed a kind of variation regarding the use of *contract* and *expand* resources. Similarly, this research partially confirms the results of some previous studies (Ho, 2011; Lee, 2006) where successful writers mostly used the *entertain* values (a sub-branch of *expand*) and demodalization process in their writings. Since *entertain* is a sub-type of *expand*, it might be argued that ETs follow, to some extent, the rules that successful writers employ and, as a result, obtain a higher score from the examiners. To mention another similar study, there is a sign of congruence between the results of the present study and those of Ruo-meii (2016) which showed that the frequency of *contract* devices is smaller than that of *expand* in critical reading passages (p. 872). Since critical reading passages are standard and
considered academic in terms of using *expand* resources in that they are written by experts in the field, it may be cautiously argued that the ETs examined in the current study could partially meet the criteria of acceptable academic texts regarding the use of heteroglossic devices, particularly with regard to *expand* meanings.

Moreover, the findings of this study are supported by the study done by Ngongo (2017) who found that Indonesian undergraduate students tend to employ *expand* resources noticeably more than *contract* meanings. Although Ngongo (2017) analyzed 10 theses written by undergraduate top students and there was no comparison between theses in terms of the scores they received, it can be concluded that these theses are probably similar to ETs analyzed in the current study. In both studies (top students in Ngongo’s study and excellent theses in the present study), students preferred to use more *expand* meanings (for example by using more citations) to support their findings. Likewise, since a strong correlation was found between the use of *expand* devices and the score of a thesis in this study (Table 4.7), it may be argued that MA students’ frequent use of *expand* resources in the discussion section of the theses in an Iranian context helps to convince the examiners to assess their theses with excellent degrees provided, of course, that the other sections of their theses are academically mature. However, a precise comparison shows that the results of this study are not consistent with those of Ngongo’s (2017) study in terms of the sub-categories of *expand* (*entertain* and *attribute*). That is, in this study, both GTs and ETs used *entertain* more than *attribute* whereas in Ngongo’s study, it was vice versa. Therefore, on the whole, regarding heteroglossic engagement resources, Ngongo’s (2017) study lends support to our results, except for *expand* sub-divisions. One reason for this discrepancy may be the fact that undergraduate students in Ngongo’s (2017) study preferred to use more citations (p.71) whereas in the
present study, as shown in the qualitative analysis (e.g., Extract 20), writers of ETs not only used citations by using *acknowledge* values to support their authorial stance but they also considered readers’ position via the employment of *entertain* resources (probability and modal verb resources). The lower frequency of *attribute* resources in ETs (mean=8.5) and GTs (mean=4.66) in this study accords with Jalilifar, Hayati and Namdari (2012) who compared international research article discussions with those written by local (Iranian) writers and found that the texts of the latter had a lower frequency for reference to previous research (p. 10). If the mean for sub-branches of *attribute* meanings is taken into account, there is a sign of more harmony with Jalilifar, Hayati and Namdari’s (2012) study. They found that in local research article discussions, the frequency for reference to previous research for *support* (N=15) was dramatically higher than that of *contrast* (N=2). If *support* and *contrast* are considered to be equivalent to *acknowledge* and *distance*, then the present study replicates the above-mentioned finding. That is, the employment of *acknowledge* resources in GTs (mean=3.75) and ETs (mean=7.66) was noticeably higher than that of *distance* (mean for GTs=0.91 and mean for ETs=0.99). An argument that may be put forward here is that writers of both GTs and ETs attempted to use external sources in a way that they found support for their voice but ETs were more successful in this attempt. Therefore, less proficient MA students should receive more instruction in terms of using a variety of dialogic engagement meanings to show solidarity and possible distance with the previous studies and simultaneously consider their readers’ face.

Furthermore, the results of the present study are in part in agreement with the results obtained by Read et al. (2007), who discussed the methodology of exercise annotating book reviews according to the Appraisal framework. As stated in their study, the use of appraisal devices might be varied in different
situations, i.e., the appraisal devices are used differently by various users and the use of its constituents is like filling a puzzle, depending on which part completes this puzzle. In addition, the research type and the researcher’s inclination toward appraisal components may be effective in using appraisal devices so that this rate is always moving through a continuum. In the present research, a significant relationship was found between the \textit{expand} resources and the score of MA theses. This may imply that the writers of ETs were more successful in applying heteroglossic engagement resources, and thus could make dialogically better and stronger communication to persuade the readers or the examiners. Put simply, writers of ETs were able to fill the puzzle better than GTs.

The findings of this study were, however, different from those of Geng and Wharton (2016), who found that Chinese-L1 and English-L1 Ph.D. students employed \textit{contract} resources noticeably more than \textit{expand} ones, which may demonstrate that Iranian MA students of TEFL are more willing to take stance through the employment of probability devices and acknowledging previous research. The contradictory results of these two studies may be due to the analysis of two different rhetorical sections of the examined Ph.D. dissertations and MA theses, i.e., literature reviews and discussion sections as well as the differences in the corpora of these two studies. That is, the examined MA theses in the present study were written by Iranian EFL learners but in Geng and Wharton’s (2016) study, the corpus consisted of dissertations written by native-speakers of Chinese and English. Contrary to the results obtained in the current study, Loghmani et al. (2020) found that in the dissertations written by English-speaking PhD students in the field of TEFL, \textit{contract} resources (62\%) were used more often than \textit{expand} ones (38\%). With respect to the higher percentage of \textit{contract} meanings, the researchers argued that English-speaking PhD students tended
to limit the alternative positions which “can enhance writer-reader solidarity when readers have already been convinced that the author has greater expertise than them or when they have no reason to reject the author’s value position” (p. 11). Based on this statement, it may be plausible to argue that Iranian MA students in the present study, particularly those writing ETs, employed fewer *contract* meanings to decrease the possibility of being rejected by the readers/examiners and instead exploited more *expand* resources to support their results and stance, and at the same time dialogically assign room for possible alternative positions. Another justification may be related to the difficulty of academic writing for EFL learners (Wilkinson, 1999) and the difference between the level of academic achievement of PhD and MA students. The theses examined in the current study were written by Iranian MA students of TEFL, who may not be as proficient and academically prepared as PhD students in using *contract* resources along with *expand* meanings in a balanced way to create solidarity with the readers/reviewers and to consequently convince them of their positions.

The results of the study by Sharifi et al. (2021) lend some support to our results in terms of the performance of writers of GTs in employing more *contract* meanings than *expand* ones. However, their results are inconsistent with those of the present study when it comes to the performance of ETs. Similarly, with respect to the sub-categories of *expand* resources, they have found different results because unlike the current study, *attribute* resources had a significantly higher mean than *entertain* ones. Since the MA theses examined in both studies were written by Iranian students, it appears that Iranian students differently convey dialogic positions and authorial evaluation springing from miscellaneous knowledge level towards academic writing. Another reason for the discrepant results may be rooted in the
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analysis of two different sections of MA theses in these studies, that is, the introductions and the discussions.

Finally, based on our qualitative analysis, ETs performed better than GTs in terms of the articulation of dialogically contractive and expansive resources. For instance, regarding one of the sub-categories of disclaim, i.e., deny, while ETs used not as a marker for deny, GTs in some cases used never instead which has a higher grade on a continuum of gradeability for appraisal resources (Martin & White, 2005). This, in turn, may have more potentiality for narrowing down the space for alternative positions. Likewise, in most cases, when the writers of ETs employed deny values, it seemed that they accompanied this marker by some adverbs (e.g., partially, relatively, etc.) to soften the effect of the deny marker and consequently considered the readers’ position. Another result obtained from the qualitative analysis was that GTs and ETs used the mechanism of reader reference differently. That is, whereas ETs sometimes used first person pronoun we, GTs mostly employed second person pronoun you for referring to readers. The use of first-person pronoun we in ETs is fairly consistent with the findings of Jin (2015), who found that expert writers used the inclusive first person we for reader reference. Due to the fact that in the present study the writers of GTs mainly used second-person pronoun you, it may be argued that compared to ETs, GTs seem to partially fail to use the first-person pronoun we as a mechanism of reader reference because “the second person you rarely occurs in academic writing” (Jin, 2015, p. 38). The final argument is that, as it was revealed in the qualitative analysis, in few cases where GTs employed the first-person pronoun we, it was not accompanied by suitable heteroglossic resources. For instance, in one case, the first-person pronoun (we) was accompanied by a distance resource (see Extract 19), and it seems that there is no harmony between first-person pronoun we and the distance marker because, in
academic writing, the first-person pronoun we is used to increase the solidarity between the writer and the readers and decrease the distance (Jin, 2015, p. 39). Therefore, it may be argued that MA students in general, and less proficient ones in particular, need to receive more instruction in terms of the characteristics of an academically acceptable writing, and the appraisal model, specifically the engagement resources, may be a helpful tool for this aim.

6. Conclusion

Among the factors that are influential in assessing the discussion section of an MA thesis as a piece of academic writing, conveying the intended meanings and expressing the authorial stance are of crucial importance which may be achieved particularly through heteroglossic engagement resources. In this study, the footprints of the positive effect of heteroglossic engagement values were revealed by comparing the discussion sections of GTs and ETs written by Iranian MA students of TEFL. Quantitatively, ETs were superior to GTs in terms of contract and expand resources, which similarly gained support through positive correlation between the use of heteroglossic values and the degrees assigned to MA theses. Likewise, qualitatively, the writers of ETs made better use of suitable heteroglossic engagement markers in order to create solidarity with readers and convey their interpersonal meanings. Therefore, it seems that Iranian MA students of TEFL, especially those who are less proficient, need to be more familiar with the appraisal model, mainly the heteroglossic engagement values, to compose academically acceptable writings by expressing their authorial stance.

References


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