
The Use of Lexical Hedges in Academic Writing

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Authors' contributions

This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.

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ABSTRACT

Currently, in the Iraqi context, it is observed that using linguistic devices is not an obvious consideration for many Iraqi English writers. Although the significance of these devices such as hedging which is the focus of this study in writing is beyond argument. In this sense, this study examined the types and frequency of lexical hedges employed by Iraqi writers in the introduction section of academic research articles in two different fields of study. To do so, a corpus of forty research articles published in two national journals were randomly selected. The procedure of the analysis and interpretation includes calculating the raw frequency of the hedging identifications and types in the introduction sections. The results show that hedges allow researchers to establish an early niche for their research. Also, the results indicate that there are significant differences between both groups in using hedging devices in writing the Introduction. The total number of hedging devices reveals that science writers employed hedging devices in writing the introductions more than humanities writers do. This indicates that science writers are more cautious in rejecting and/ or confirming ideas of others work. The present findings can be employed in teaching writing that is to show the importance of focusing on rhetorical structures rather than only on grammar. It also recommended that more national studies need to fill the desire of paying more attention to the other rhetorical devices that are important in academic writing to allow Iraqi research in all fields of knowledge to spread out internationally.

Keywords: Hedging; academic writing; Iraqi context; rhetorical devices; science and humanities writers.

1. INTRODUCTION

Academic writing is distinguished by the unbiased representation of information, where writers attempt to place their new work, drawing on interpersonal and ideational tools, into the current research in the field. It has, however, been widely agreed that the communication of new knowledge in a genre e.g., research article meets the criteria of a disciplinary discourse and its readers. This can be done with modality, first-person pronouns and attribution [1], or position adverbs [2,3]. Mauranen, [4]; Hyland, [5] and [6], p. 63-71; Hyland, [7] focus mainly on the persuasive role of meta-discourse, exploring the use of its markers to interpret the propositional meanings, [8].

An essential feature of academic writing is hedging [9]. Hedging helps the writer to present new arguments or make claims on a certain topic. It can be described as a device that allows the writer to avoid any certainty or to minimize the claims of an argument [10]. Additionally, it helps the writer to make a new contribution(s) to the current research in the field [11]. It is a tool that is used to allow the writer to properly formulate their claims to give the reader room to take part in a dialogue. As a result, the writer addresses the reader to participate in the discourse in order to create well and motivating arguments [12].

Hedging has been firstly defined by Lakoff [13] as "Words whose job is to make things fuzzier or less fuzzy". Hyland [9] defined the term as "The expression of tentativeness in language use that represents an absence of certainty". In the academic context, "Hedges imply then, that a statement is based on plausible reasoning rather than certain knowledge, and allow readers the freedom to dispute it" [11].

In this vein, many taxonomies have been introduced hedging as an important device used by the writer in a different genre. For example, Prince et al. [14] introduced two associated terms: approximators and shields. Crompton [15] distinguished "shields" and "approximators" for academic writing education. However, hedging in scientific research is still a challenge since writing for science has been associated with exactness and accuracy.

One of the major headings is lexical and referential markers [16]. These devices, which are the focus of this study function as a point view of "distancing, downtoners, demonstratives, discourse particles, diminutives, and indefinite pronouns". Regarding this study, Hyland's suggestions [17] have been adopted. The taxonomy of analysis includes the following markers [18]:

1. Modal verbs and semi-modal verbs (may, might, can, could etc.)
2. Verbs (seem, believe, appear, estimate, argue etc.)
3. Epistemic adjectives (possible, approximate, uncertain)
4. Epistemic adverbs (slightly, presumably, merely, partly etc.)
5. Quantifiers/determiners (a few, some, many)
6. Nouns (assumption, estimate, suggestion, claim)

2. DATA COLLECTION AND RESULTS

The data of this study are collected from two Iraqi journals of two different fields of study, one related to science and the other related to humanities. These are Karbala International Journal of Modern Science and The Journal of Adab Al-Rafidain. The first one is a peer-reviewed journal consolidating research activities in all experimental and theoretical aspects of modern sciences. It is dedicated to the latest advancement in Physics, Chemistry, Biology, Computer Science, and their related and subfields. The Journal of Adab Al-Rafidain (RADAB) is an open access scholarly journal, issued quarterly under the Creative International License (CC-BY); the Journal has been published since 1972 by the College of Arts, University of Mosul, Mosul, Iraq. The double-blind review system is also used to ensure the quality of the publication in the journal.

The procedure of analysis includes identifying the hedging devices by reading the Introduction sections of 20 articles from each journal. The type of hedging devices was marked by using a different colour, then quantified and arranged in tables include the types of hedging devices depending on Hyland's [17] taxonomy. The procedure of analysis and interpretation includes calculating the raw frequency of the hedging

identifications and types in the introduction sections of the 40 RAs in each field, the number of words in science RA introductions is 5469 while in humanities 4302. The raw frequency (F) was multiplied by 1000 since the size of the articles in each field varied. Then, it was divided by the total words in the selected section of RAs (Table 1).

According to Table 1, the total frequency of hedging devices per 1000 is 49.35 in the introductions of science and 45.06 in the introductions of the humanities. The percentage of hedging devices reveals that science writers employed hedging devices in writing the introductions is more than humanities writers do. The two hedging categories that were used more in humanities introductions are the Lexical verbs, Quantifiers 16.09 and 8.04 per 1000 were successively for Science writers. In addition, Lexical verbs and Modal Verbs 14.64 and 9.06 per 1000 were successively for Humanities writers. Then, to show if there are significant differences in adopting hedging devices between the two selected fields in writing the Introductions, a Chi-square calculator has been used as shown in Table 2.

Table 2 shows that since Chi-square value = 20.76 at 5 degrees of freedom is higher than the critical Chi-square value = 11.07. It can be concluded that there are significant differences between the two groups of authors in using

hedging devices in writing the Introduction in Science and Humanities.

3. DISCUSSION

The analysis of the selected corpus in the introduction sections of Science and Humanities research articles revealed a difference between the choice hedging devices in the articles written by Iraqi authors in terms of type and frequency.

In the selected articles, since Lexical Verbs were the most frequent hedge types in the two fields under investigation, they could be considered as the basic element of hedging types used. Using lexical verbs in the introduction section in academic writing makes it “more in conformity with the rules of discourse community” [19]. In addition, the lack of these markers in the academic context may result in inadequate writing [20] in the following example using the lexical verbs “seem” as hedging devices, the writer tends to express his perception and apprehension towards reporting others findings.

“If the back-translated version seems to lack equivalence in meaning to the source, it is not easy to determine whether the differences are as a result of poor translation, or cultural and linguistic differences in cross-cultural research.”

Table 1. The frequency and percentage of hedging devices across introduction sections in Science and Humanities articles

Hedging type	Science		Humanities	
	Number	Per 1000	Number	Per 1000
Lexical Verbs	88	16.09	63	14.64
Adverbs	43	7.86	23	5.34
Noun	28	5.11	33	7.67
Modal Auxiliary	32	5.85	39	9.06
Adjectives	33	6.03	24	5.57
Quantifiers	46	8.41	12	2.78
Total	270	49.35	194	45.06

Table 2. Chi-square for the frequency of hedging devices in the Introductions of Science and Humanities

Field of Study	Main verbs	Adverbs	Nouns	Modal Verbs	Adjectives	Quantifiers
Hedging Device						
Science	88	43	28	32	33	46
Humanities	63	23	33	39	24	12
Chi-square= 20.76		D.F.= 5		Critical Chi-square = 11.07		

On the other hand, modal verbs are less used in the Science introductions than used in the Humanities introductions. These results agree with [21] who found that modals are used more in soft sciences (linguistics and economics) than in hard sciences (engineering and natural sciences). As it is clear in the following examples taken from the data of this study:

“On the other hand, notable changes can be observed for the hybridization of the bonds between the atoms located next to the substitution position”

On the other hand, it can be revealed from the analysis that Science writers tend to use Quantifiers in their Introductions more than Humanities writers do. Quantifiers as hedging devices such as; few, little, many...etc. act in terms of intensity from the lowest quantity to the highest quantity [22]. It is logical that science extensively used Quantifiers to indicate the level of certainty we have in relation to the evidence or support. The following example is taken from the data under investigation:

“Morocco is subject to a high level of pollution in some localities, especially in Morocco’s largest river “

Finally, it can be observed that there are significant differences in terms of using hedging devices in academic writing between two fields of study (Science and Humanities). These differences appear in writing the introduction section of these fields by Iraqi writers in two Iraqi journals.

4. CONCLUSION

Quantitatively, this study analyzed and interpreted the use of lexical hedging devices in the Introduction sections of 40 articles from two fields of studies, one related to science and the other related to humanities. As the writers introduce their work in the introduction sections of the articles, they justify their research by referring to the previous studies to show agreement and/ or disagreement. Hedging is a rhetorical device that can help researchers to be more cautious in introducing their views towards others. The study is hoped to be useful for both teachers and 2L writers in general as well as teaching academic writing for advanced Iraqi learners and Academics as well. Finally, this study also recommends that linguistic devices such as hedging is important for non-native writers since they mostly desire to publish their

scholastic manuscripts in prestigious journals since universally English regards the language of academic writing.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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