# Semantic and Syntactic Realizations of Hedging in Introductions of Written Academic Discourse

Researc	h · August 2018		
CITATIONS	5	READS	
0		435	
1 autho	r:		
6	Maysa Abdulkareem Mahmood Knowledge University Erbil - Iraq		
	12 PUBLICATIONS 886 CITATIONS		
	SEE PROFILE		

# Semantic and Syntactic Realizations of Hedging in Introductions of Written Academic Discourse

Maysa' A.Mahmood
Department of English, College of Arts & Letters
Cihan University-Erbil
maysa.a@cihanuniversity.edu.iq

## **Abstract**

Hedging plays a crucial role in academic writing style and research articles in particular. It has been proven that hedges fulfil a wide range of both prepositional and interpersonal functions, since they allow writers to present their opinions and comments on the content of the proposition while taking into consideration their readership (Hyland, 1994, Salager-Mayer, 1994). Differences in the occurrence of hedges in various fields have been satisfyingly explored . However, comparisons within the field of humanities and research articles written by non-natives have received considerably less attention. This paper presents the results of comparing the introductions of twenty research articles in linguistics and literary criticism, written by Iraqi lecturers at the Dept. of English, college of Arts & Letters /Cihan university-Erbil, during the academic years 2015-2017. The analyses draw on Hyland's classification (1996) in an attempt to identify different functions of hedges and to describe their grammatical realizations with regard to genre-specific features of the examined texts. In addition to the theoretical background, the study includes description of different forms of scientific hedging, their semantic roles, categorization, and functions. Results of the study revealed the fact that a variety of hedging expressions with different functions and frequency is present in all examined texts though writers of linguistics tend to be less personal and more objective than those of literary criticism who are more personal and subjective.

**Keywords**: Hedging, research articles, semantic & syntactic realizations

#### 1. Introduction

The academic writing is a process that does not present the propositional facts only; it rather takes the professional consequences and social structures into account. The potential readers and their experiences should be considered. To show the writer's perspective and lead the reader to a specific direction ,there must be certain conventions to follow (Hyland,2005). The existence of such conventions insinuates the significance of

DOI: 10.24086/cuesj.si.2018.n1a3

treating the reader as a partner and reveals the fact that adhering to such conventions is a crucial factor to be among special discourse community. Metadiscourses are among these conventions that direct the writer/reader relationship along the written academic discourse. Hyland defines metadiscourse as "the cover term for self –reflective expressions,hedges used to negotiate interactional meanings in a text, assisting the writer (or speaker) to express a viewpoint and engage with readers as members of a particular community" (p.37).

## 2. Theoretical Background

The concept of hedging was first introduced in 1972 by Lakoff, who sees hedging expressions as "words whose meanings implicitly involves fuzziness" (Lakoff,1973:471). Since then ,hedges have received a great deal of attention and different aspects of them in written discourse have been studied. The results of previous research proved that the role of hedging in academic writing is vital for several reasons and various approaches resulted in a number of different theories about the nature of hedges. Many linguists have tried to define and then categorize the concept of hedges. One of the early and well-known definitions has been provided by Lyons(1977). He defined them as "any utterance in which the speaker explicitly qualifies his commitment to the truth of the proposition expressed by the sentence he utters is an epistemically model or moralized sentence" (p.797).

In a similar way, Holmes (1982) defined hedges as rhetorical devices whose main function is considering the readers and provides them an opportunity to have their own ideas through reading. Skelton(1988), goes further than that in his interpretation and states that "Hedging allows writers to manipulate both factivity and effect and invites readers to draw inferences about the reasons for their use "(p.107).

The most recent approaches identify hedges to be part of metadiscourse (Hyland,2005;Ifantidou,2004) and emphasize their interpersonal and interactive character. According to Leech and Svartvik's classification(2002),hedges fall into the category of 'also interactive' metadiscourse markers(ibid.:13-14). This attitude overlaps with that of Hyland since he suggests that the character of metadiscourse is both 'informative' and 'interactional' (Hyland,2005). Hyland (1996a) also argues that "hedges express tentativeness and possibility in communication "and that "hedging enables writers to express a perspective" on claims that have not been acclaimed yet by the discourse community(Hyland,1996b,1998).

Salager-Mayer(1994)proposes that hedges function as a bridge between the proposition and the author's factual interpretation. This relationship between the writer/speaker, proposition and the intended recipient is central in understanding the notion of hedging and its semantic role. As for Getkham (2011), the metadiscourse expressions are mechanisms whose main function is managing the tone, attitude, and information within spoken or written discourse. He claimed that tentativeness is one of the important requirements which help speakers or writers maintain objectivity in their language productions, one way through which this requirement can be realized is utilizing hedges.

## 3. Forms of Scientific Hedges

A high degree of formal diversity of hedging expressions is an inevitable result of increasing interest of corpus linguistics in the research of hedges. There are various approaches to the formal classification of hedges and also vivid discussions on identifying hedges properly (Hyland,1996;Crompton,1997;Biber et al.,1999).Formal means of hedging in written academic discourse can be roughly divided into two large groups: lexical means and non-lexical means.

Hyland (1995) in his classification provides a detailed breakdown of hedging expressions into the following grammatical categories: lexical verbs and nouns with lexical verbs being the most frequent as opposed to nouns which have only marginal importance in academic prose style hedging.

Formal realization of hedges	Example	
Lexical verbs	suggest, seem, indicate	
Adverbials	probably, sort of	
Adjectives	possible	
Model Verbs	might ,may	
Nouns	Assumption, claim	
Structures functioning as hedges	Conditions ,questions ,reference to methods, admission to a lack of knowledge etc	

Table 1 : Principal devices functioning as hedges

As is obvious in the above table ,hedging markers are classified into lexical and non-lexical. The non-lexical ,or structural markers, usually refer to weaknesses or shortcomings of theories, models ,or methods used in the research concerning either the propositional information itself (content-oriented hedges) or the writer's relationship with

the intended readers (reader-oriented hedges). It is not insignificant that some writers also include verb tense (Salager-Mayer, 1994) or voice (Hyland, 1996) into hedging expressions, arguing that these carry certain implicit meanings connected to the concept of hedging. It has already been mentioned that hedges have been approached from various points of view at different levels. Hyland (1996) focuses on hedges from a functional point of view and provides a very detailed system of various categories (see Table 3).

#### 4. Semantic Role

The importance of hedges is given by the fact that they fulfil several various functions. Three main functions should be mentioned here. First ,writers use hedges to comment on the content of the proposition in their attempt to be as accurate as possible while lowering the risk of rejection of their arguments at the same time. Second, hedges help writers to express different degrees of confidence towards the proposition. The relationship between the writer and his intended readership is connected with the third major function of hedges. Writers seek acceptance by the discourse community as defined by Swales(1990). Thus establishing and maintaining contact with the readership is of crucial importance and using hedges allows the writer to avoid risky claims by downtoning categorical assertions(Mayer, 1989). All the previously mentioned functions of hedges make it obvious that the principal motivation for employing hedges in written academic discourse is pragmatic. The realization of functions of hedges according to Hyland (1996) is illustrated in the table below.

Table 2: Categorization of scientific hedges (Hyland.1996:437-449)

Content-oriented		Reader-oriented
a) A saymany amiantad	attribute	
a) Accuracy-oriented	reliability	
b) Writer-oriented		

The content-oriented hedges are used to mitigate the author's claim. That is to say they "hedge the correspondence between what the writer says about the world and what the world is thought to be like" (Hyland, 1996; p.439). The two types of the content-oriented hedges are related to imprecision and invisibility of the writers. Accuracy —oriented hedges are used mostly to reflect the authors' desire to be as precise as possible but lack of knowledge, sometimes, prevents them from being so. Therefore, they use hedges which reflect imprecision and uncertainty. Words which indicate what is presented as the

author's claim is not necessarily the exact way nature behaves, are attribute hedges. Reliability hedges, on the other hand, are words used to express the writer's tentativeness and usually include modal auxiliaries, full verbs ,modal verbs ,modal adverbs ,adjectives ,and nouns.

As for the writer-oriented hedges, they reflect the writer's attempt to diminish his own role in order to be protected from consequences of being wrong. Using impersonal constructions and passive voice are some means to do that (ibid.;441). Reader –oriented hedges ,generally speaking, show the author's respect to his audience as intelligent members of a scientific community and presents his view in such a way that they feel they have some space for their own judgement. Hyland (1996) considers this category as very important especially for non-native speakers if they want to achieve acceptance in academic world. Hyland's categorization reflects the nature of hedges as devices that have different semantic interpretations as well as a range of meanings for particular users in particular context.

Table 3: Functions of hedges related to various categories used to express hedging after Hyland (1996)

.Content -oriented		Reader -oriented	
Accuracy -oriented	Writer -oriented		
Attribute type	Epistemic lexical verbs:	Epistemic lexical verbs:	
Precision adverbs:	Judgmental	Judgmental	
Content disjuncts	Evidential	Deductive	
Style disjuncts	Impersonal expressions:	Personal attribution	
Downtoners	Passive voice	Personal reference to:	
		Methods	
Reliability type	Abstract rhetors	Modal	
Epistemic modal verbs	'empty' subjects	Offer alternatives:	
Epistemic modal adjectives	Thematic epistemic device	Conditionals	
Epistemic modal nouns	Attribution to literature	Indefinite articles	
Content disjunct adverbs	Impersonal reference to:	Involve reader:	
Limited knowledge	Method	Direct question	
	Modal	Reference to testability	
	Experimental conditions	Assumption of shared goals	
		Hypothetical,e.g. would	

Biber et al.(1999:856), on the other hand, are concerned with the grammatical level and describe hedges as both adverbial and non-adverbial expressions used to mark imprecision and specify six major categories of syntactic realizations of adverbial hedges(see Table 4). According to them, adverbial hedging expressions fall into the category of stance adverbials. Adverbial hedges belong to to the category of epistemic

stance adverbials which ,together with attitude stance adverbials, comment on the content of the proposition. Within the category of epistemic stance adverbials, there is a further division into six categories :doubt and certainty ,actuality and reality ,source of knowledge ,limitation ,viewpoint of perspective and imprecision (ibid: 557).

Table 4: Syntactic realizations of stance adverbials(Biber et al. 1999: 861)

	Single word adverb
	Adverb phrase
Syntactic realizations of stance adverbials	Prepositional phrase
	Noun phrase
	Finite clause
	Non-finite clause

The above presented classifications partly overlap in terms of formal realization of hedging .However ,while Biber et al.mainly deal with adverbial stance markers, Hyland (1996) provides a detailed account of formal realizations on the textual level. Moreover ,there is a certain discrepancy in terms of the definition of hedges. While Biber et al. consider hedges as expressions conveying a certain degree of imprecision ,Hyland includes adverbials also which are classified as adverbials of doubt/certainty in Biber et al.'s classification. The analysis presented in this study adheres solely to the classification of Hyland as presented in Table 3.

## 5. Hedges in Research Articles

It has already been mentioned that hedges play a significant role in written academic discourse and the principal reasons for this have been stated. However, it is important to look into this problem in greater detail. To start with, the reasons for examining research articles in this study should be clarified. The genre of research articles is one of the most important parts of scientific writing. It appears across all academic disciplines and it serves mainly for presenting the results of scientific research and it enables scientists to present their opinions. By doing this, research articles connect the writer to his discourse community, thus fulfilling a crucial pragmatic function closely connected to the issue of hedges in academic writing as previously mentioned.

Genre-specific features as presented by Swales(1990), Crystal and Davy(1969) and Widdowson (1979) provide us with a background for observing a wide range of

different functions of hedges (see Table 5). Pragmatic motivation for the use of hedges connected to the concept of a face saving/threatening act and positive/negative politeness strategy has been already outlined. However, there are other reasons for using hedges in research articles. One of them is the need to report the research results with the greatest possible accuracy. Therefore ,it is often necessary to reduce the strength of claims for various reasons .Hedges also represent the writer's relationship towards both the recipient of the text and the factual proposition.

Function

Comment on the content of the proposition

Express different degree of confidence towards the proposition

Establish and maintain contact with the reader/listener

Function

Attempt to be as accurate as possible

Lowering the risk of rejection of the arguments

Face-saving

Interest in discourse community the writer/speaker is a part of

Table (5): Main functions of hedges (reader-writer point of view)

## 6. Examples of Hedging Types and Functions

The following examples, taken from the research materials, illustrate both major types of hedging functions: content-oriented hedges in (1) and reader-oriented hedges in (2):

<u>This research</u> shows the collocational behavior and semantic prosody of synonyms <u>from a linguistic point of view.</u>

(2) I see that through the novel the feminist heroine is represented as a rebellion against traditions.

In (1),the impersonal subject together with the impersonal reference to theory hedge the writer's commitment towards proposition. The example also illustrates the

complexity of formal realizations of hedging. As for example (2), the personal attribution in combination with epistemic lexical verb functioning as reader-oriented hedge is clearly shown.

On the basis of using hedges in the available literature summarized in Table (5), various functions from the reader-writer point of view were identified in the analyzed research material and summarized in the following table;

Table(6):Main reasons behind using hedges drawn from the analysed material

	Examples of hedges	Reasons for using them
3.	It will be interesting for the tutor ,and <u>possibly</u> also for the student,to analyse why a particular syntactic choice is made	-The writer comments on the content in an attempt to be as accurate as possibleThe writer protects himself/herself against possible criticism.
4.	Most of this research assumes that opinion is something already out there to be measured, like the	The writer presents the results of the research more as an opinion or a possible interpretation rather than a fact, the risk for rejection of the arguments is lowered or averted.
5.	That the book is called 'The Box of Delights' indicates that a work of fiction can be a treasure house of imagination, which when opened, inspires	The author expresses different degrees of confidence towards the proposition and allows himself to be open for discussion by withholding complete commitment towards the proposition.
6.	If true, this research agrees with the theory of	The writer aims at establishing and maintaining contact with his/her readership.
7.	I'm afraid I don't quite agree with those who consider private education as	The writer is interested in the discourse community by lessening the risk of face-threatening.

# 7. Significance of the study

The significance of the research rises from the fact that it investigates the semantic and syntactic realizations of hedges in the field of humanities, comparing the introductory

parts of research articles in Linguistics and Literary criticism which has not received much attention in previous years. Additionally, it examines the written academic discourse of non-native writers, namely Iraqis ,a corpus, to the best of the researcher's knowledge ,has rarely been addressed.

# 8. Research Questions

The present study aims at investigating the following questions:

- (1) How much do non-native authors in the fields of linguistics and literary criticism use different types of hedging in introductions of their research articles?
- (2) Is there any difference in the types of hedges used in the linguistics and literary criticism articles' introductions?
- (3) What are the most frequent types of hedges used in both types of research articles?

# 9. Methodology

#### 9.1. Data

The material under examination in the present research comprised the introductions of 20 research articles, ten linguistics and ten literary criticism ,written by non-native (Iraqi) lecturers in the Dept.of English, College of Arts & Letters/Cihan University-Erbil. All examined research articles were published in different national and international journals during the academic years 2015-2017. The esteemed length of corpus A(linguistic) is 3422 while the length of corpus B (literary criticism) was esteemed to 3250.

## 9.2. Procedure

After selecting the articles ,the researcher chose to investigate the introductory part of them because of its importance .The chosen parts were precisely read twice, word by word in order to identify and locate types of hedges .Then, the number of hedges in corpus A and B was counted separately .The hedges were located ,underlined ,and tabulated ,then ,classified into the lexical types of hedges based on Hyland's(1996) classification. There are two main reasons for using Hyland's taxonomy over others. First, contrary to many taxonomies presented for hedge words ,Hyland 's emphasis is on the

function of hedges rather than their parts of speech. Second, his taxonomy is more organized ,easy to detect ,and broader than others.

Choosing introductions should be justified as well. They are one of the four standard parts-Introduction-Method-Results-Discussion (IMRD)-of research articles as presented by Swales(1990) and his "Create-a-Research-Space" (CARS) model (ibid.) modified by Samraj (2008). Drawing on these models, a relatively varied spectrum of functions of hedges was expected.

#### 10. Results and Discussion

The semantic analysis shows that introductions to linguistic research articles introductions tend to contain more content oriented hedging expressions than literary ones. This might indicate that linguists make an attempt at greater invisibility throughout the texts which points to higher level of impersonality and objectivity, since content-oriented hedges are typically expressed by impersonal means. Also ,withdrawing commitment to the proposition makes it harder to falsify the claims thus increasing the author's credibility which is much sought after in the discourse community. Literary discourse, on the other hand ,show higher occurrence of reader-oriented hedges, making the text more personal ,as reader-oriented hedges are very often expressed by means of personal attribution. This reveals the author's direct involvement in the research thus presenting the results as an individual interpretation, one of the alternatives presented to the reader(discourse community). Reader-oriented hedges help the writer weaken criticism by involving the reader and treating him /her as a partner.

Table (7): Analysis of semantic types of hedges

	Accuracy oriented	Writer oriented	Reader oriented	Total
Linguistics	36	69	36	141
Literary criticism	33	21	48	102

Lexical markers Linguistics Literary Criticism Epistemic lexical verb 41 57 Epistemic modal verb 50 33 Epistemic modal adverb 24 24 7 Epistemic modal adjective 10 Total 141 105

Table (8): Analysis of lexical hedging markers

Table (9): Analysis of structural hedging markers

Structural marker	Linguistics	Literary Criticism
Impersonal reference to modal/method/theory	27	16
Personal reference to model/method/theory	18	21
Abstract rhetor	21	18
Attribution to literature	9	7
Empty subject	12	6
Assumptions of shared goals	9	18
Personal attribution	6	4
Conditional	4	8
Offering alternatives	8	4
Admission to limited knowledge	9	5
Total	123	107

The result of the analysis of lexical and structural realizations of hedges revealed that the most common lexical hedging in both linguistics and literary criticism articles introductions are epistemic lexical verbs, closely followed by epistemic modal verbs. Among structural hedging means, personal reference to model/method /theory is prominent in literary criticism, while in linguistics it is the impersonal counterpart. It should be noted that in connection with non-lexical hedging means ,there were slight difficulties encountered with attribution to literature. It has been discussed that citations in research articles contribute to the construction of knowledge (Hyland,1999).

With regard to functions of research articles introductions ,it was necessary to distinguish between attribution to literature as a simple means of construction of knowledge and reviewing the items of previous research from attribution to literature hedging the writer's commitment to the propositional information .Therefore only

instances of attribution to literature together with epistemic lexical verb were taken into account for the purpose of this analysis. The results of the analysis also showed that hedges tend to appear in clusters and the tendency is quite strong. A possible reason for this is the author's attempt at reinforcement .It has also been proven that a certain structure can fulfil more functions and these are often quite difficult to differentiate and identify. Similarly, a semantic function can be expressed by different syntactic means.

#### 11. Conclusion

Hedging expressions are an indispensable part of research articles introductions since they serve a wide range of purposes. There used to be syntactic and semantic differences in hedging expressions used in linguistic and literary articles. Authors of both fields aim at establishing themselves within the discourse community, however they use different strategies to achieve their aims. Epistemic lexical verbs were the most frequent hedges used in both types of research articles, while the least ones in both were epistemic model adjectives. However, authors of Linguistics seem to be less personal, more objective and factive for the most frequently used structural hedging marker was the impersonal reference to model/method/theory. Those of literary criticism, on the other hand, tend to be more personal, subjective and interpretive in their writing by using mostly the personal reference. The scope of the research presented in this article, however, is quite limited, therefore further in —depth investigation into the topic is needed.

It is worth mentioning that the need to carry out research and publish results in English language journals presents non-native scholar and researchers with serious problems for they have to work within unfamiliar cultural and linguistic environment. The research article is the key genre in academic disciplines and non-natives writers must be familiar with its conventions and be able to recognize and use hedging devices appropriately. To achieve this however, our understanding of the concept needs to be sharpened and informed by granting hedges a higher priority in both our teaching and research methods.

## 12. Suggestions for Further Research

Future research could add to the findings of the present research by examining hedging in other parts of the research articles or the abstracts as being significant parts of the academic discourse .The Present study investigated the syntactic and semantic

realizations of hedging expressions in research articles written by non-native writers, so it may be interesting to compare the hedge usage and frequency in research articles of native and non-native scholars. Another propose is that hedge studies have concentrated on academic writings existed in linguistics and literature, however ,it would be very informative to know how other sources, in which hedging is crucial such as media ,politics, etc.. ,use hedges and accordingly rhetorical style.

Future research could also include the investigation of gendre differences in utilizing hedges; or whether it is possible that females use more tentative ,indirect ,and vague language when compared to males or vice-versa. Another caveat is the various uses of hedge changing from the point of culture. Although there are some studies searching culture specific differences of hedge use (e.g.Leyla & Atai,2008, Yang ,2003,Uysal,2014),yet,they mostly focused on academic writing .So, there is a paucity of data in exploring culture specific hedge usage in other discourses.

## References

- Biber, D., Johnson, S., Leech. G., Conrad, S., Finnegan, E. (1999). Longman Grammar of Spoken and Written Language. London: Longman.
- Crompton, P. (1997). Hedging in Academic Writing: Some Theoretical Problems. English for Specific Purposes, 16 (4), 271-287.
- Crystal, D., Davy, D. (1969). Investigating English Style. London: Longman.
- Getkham, K. (2011). Hedging Devices in Applied Linguistics Research Articles. *Interdisciplinary Discourses in Language and Communication*, 141-154.
- Holmes, J. (1982). Expressing Doubt and Certainty in English. *RELC Journal*, 13(2), 19-28.
- Hyland, K. (1995). The Author in the Text: Hedging scientific writing . Hong Kong Papers in Linguistics and Language Teaching, 18,33-42.
- Hyland, K.(2007). Disciplinary Discourse: Social Interaction in Academic Writing. Michigan: The University of Michigan Press.
- Hyland, K.(1996). Talking to the Academy: Forms of Hedging in Science Research Articles. Written Communication 13(2),251-281.
- Hyland,K.(1999). Writing Without Conviction? Hedging in science research articles. 'Applied Linguistics, 17(4),433-453.

- Hyland, K. (2005). *Metadiscourse*. London: Continuum.
- Hyland,k.,(1996). 'Nurturing hedges in the ESP curriculum.' System, 24(4),477-490.
- Ifantidou, E.(2004). The semantic and pragmatics of metadiscourse. *Journal of Pragmatics*, 37,1325-1353.
- Layla, S., & Atai, M. (2008). A Cross –cultural study of hedging devices in discussion section of applied linguistics research articles. *Teaching English Language and Literature Society of Iran*, 7:1-22.
- Leech, G., Svartic, J. (2002). A Communicative Grammar of English. London: Longman.
- Lyons, J. (1977). Semantics. Cambridge: Cambridge University Press.
- Mayers, G.(1998). The Pragmatics of Politeness in Scientific Articles' *Applied Linguistics* ,10(1),1-35.
- Quirk,R.,Greenbaum,S.,Leech,G.,Svartvik, J.(1985). A Comprehensive Grammar of the English Language. London: Longman.
- Salager-Meyer, F. (1994). 'Hedges and Textual Communicative Function in Medical English Written Discourse. 'English for Specific Purposes, 13(2),149-171.
- Salager-Meyer, F. (1995). 'I think that perhaps you should: A study of hedges in written scientific discourse. 'The Journal of TESOL France, 2(2),127-143.
- Skelton, J. (1988). Comments in academic articles. London: CILT/BAAL.
- Uysai, H.(2014).A Cross –cultural study of Indirectness and Hedging in the Conference Proposals of English NS and NNS Scholars. In A.Lyda,&Warchal, K.(Eds.),Occupying niches: Interculturality, Cross-culturality and acculturality in academic research,179-195.
- Widdowson ,H.G.(1979). *Exploring in Applied Linguistics*. Oxford: Oxford University Press.
- Yang, Y.(2013). Exploring Linguistic and cultural variations in the use of hedges in English & Chinese scientific discourse *.Journal of Pragmatics*, 50:23-36.