HEDGING DEVICES IN INTERPRETING RESEARCH DATA: A STUDY IN STUDENTS’ UNDERGRADUATE THESIS

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Abstract: This study aims at describing the use of hedging devices found in interpreting research data in finding and discussion section of students’ undergraduate thesis. It is focused on describing its types, functions and meaning used in finding and discussion section. In the data collection, the data was gathered by using descriptive qualitative method. The source of this research was taken from the statements and claims written in finding and discussion section of students’ undergraduate theses. The result of the data analysis showed that the most frequently used type and function of hedging was Approximator of Degree, Frequency, Time and Quantity and Attribute Hedge. It is caused that most of the writers often state a speculation, assumption, opinion or probability through their statement in which decreases the explicitness of a statement and hence enables the writer to be less direct and bald in communicating his/her meaning. It is also the signal that what they state is not completely true.

Keywords: hedging devices; interpreting research data; students’ undergraduate thesis

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INTRODUCTION

Academic writing is one kind of an academic stage that needs the writing skill competence. There is a particular case in constructing academic writing that should provide the vagueness statement in order to reduce the exactness of the claims and show the possibility of the truth that can be avoided from the responsibility if the statement is found being wrong later (Suaib, 2019). However, writers face various writing problems at different stages of process in constructing of academic writing especially in context of providing the vagueness. Some of the writers do not have of awareness in using of vagueness device even do not have knowledge about this device. Furthermore, the language device that have function to provide the vagueness or tentativeness of statement is called hedging (Lakoff, 1972).

Academic writers may well wish to reduce the strength of claims simply because stronger statements would not be justified by the experimental data presented. In such cases, researchers are not saying less than what they mean but are rather saying precisely what they mean by not overstating their experimental results. Being too certain can often be unwise. Academics want their readers to know that they do not claim to have the final word on the subject, choosing instead to remain vague in their statements. Hedging then are not a cover-up tactic, but rather a resource used to express some fundamental characteristics of modern science.

The term ‘hedge’ was coined by Lakoff (1972), who pointed out that hedges are “Words whose job is to make things fuzzier or less fuzzy” (p. 471). In other words, hedges are used to avoid or degrade the certainty of statements. Similarly, Hyland (1998) defines hedging as “any linguistic means used to indicate either a) a lack of complete commitment to the true value of an accompanying proposition, or b) a desire not to express that commitment categorically”. In academic writing, writers are expected to use a modest and objective language in order to present information. It is the writer who is responsible for creating and maintaining the balance between representing the facts and providing claims for the current research (Salager-Meyer, 1994).
Several studies have been conducted regarding the topic of Hedging. The first study done by Wudaa entitled “The Use of Hedging in Scientific Research Papers by Iraqi EFL Learners (2011)”. She conducted the research by comparing some students who were enrolled in experimental group which have an instruction to used hedging devices and students who were not. The other study has done by Lingga entitled “A Study of Hedging Expressions in J. K. Rowling’s Novel Harry Potter and the Sorcerer’s Stone and Its Implication to Teaching and Learning Cross Cultural Understanding (2018)” Different from the first study, He investigated the types, function and meaning used of hedging device in different context by characters in the Novel of Harry Potter and The Sorcerer’s Stone.

This study, therefore, focuses on observing and analyzing the types, function and meaning of Hedging used in finding and discussion section in Students’ Undergraduate Thesis of English Department of Faculty of Education and Teacher Training of Mataram University. Hedging has 7 types proposed by Salager-Meyer and 4 functions proposed by Hyland. All of the types and functions are used in this study.

LITERATURE REVIEW

The extensive body of literature about the concept of hedging has been stated by many researchers and experts. The statement that explained about simply concept of hedging is firstly coming from Lakoff (1973) which says hedging is words whose job to make things fuzzy to fuzzier or less fuzzy. From this statement, it shows that He starts his interest in hedging as the way of logical properties of words and phrases, largely, like rather in manner of speaking and writing in their ability to make things tentative and vague than the communicative value of the use of hedging.

In extended definition, hedging occurs in both speaking and writing. The hedging occurs in speaking based on Grundy (2007) is when speakers prefer to choose in avoiding of making an emphasizing utterance in which many people want to make their speaking vague because some utterances may be inappropriate to be spoken. Hedging not only has received much attention in relation to conversational rules as a means to facilitate turn-taking, show politeness, mitigate face-threats, but it is also considered a means of conveying vagueness purposely. Hedging has become forms of social interpretation of verbal and non-verbal behavior revolving around the concept of mitigating face – threats of the addressee, thus playing a crucial role in social interaction strategies.

Hedging is mostly used in written discourse because it allows writers to reduce readers’ imposition in their claims of the truth of the statements. Henning (2005) claims that in written text, hedging represents the syntactic means of decreasing the responsibility of the writer’s proportion and the reader’s claims.

Furthermore, as kind of linguistic features, hedges are used to give signal distance and to avoid absolute statements which might put writers and speakers in an embarrassing situation if there are some conflicting evidences or contradictory findings (Kubui and Fand in Salager-Meyer, 1997). It means writers are able to attempt in presenting a paper with conviction and at the same time, to determine whether the role of the readers is able to confirm the knowledge or not (Hyland, 1996).

Types of Hedging

Based on Salager-Meyer’s classification (1997), there are seven types of hedging. Those are (1) modal auxiliary verb, (2) modal lexical verb, (3) adjectival, adverbial and nominal phrase, (4) approximators of degree, quantity, frequency and time, (5) introductory phrase, (6) if clauses and (7) compound hedging.

1. **Modal auxiliary verb**, it is taken from its name, modal auxiliary verb is from modal auxiliary: may, might, must, shall, should, could, can, will, would, ought. Example:
- Such a measure might be more sensitive to changes in health after specialist treatment.

2. **Modal lexical verb**, it is the kind of hedging that performs acts like assuming, evaluating or doubting rather than merely describing: the epistemic seem and appear, also believe, assume, suggest, estimate, tend, think, argue, indicate, propose, speculate, suppose. Example:

- These results indicate that the presence of large vessel peripheral arterial disease reflect a particular susceptibility

3. **Adjectival, adverbial and nominal modal phrase**, it is the type of hedging that (adjectival modal phrase) decreases the strength of the nouns, it determines and it usually forms a predicate with the verb to be: possible, probable, unlikely, (noun modal phrase) render epistemic certainty or, on the contrary, doubt: assumption, claim, doubt, possibility, probability, estimate, suggestion, likelihood and (adverbial modal phrase) contains phrase like perhaps, practically, presumably, apparently, virtually. Example:

- There is a possibility that we can reach the top of mountain tonight

4. **Approximators of Degree, Quantity, Frequency, and Time**, it is the type of hedging that occurs under the form of adjectives and/or adverbs: approximately, little, roughly, about, often, occasionally, generally, usually, somewhat, somehow, a lot of. Example:

- The temperature approximately under 25 C degree

5. **Introductory Phrases**, it is the type of hedging device which is used to mark and to express the author’s personal doubt such as I Believe, to our knowledge, it is our view that we feel that. Example:

- We feel that the team will be lost today

6. **If clause**, it is the type of hedging that is used to render hypothetical meaning with actions which are deemed possible only if certain conditions are met (if true, if anything, unless). Example:

- If true, our study contradicts the myth that fishing attracts the bravest and strongest men.

7. **Compound hedge**, it is the type of hedging that is made up of several hedges: a modal auxiliary which is combined with lexical verb (would appear), a lexical verb which is followed by a hedging adverb or adjective (it seems reasonable), a treble hedge which contains three hedges in a sentence (it seems reasonable to assume.) and quadruple hedges which contains four hedges in the sentence (it would seem somewhat unlikely that)

**Function of Hedging**

1. **Writer-oriented**

   Writer-oriented hedge refers to the relationship between a claim and a writer. It does not deal with the relationship between the claim and the propositional elements. Wuda (2011) claims that the used of this hedge markers refers to how the writer can reduce their presence in their writing by using various impersonal, agentless and passive structures in order to reduce their responsibility of the truth of the claims which is expressed. For examples:

   - The data shows that in third world countries the extensive use of land to grow exportation products tends to impoverish these countries’ even more.

2. **Attribute-oriented**

   Attribute-oriented hedges refer to the strategy which is used by the writer to express their claims with precision by keeping the interpretations and deductions close to findings. This marker is used to specify the extent to which a term describes accurately the reported phenomenon. it is also used as politeness strategy (Wudaa, 2011). For examples:

   - The theory arouses just few insignificant problems.
3. Reliability

Reliability hedge refers to the strategy used by the writer which indicates the writer’s confidence in the truth of proposition. Reliability hedges are commonly expressed by epistemic modality. For example:
- Researcher *may* have found a cure for influenza (Modal auxiliary)

4. Reader-oriented

Reader-oriented refers to the way of writer to make readers involved in a dialogue as thoughtful individuals to give a respond and judge regarding the truth value of the proposition. The main role of reader-oriented hedge is that lying in fact that it can decrease the writer’s meaning by increasing the subjectivity of the sentences. For examples:
- *In my view*, this medicine could help you recover quickly.

RESEARCH METHODS

In this study, the researcher uses the qualitative descriptive approach, which involves focus groups, document review, or observation of a specific event Creswell (2015). A qualitative descriptive design is used when an uncomplicated description is desired that focuses on the details of what, where, when, and why of an event or experience. It is intended to examine the use of Hedging in finding and discussion section in Students’ Undergraduate Thesis of English Department of Faculty of Education and Teacher Training of Mataram University.

The data of this study was obtained from students’ undergraduate thesis in English Education Department of Faculty of Education and Teacher Training in form of words, phrases, clause or even sentences. The undergraduate theses, that were analyzed, were divided to qualitative and quantitative theses. As it was found that the 6 theses chosen were appropriate in using of hedging and some of them were less appropriate in terms of data analyzed. However, here are the 6 theses that had been chosen categorically:

a. **An Analysis of Illocutionary acts used in Indonesia’s the 2019 presidential election debates**, it is Qualitative research and is called as an Undergraduate thesis 1

b. **An Analysis of Character education in Andrea Hirata’s Novel Entitle: Rainbow Troops**, it is Qualitative research and is called as an Undergraduate Thesis 2

c. **The Techniques of Teaching Reading Applied by English Teacher at SMPN 1 Gerung in Academic Year 2018/2019**, it is Qualitative research and is called as an Undergraduate Thesis 3

d. **The Relationship Between College Admissions Procedures with Students’ Ability in Answering the Overview and Vocabulary-In Context Question of TOEFL-Like**, it is Quantitative research and is called as Undergraduate Thesis 4

e. **The Correlation Between Students’ Learning Motivation and Their Reading Ability of Narrative Texts: A Case Study at Third Year Students of SMP Negeri 12 Mataram In Academic Year 2018/2019**, it is Quantitative research and is called as Undergraduate Thesis 5

f. **Relationship Between Students’ Perceptions of Classroom Environment and Their Motivation in Learning English: A Study at SMPN 11 Mataram**, it is Quantitative research and is called as Undergraduate Thesis 6

In order to be able to conduct this study, the researcher intends to conduct this study using 6 students’ undergraduate thesis, those were divided into qualitative and quantitative thesis. The selected types and functions of Hedging used in finding and discussion section in Students’ Undergraduate Thesis of English Department of Faculty of Education and Teacher Training of Mataram University are the subject of this research. To collect the data in this research, was reading the finding and discussion section of undergraduate thesis that had been
chosen before, and trying to understand and finding any important details that support this research and looking for all written hedges. Then observing all of the types and function of hedging and Collecting and classifying all written statement using hedging while consulting with experts (thesis advisors).

There were some procedures undertaken to analyze the data: Classifying the data taken from the finding and discussion section of students’ undergraduate thesis, codifying the data based on seven types and four functions of hedging, and describing conclusion.

DATA DESCRIPTION AND ANALYSIS

Data Description

Salager-Meyer (1997) is used as the theory of the types and Hyland (1996) as the function of hedging, it was found that the distributions of the use of hedging used in finding and discussion section in Students’ Undergraduate Thesis as presented in the following table

| Table 1. types of hedging in finding and discussion section of students’ undergraduate thesis |
|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|
| **Undergraduate Thesis**       | **Modal Verb**                  | **Modal Lexical Verb**          | **Adjective/Adverb/Noun Phrase** | **Introductory Phrase**         | **If Clause of degree, frequency, time and quantity** | **Approximator of degree, frequency, time and quantity** | **Compound Hedge** |
| thesis 1                       | 14                              | 4                               | 5                               | 6                               | -                              | 35                              | 9                               | 73                              |
| thesis 2                       | 16                              | 2                               | 9                               | 10                              | 5                              | 13                              | 3                               | 58                              |
| thesis 3                       | 6                               | -                               | 7                               | 3                               | 1                              | 7                               | -                               | 24                              |
| thesis 4                       | 4                               | -                               | -                               | 1                               | -                              | -                               | -                               | 5                               |
| thesis 5                       | 2                               | 1                               | -                               | 3                               | -                              | -                               | 2                               | 8                               |
| thesis 6                       | 7                               | 3                               | 2                               | 4                               | -                              | 6                               | 1                               | 23                              |
| **Total**                      | 49                              | 10                              | 23                              | 27                              | 6                              | 61                              | 15                              | 191                             |

From the Table 1, it is found that the type of hedging used in each of the research is quantitatively different. Approximator of degree, frequency, time and quantity is the most types that used in all theses with 61 occurrences. It is followed by Modal Verb with 49 occurrences, Introductory Phrase 27 occurrences, Adjective/Adverb/Noun Phrase 23 occurrences, Compound Hedge 15 occurrences, Modal Lexical Verb 10 occurrences and If Clause 6 occurrences. From this finding, it can be concluded the theses frequently speculate, predict, give possibility and opinion, assume, doubt, and give conclusion to statement and claim.

| Table 2. Functions of Hedging in finding and discussion section of students’ undergraduate thesis |
|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|
| **Undergraduate Thesis**       | **Function of Hedging**         | **Total**                       |
|                                | **Writer Oriented Hedge**      | **Attribute Hedge**             | **Reliability Hedge**          | **Reader Oriented Hedge**      |
| thesis 1                       | 7                               | 46                              | 20                              | -                              | 73                              |
| thesis 2                       | 14                              | 17                              | 23                              | 4                              | 58                              |
Table 2 indicates that there are 191 functions of hedging found in the finding and discussion section of students’ undergraduate thesis. The table also shows that the students used four different functions of hedging in their writing, namely: attribute hedge with 84 times occurred as the most used by students, it is followed by reliability hedge with 68 times, writer-oriented hedge 35 times and reader-oriented hedge 4 times.

### Analysis

This section discusses the selected examples of types and function of hedging used in interpreting section in finding and discussion of students’ undergraduate thesis.

**Types of Hedging found in finding and discussion section of Students’ Undergraduate Thesis**

1. **Modal Verb**
   
   - They express psychological states and it can be statements of pleasure. *(Undergraduate thesis I/ Ch. IV/ Page 46)*
   
   Based on the example above shows the most frequently modal verb that used in interpreting section of students’ undergraduate thesis, the writer is trying to show a vague statement which contained probability, possibility and prediction, it showed when the writers used modal verb “can” in their statements or claim when the modal verb is deleted, the sentence would not be vague or imprecise statement rather it would be precise statement.

2. **Modal Lexical Verb**
   
   - He thinks those problems did not have to happened and had been handled by the president. *(Undergraduate Thesis I/Ch. IV/ Page 56)*
   
   The example above shows the writer’s expressions of doubt in stating his/her claim. The writer of undergraduate thesis 1 tried to claim Prabowo’s argumentation about something did not have to happened and had been handled by the president, Jokowi. This shows that the writer has some doubts in his/her claim because he/she could not make the claim as sure as possible in line with his/her interpretation, thus the writer uses modal lexical verb “think” to make it imprecisely.

3. **Adverbial, Adjectival and Nominal Phrase**
   
   - Mr. Prabowo’s promises sound more normatively, a number of his promise are quite enough by how it works and what the result. *(Undergraduate Thesis I/Ch. IV/page 63)*
   
   The example in (a) shows the use of adverbial phrase that signed with “quiet”. The writer explained that Mr. Prabowo states his promises are quite enough by how it works and what the result. This is showed that the writer tried to convey his/her assumption, doubt and uncertainty.
4. Introductory Phrase
   - **In revering to result of the research**, it can be assuming that most of students who got high score in learning motivation questionnaire also got high score in reading ability of narrative text test. (Undergraduate Thesis 5/Ch. IV/Page 31)

   The writer indirectly shows the personal doubt as had been exampled above. The writer makes a conclusion based on the data that he/she has obtained, in order to not showing the subjectivity, the writer uses introductory phrase to express personal doubt and transmit the information indirectly.

5. If Clause
   - **This way, if the students feel like they are also part of the lesson, they will pay attention until the end of the lesson.** (Undergraduate Thesis 3/Ch. IV/page 37)

   Based on the example above, the writer tried to conclude by using if clause that the students will pay attention until the end of the lesson when they are also a part of the lesson. This if clause showed the writer’s expression of hypothetical situation or conditional situation that offers a possibility of claim.

6. Approximator of Degree, Frequency, Quantity and Time
   - **On scanning, the teacher and the students look at the text briefly together then the teacher asked some questions related to the text topic.** (Undergraduate Thesis 3/Ch. IV/Page 37)

   The word “some” above has function to deliver an inexactness of the statement. This word is classified into the approximator of quantity because it used to hedge the quantity of thing. The writer of undergraduate thesis 3 has not idea to know or to decide how many questions that had been asked by the teacher certainly. In order to show his/her inexactness, the writer then use word “some” as a fuzzy word to draw inexactness statement.

7. Compound Hedge
   - **Notify often appears when Mr. Prabowo wants to offer an idea and program.** (Undergraduate Thesis 2/Ch. IV/54)

   The phrase “often appears” above is one of the examples of compound hedge, it consists of adverb “often” and modal lexical verb “appears”. The function of this hedge is to express possibility, assumption and speculation. The writer in undergraduate thesis 2 did not know the total of occurrence of “Notify”, he/she tried to deliver about the possibility of the occurrence of “Notify” in Mr. Prabowo’s statement in offering idea and program. Therefore, in order to make it vague, the writer used compound hedge to deliver possibility.

**Functions of Hedging found in finding and discussion section of students’ undergraduate thesis**

1. Writer Oriented Hedge
   - **Based on the table 2 above, assertive are the most commonly used by both candidates same as what researcher found in first debate.** (Undergraduate Thesis 1/Ch. IV/Page 31)

   The bold phrase above is an introductory phrase, it is classified as a writer-oriented hedge. It used to show how the writer diminishes his/her self from claim. The writer makes the other impersonal subject become proposition to make a claim in order to make the sentence vaguer because all the responsibilities are burdened to an impersonal thing that have been stated in introductory phrase.

2. Attribute-Oriented Hedge
   - **It was followed by Affiliation dimension. While the rest dimension of classroom environment that are Teacher Support, Task Orientation, Order and Organization,
and Involvement dimension were sometimes occurred based on the students’ perceptions. (Undergraduate Thesis 6/ Ch. IV/ Page 48)

The use of attribute hedge in undergraduate thesis 6 is showed by using marker of intentional vaguer “sometimes”. The purpose of using hedging is to mitigate potential threats to one's reputation by reducing the explicitness of statements, thereby enabling writers to express their claims in a less direct manner. The writer in example above tried to explain the students’ perception that could be occurred as the rest dimension of classroom when the teaching practice happened.

3. Reliability Hegde

- The contradiction may have been caused by the different of the majors of students’ chosen by the researcher as the participants and the instrument that the researcher used to measuring students’ performance in term of English proficiency. (undergraduate thesis 4/ Ch. IV/ Page 34)

While based on the example above, the writer undergraduate thesis 4 shows the use of reliability hedge. It is signed with the modal verb “may”. The function of the word is to let the writer’s reservations concerning whether the situation actually obtains, where claims may be less tenuous. The writer above tried to make a claim about the contradiction has been caused by the different of the majors of students’ chosen by the researcher as the participants and the instrument that the researcher used to measuring students’ performance in term of English proficiency, however the sentence or the claim put a modal verb “may” then the sentence was vague whether the contradiction was really caused by the different of the majors of students’ chosen by the researcher or not.

4. Reader Oriented Hedge

- We can also take the positive side of us to be more tolerant in recognizing and accepting the superiority of others.

The writer in the example above tried to involve the reader to take the positive side of the writer and the reader to be more tolerant in recognizing the superiority of others. The writer used this function as self-threatening act by showing his/her subjectivity and letting the reader as thoughtful individual to give a respond and judge regarding the truth value of the proposition.

CONCLUSION

Based on the result of the data that has been analyzed, this study concludes that all type of hedging is used by the writers in interpreting research data with the total occurrence 191. Based on the data in table 1, the use of Approximator of Degree, Frequency, Quantity, and Time is the most commonly occurred in all theses. It means that the writer tends to render or make the statement fuzzy in term of quantity, degree, frequency and time, it also softens the statement or to show inexactness. It means that the writers tend to render or make the statement fuzzy in term of quantity, degree, frequency and time, it also softens the statement or to show inexactness. On the other hand, If Clause is the types of hedging that the least occurred in all thesis because the writers is less in expressing hypothetical situation or conditional situation that offers a possibility of claim.

Additionally, in terms of functionality, this study concludes that the writer employs various functions in interpreting research data, totaling 191 occurrences. The predominant use of Attribute hedge is observed in all the theses, with Markers of Intentional Vagueness being the most frequently employed type of attribute hedge. This suggests that writers may view Marker of Intentional Vagueness as an effortless way to introduce vagueness into their arguments, as words such as "generally," "usually," "often," and "several times" directly convey vagueness. The primary purpose of employing such markers is to mitigate the potential threat to one's reputation by reducing the explicitness of a statement, thereby allowing the
writer to communicate their meaning indirectly and less boldly. Conversely, reader-oriented hedge is the least commonly used in all theses. The utilization of reader-oriented hedge implies to readers that the writer's statements should not be universally accepted as true or definitive, but rather as personal opinions, judgments, or beliefs open to further negotiation. The subjectivity introduced by reader-oriented hedge contradicts the objectivity expected in academic writing. Consequently, reader-oriented hedge is generally avoided in the finding and discussion sections of undergraduate theses, which encompass academic writing.

Lastly, with regards to its application in academic writing, the first three undergraduate theses fall into the qualitative category, while the remaining four to six falls into the quantitative category. Based on the data findings, hedging is more frequently employed in qualitative theses than in quantitative ones. This is due to the nature of qualitative theses being inherently more ambiguous and speculative compared to quantitative theses. Hedging and academic writing are interconnected because hedging allows writers to introduce ambiguity into the discussion while simultaneously increasing the precision of their claims. Additionally, the distinction in the use of hedging between qualitative and quantitative theses is determined by how research data is interpreted in the finding and discussion sections, whether it involves vague or epistemic claims for qualitative theses or precise and categorical claims for quantitative ones.

REFERENCES