
The Use of Hedging in Academic Discourse

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ABSTRAK

Penelitian ini mengkaji fenomena penggunaan *hedging* (penolakan halus) dalam teks akademik. Dengan menggunakan metode kualitatif, peneliti mengumpulkan data melalui angket, wawancara *stimulated recall*, analisis teks dan profil bacaan. Subyek penelitian adalah empat kata pengantar tesis yang ditulis mahasiswa UPI; dua orang mahasiswa S-1 dan dua orang mahasiswa S-2 jurusan Pendidikan Bahasa Inggris. Penggunaan teknik *stimulated recall* menemukan adanya penggunaan sembilan jenis *hedging* sementara analisis dengan menggunakan definisi Hyland mengidentifikasi delapan jenis. Hasil temuan tersebut kemudian dianalisa berdasarkan jenis, kepantasan dan kesadaran penggunaan *hedging* tersebut. Peneliti menyimpulkan bahwa penggunaan *hedging* berkaitan dengan tingkat pemajanan penulis terhadap kegiatan membaca dan menulis sebagai bagian dari pengalaman akademik mereka.

Kata kunci: *hedging*, analisis teks, diskursus, membaca dan menulis

Academic discourse is both a vehicle and a site where scientists of various disciplines disseminate their findings to the public of academics and to a significant extent, it also serves as a medium of interaction among experts across different disciplines. The role of academic discourse is vital in the construction and development of sciences.

Research on academic discourse has spawned insightful theories on the linguistic characteristics of scientific texts. According to Varttala (2001), this genre of scientific writing has been discussed extensively in literature and researchers have also investigated other types of scientific discourse such as academic writings, textbooks, and presentations.

Regardless of the popular misconception that academic discourse embodies neutral accounts of factual information, linguists have come to believe that this type of discourse actually constitutes socially constructed '*rhetorical artifacts*' (Hyland 1998). Authors of scientific discourse often structure their messages by using specific linguistic strategies when engaging in processes of negotiation and persuasion in conveying their scientific findings .

Despite the claim that authors of scientific discourse commonly qualify their information by means of discourse markers related to vagueness, uncertainty, or tentativeness that are commonly referred to as *hedges*, Hyland (1998) states that the

use of hedges is not merely a strategy to obfuscate or confuse propositions or statements; it is simply a convention of academic style.

The study of hedges or hedging in scientific discourse has developed into a new linguistic area that is full of prospects. The results of the latest studies on hedging, for instance, have indicated some practical applications in some pedagogical materials and style manuals (Varttala 2001).

Considering the magnitude of these findings, it is imperative to turn to this field as an alternative for improving the quality of academic writing skills of non-native speaker students of English. This study does not fall into the category of EFL research, however, there could be some significant implications to the improvement of the teaching of reading and writing.

The logic of our study is based on a functional approach to language as proposed by Searle (1984), Brown and Levinson (1994), Yule (2000), Fairclough (2003), Halliday (2004), that is, choices of words, metaphors, grammatical structures, styles are all purposeful.

From the functionalist perspective, language when used is believed to have the capability to represent the world and determine the nature of social relations existing among social actors (Halliday 2004). This linguistic phenomenon is not only found in texts that are produced in the mass

media or literary texts, but also in academic texts that are often seen as neutral

Guided by such functional perspectives, we began to think that theses might also contain certain linguistic features that are worth researching. One of the most salient characteristics of thesis writing is the deployment of hedging. We were drawn to investigate hedges in academic discourse because of our curiosity in such a writing style.

Method

The research method used in this research is qualitative in nature. We decided to use a qualitative study because our intention was to obtain insights as to the patterns and meaning of particular linguistic features found in academic works.

We studied a relatively small number of texts along with the subjects and situations that were involved in the processes of the texts' production. This is in accordance with the main characteristic and spirit of the qualitative approach; that is, what stands out in a qualitative study is the depth and breadth of the analysis, not the number of the subjects studied. A qualitative study has nothing to do with statistical significance; rather, it seeks to pursue a profound understanding on a particular phenomenon by utilizing all resources, data, observation, and even subjective interpretation.

The Subjects

We took two different kinds of academic writing which were written by four scholars, that is, two males and two females; two of them by S-1 graduates, and the other two S-2 graduates.

The reason for choosing them to be our subjects was because they sufficiently represented all the prominent elements of our observation, such as modality and passive construction. Those elements were available in the corpus of the academic writings; '*skripsi*', and '*thesis*', from which we hoped not only to examine what types of hedging the subjects used but also their reasons for using them.

Related to the research undertaken by Clyne (1991b), we were interested in investigating the hedging phenomena in the academic works written

by S-1, and S-2 graduates. We examined the deployment of hedging in the introduction section of their academic writings; ('*skripsi*', and '*thesis*').

Following are the characteristics of the samples:

Table 1: Characteristic of the Subjects

No	Initial	Gender	Educational Background	Titles of The Papers
1	RY	male	S-1	Power Relation Among Characters: A Postcolonial Analysis on Frances Goodrich and Albert Hackett's Drama "The Diary of Anne Frank"
2	DG	female	S-1	Power Relations in the Discourse of Inul Daratista (A Cultural Study Analysis)
3	RD	male	S-2	The Contribution of News Websites to Democratization in Indonesia (A Hypertext – Based Critical Discourse Analysis of Democratic Awareness)
4	YW	female	S-2	Social Interaction in EFL Classrooms (A Case Study at Three Senior High Schools in Bandung)

Corpus Selection

In this study, we chose two different levels of the academic writings produced by four graduates, that is, two males and two females. This was intended to avoid a gender bias.

In addition, we decided to use the introduction section for our corpus of analysis for several reasons. First, the discourse of the introduction section is generally shorter than other sections; this gave us more room for a thorough investigation. Being short does not mean that it contains a small number of hedges. In fact, according to Hyland (1999), the introduction section of a thesis is heavily hedged.

Secondly, investigating the introduction put us in the position to analyze the background to the research. The background of a thesis usually presents a bigger framework that underlies the undertaking of the research, which includes the contexts, reasons, and purposes of the study.

Topic Selection

This table lists the topic selections made by the subjects under study:

Table 2: Topic Selections

No	Initial	Titles of The Papers	Page numbers of Introduction section	Number of words in Introduction section
1	RI (S-1/ male)	Power Relation Among Characters: A Postcolonial Analysis on Frances Goodrich and Albert Hackett's Drama "The Diary of Anne Frank"	6	1,379
2	DG (S-1/ female)	Power Relations in the Discourse of Inul Daratista (A Cultural Study Analysis)	7	1,915
3	RD (S-2/ male)	The Contribution of News Websites to Democratization in Indonesia (A Hypertext – Based Critical Discourse Analysis of Democratic Awareness)	13	3,787
4	YW (S-2/ female)	Social Interaction in EFL Classrooms (A Case Study at Three Senior High Schools in Bandung)	8	1,862

The table shows that the topic selections of our subjects range from Power Relations (Power Relations Among Characters: A Postcolonial Analysis on Frances Goodrich and Albert Hackett's Drama "The Diary of Anne Frank" and Power Relations in the Discourse of Inul Daratista – A Cultural Study Analysis) to Social Interaction in EFL Classrooms.

The Techniques of Data Collection

In collecting data in this study, we developed indirect interviews (in the form of questionnaires) as instruments. The interviews were conducted to gain a rich embedded data related to the main questions proposed in the thesis statements.

In order for us as the researchers to have a wide perspective about the characteristics of the samples after giving questionnaires to the samples, we conducted direct interviews. Direct observations were needed to gain "real" data.

The interviews used in this study were based on the stimulated recall methodology (SRM). The SRM, according to Bloom, Gass & Mackey, is an introspective method where participants are encouraged to remember thoughts by using some visual or oral stimulus such as photographs or video or audiotape so that the subjects are capable of reliving an original situation with clarity and accuracy if they are presented with a large number of the cues or stimuli which occurred during the original situation (Gass & Mackey, 1998; Bloom, 1953 in <http://linguistlist.org/issues/11/11-1414.htm1#1>).

In a stimulated recall, the researcher is an active listener and reflector who asks and clarifies, but avoids asking leading questions, making evaluative questions or doing anything that implies disinterest or disapproval. In general, the most important questions to elicit the subjects' thinking and action are: what, how and why (Mayer & Marland 1997 in sanna.patrikainen@helsinki.fi and aui.toom@heksinki.fi).

Following are the steps that we took in using the stimulated recall method:

- (a) We distributed copies of the theses under study to the subjects to be checked by themselves. We asked them to underline words in their writings wherein they thought they had used hedges.
- (b) If they did not have any idea or had already forgotten about the hedging concept, we gave the subjects a kind of trigger to introduce 'hedge or hedging' by eliciting the subjects' understanding indirectly. The questions such as 'what, how and why' were used to recall their memory.
- (c) After they had finished underlining the hedged words, we compared their findings to our own findings. We used three experts' indicators of hedging (Hyland, Myers, and Lakkoff) as the standard because we employed the categories of hedges used by hedging experts such as Hyland (1998), Myers (2001) and Lakkoff (1972).

Operational Definitions

- Hedging: A rhetoric strategy to present an argument in academic writing intended to soften, strengthen or weaken statements.
- Reason: An explanation for something that has happened or for why something is the case.

Results and Discussion

We used both theoretical and empirical perspectives to make sense of what happened, as well as the context that caused it to happen. After that we interpreted the information from the questionnaires and interviews to seek answers for the three research questions. There are three types of analysis that we carried out in our study: a) analysis of the types of hedging, b) analysis of hedging appropriateness, c) analysis of hedging awareness.

Analyses of The Types of Hedging

These were the steps that we took in analyzing the types of hedging:

- a) we identified hedged words, phrases, and clauses based on the indicators provided by Hyland (Hyland 1998).
- b) we sought to classify the hedged words in terms of their grammatical forms given by Hyland (Hyland 1998).
- c) those hedged units were put in tables to show how they are distributed in percentages. By calculating their frequency of hedges, it would be easy to look at the tendencies of the subjects in using hedging.
- d) we interpreted the data in relation to the subjects' proficiency in using hedging; there are certain types of hedging which are more complex than others.

Analysis of Hedging Appropriateness

- a) we identified the appropriateness of hedges used by the subjects.
- b) we classified those hedges into the columns of appropriate use (a) and inappropriate use (i). This was based on both the accuracy of their forms and functions.

- c) we calculated the percentages of the frequency of both appropriate and inappropriate use of hedges. This enabled us to see clearly the distribution of appropriateness of the use of hedges by the subjects.
- d) we interpreted the data of appropriateness in relation to the subjects' overall mastery of how hedges should be used to convey their communicative purposes.

Analysis of Hedging Awareness

- a) we identified hedges that were objectively written by the subjects based on the indicators given by Hyland (Hyland 1998).
- b) we identified hedges that the subjects thought they had written from their own perspective.
- c) we calculated the sum of each sort of hedging and presented it in tables.
- d) we interpreted the data with the assumption that the closer the number of hedges between those that were objectively written by the subjects and those that the subjects thought they had written, the more they understood about the concept of hedging.
- e) The information on the subjects' awareness of hedging was further identified by whether or not the subjects understood the reasons for choosing those hedges; that is, this was proved by whether they wrote the reasons and whether their reasons were appropriate with the contextual meaning of the hedges they wrote.
- f) we then had the opportunity to identify the degree of the subjects' awareness of hedging by classifying subjects into those who were less aware of the use of hedging, those who were aware but could not explicitly state the reasons, and those who were both aware and could explicitly state the reasons for using their hedges.
- g) we sought to explain their varying degrees of hedging awareness by relating it to their reading profiles

The Number of Hedges in The Subjects' Work

Upon completion of the research, it was discovered that hedges occurred in the subjects' discourse.

(a) By Using the Stimulated Recall Technique

This research indicates that the male S-2 subject has the most 'hedging awareness' among all the subjects (Table 19); this has been proved by the fact that he had collected 'the most hedged words' of all the subjects; 74 words (58.26%). In terms of this hedging awareness, it turns out that the second rank has been achieved by the S-1 male subject; he underlined 25 'hedged words' (19.68%).

Following the male S-1 subject is the female S-2 whose hedged words amount to 22 words (17.32%). Finally, the female S-1 came up with the least hedged words, totaling 6 words (4.72%); this number of hedged words indicates that she has the least awareness of her use of hedging.

(b) By Using Hyland's Definition

Based on the finding, it was found that the total number of hedges found in their essays, the highest frequency of hedges was 28.14% (one out of 3.5 words in the corpus of 3,787 words – Male/S-2) and the lowest was 2.24% (one out of 44.5 words in the corpus of 1,862 words – Female/S-2).

The Types of Hedging The Subjects Used

(a) By Using the Stimulated Recall Technique from Highest to Lowest:

- Adverbs (33.85%)
- Modal auxiliaries (25.19%)
- Adjectives (14.96%)
- Clause (11.81%)
- Full verbs (9.44%)
- Passive Sentences (0.78%)
- Conditional sentences (0.78%)
- Nouns (0.78%)
- Conjunction (0.78%)

With the use of the Stimulated Recall Technique, it was found that there were nine types of hedging found in the subjects' writing. The hedging type that most frequently appeared was Adverbs. The most infrequent types, however, were Passive Sentences, Conditional sentences Nouns, Conjunction, all of which shared the same frequency.

(b) By Using Hyland's Definition from Highest to Lowest:

- Agentless Passive (38.41%)
- Modal Auxiliaries (25.49%)
- Adverbs (19.53%)
- Adjectives (5.96%)
- Full Verbs (4.30%)
- Nouns (3.97%)
- Clausal Elements/Conditional Sentences (1.98%)
- Passive Infinitives (0.33%)

The result shows that eight types of hedges were found in the introduction section of the subjects' theses. The highest frequency among all types was Agentless Passive, and the lowest was the Passive Infinitives.

The Subjects' Reasons in Using Hedging

(a) By Using the Stimulated Recall Technique

RI: From the interview (unrecorded), it was found that he was not very sure in giving reasons for each word or sentence that he thought might contain 'hedges'; therefore, he did not provide any specific reasons. Nevertheless at the end of the interview, RI stated that most of the hedged features that he used were mainly because he had tried to be careful with everything he wrote.

The reasons he had put forward appears to be 'academically justified'; they are commonsensical and somehow seems to be a paraphrased version of Hyland's definition. Unfortunately, RI was not able to give specific explanations to each hedged feature that he used. This might have been because of his lack of understanding of the concept of hedging.

DG: It was found that she had used specific hedged clauses for the sake of caution. She also stated that her use of the modal auxiliary 'could' and adverb 'possibly' was driven by her uncertainty of the accuracy of the data. For example, she used the phrase 'as we have been familiar with' in order to convey a safe statement, evading the impression of being too confident.

Meanwhile, she said that the use of passive sentence was triggered by the adverb 'seriously' to convince the reader on the significance of the act of the showing social status and she used the adverb 'preferably' to assure the reader on the significance of her choice.

Viewed from the appropriateness of the use of hedging, DG employed hedged words appropriately five out of six tokens (83.33%) and inappropriately one out of six tokens (16.66%). DG used an inappropriate form of pronoun to be used in an improper context.

RD: Based on the questionnaire, it was found that RD has 74 hedged words in his writing consisting of 13 modal auxiliaries (17.56%) and 30 adverbs (40.54%), 10 verbs (13.51%), 18 adjectives (24.32%), and 3 clauses (4.05%) in his work.

Related to the use of hedging in his writing, it was revealed that RD was able to put forward the reasons for each '*hedging*' that he had used appropriately.

YW: she underlined 22 sentences that in her view used features containing '*hedging*.' It was found that there were 13 modal auxiliaries (59%), 6 clauses (27.27%), 1 conditional sentence (4.54%), 1 noun (4.54%), and 1 verb (4.54%) in her work.

Concerning the use of hedging in her writing, YW had a fairly high degree of appropriateness (95.45%); it means that she used 21 '*appropriate*' hedged features out of 22 tokens. It also indicates that she only had one inappropriate use of hedging, that is, in the use of modal auxiliary.

b) By Using Hyland's Definition

The study indicates that the four subjects used hedging:

1. to demonstrate qualification – strengtheners and weakeners – (37.74%)
2. to express both certainty and uncertainty (24.72%)
3. to avoid confrontation; respondents delete the agent or qualified claims in order to stay away from conflict. (12.52%)
4. to do self-protection (10.65%)
5. to express possibility (3.72%)
6. to appear modest (2.6%)
7. to show attribution – personalization and depersonalization – (2.00%)
8. to evade responsibility (1.78%)
9. to persuade readers to agree with the writer (1.48%)
10. to demonstrate politeness (1.36%)
11. to commit in politics (0.68%)

12. to show expectation/hope (0.34%)
13. to impress (0.34%)
14. to conceal the truth (0%)

Gender

One of our major findings on the theory of hedging in academic discourse is that gender has had no effect on the hedging awareness of the subjects. Although there are differences in the distribution of hedging and their reasons among the subjects, the data do not vary significantly, that is, the male S-1 subject (25.49%), the female S-1 subject (24.17%), the male S-2 subject (28.14%), and the female S-2 subject (22.18%).

This finding appears to contradict the dominant theory proposed by Lakoff (1975) and Preisler (1986) who state that women tend to hedge more than men. This contradiction is interesting because it challenges the apparently common belief among linguists that women have a stronger tendency to hedge than men.

It turns out that this finding also contradicts the results of other studies such as, those of Crismore, Markkanen and Steffensen (1993) who found that men use hedging more frequently than women. This being the case, our finding is somewhere in the middle between the two competing theories, that is, the dominance theory and its opposing theory.

The result of this study, however, does not oppose all findings from previous studies on hedging. This study corresponds with Farrell and van Baalen's (2001) findings, namely, women do use the male mode of discourse because they are brought up and educated in a patriarchal system. The subjects in this study appear to come from a relatively similar education background, that is, all of them are highly intellectual and graduated from the same university.

Genre, message, and topics

Having considered the three perspectives on hedging use, it appears that the influence of gender on the use of hedging is not as simple as it seems to be; more explanation has to be given in order to understand these seemingly inconsistent findings. It may be the case that there are a number of variables that have come into play in these different results, that is, the genre of discourse, the nature of the message, and topics.

The genre of the works that we examined is thesis, which falls into the category of academic writing. This genre requires a specific standard of writing. Six common features that are believed to characterize academic writing are complex, formal, objective, explicit, hedged, and responsible (<http://elc.polyu.edu.hk/CILL/comstud1/acadwrit.htm>).

Because of this standard, anyone writing a thesis has to obey the rules, that is, to write in a strictly academic manner. Thesis writing is not the same as the writing of novels, drama, or poems. Hedging is used in thesis writing, but it has to be used sparingly; that is, it cannot be used to create a dramatic or poetic effect as in literary works.

The third variable that might contribute to the differences of the distribution of hedging among the subjects is the fact that they wrote theses on different topics. Differences in topics mean differences in the distribution of hedging use; certain topics require the writer to hedge more than other topics.

Education

With regards to the variable of education, there seems to be a relationship between education and hedging awareness. The tendency is that the higher the education of the subjects, the higher their hedging awareness is. This finding is in accordance with the common sense that education contributes to the development of both the intellectual and mental capacities of individuals that includes enhancement of metalanguage awareness among education participants.

The data of this study show that by using STRM, the male S-2 subject's percentage is 58.26%, the male S-1 subject is 19.68%, the female S-2 subject is 17.32% and the female S-1 subject is 4.72%. From the number of the percentages, the male S-2 subject had the highest hedging awareness among the subjects. He had underlined 'the hedging features' correctly and given the reasons to all hedged words properly.

The male S-1 (RI) followed the male S-2 subject with his hedging percentage, that is, 19.68%, unfortunately each hedge that he had underlined showed up without any specific reasons. Therefore, RI could not be regarded as a subject who had high hedging awareness. It seems to be that the female S-2 subject (YW) was more suitable to be the second highest in terms of hedging awareness. YW could specify the types of hedges found in her

writing (17.32%) moreover she was also able to put forward her reasons underlying the use of the hedged features she employed.

DG, the female S-1 subject, appears to have the least of hedging awareness due to her percentage of hedged words, that is, only 4.72%. However, DG's percentage of hedging does not necessarily indicate that she has the least hedging awareness among the subjects. Despite her not being able to highlight hedged features as many as expected (6 hedged features out of 127 tokens), DG was able to specify her reasons in using hedging.

As RI, the male S-1 subject, could only identify which part(s) of the writing containing hedged features without explaining his reasons for using them, he was properly considered as a subject who had the least hedging awareness of all. This is due to the fact that shows the ability to underline the hedged features is far too easy compared to the ability to put forward the reason(s) for using them.

Based on the above explanation, we conclude that the rank of the subjects in terms of hedging awareness by using STRM from highest to lowest is: the first is the male S-2 subject, the second is the female S-2 subject, the third is the female S-1 subject and the last is the male S-1 subject.

Types of Hedging revealed using STRM

By using STRM, the subjects in our research used nine types of hedging. Those are: (1) Adverbs (33.85%), (2) modal auxiliaries (25.19%), (3) adjectives (14.96%), (4) clauses (11.81%), (5) full verbs (9.44%), (6) passive sentences (2.36%), (7) nouns (0.78%), (8) conditional sentences (0.78%) and (9) conjunctions (0.78%).

Hedges marked by adverbs have a relatively high frequency. It is probably because this type of hedge is the easiest; in order to use an adverb, a writer should just put it in a sentence, at the front, in the middle or at the end of the sentence, depending on his or her emphasis.

Meanwhile, modals mark the writer's attitude of his or her proposition. Out of the basic meanings of 'can' (possibility, ability, and permission), it is possibility which is relevant for hedging. The 'can' 'possibility' refers to the external circumstances making something possible (Coates 1983:93). Instances of 'will' in texts mostly state the notion of *determination* (in the first person) or *forecast* (in the third) or are used *habitually*.

Types of Hedging revealed using Hyland's criteria

By using Hyland's criteria, it was discovered that the subjects used eight types of hedging. Those are (1) Agentless passive (38.41%), (2) modal auxiliaries (25.49%), (3) adverbs (19.53%), (4) adjectives (5.96%), (5) full verbs (4.30%), (6) nouns (3.97%), (7) clausal elements or conditional sentences (1.98%), (8) passive infinitives (0.33%).

Based on these criteria, it was found that the type of hedge that has the highest frequency among the four subjects is agentless passives. It seems that this was because they felt that they had no authority to make theoretical statements as experts.

By using the agentless passive, these writers confine their commitment to what they state; the agentless passive helps them to evade errors due to their lack of knowledge. They might show reserves by stressing the general validity of their statements. If they doubt, or want to shun dogmatism, they could quote a higher authority. Hyland says that reference to an authority gives writers the confidence to assert their views (Hyland 1998).

In addition, there is another insight from Markkanen and Schroder (1989; 1992). They view *the agentless passive* and other types of hedges as modifiers of the writers' responsibility for the truth-value of propositions or as modifiers of the magnitude of information given, or the attitude of writers to the information.

Meanwhile, the use of modality also permits the inclusion of linguistic items and structures such as logical and pragmatic connectors, past tense when used hypothetically, and passivization. The hypothetic and passivization allow agent deletion and therefore the avoidance of commitment happens. This view of modality comes close to the functional, pragmatic definition of hedges (e.g. Markkanen & Schroder, 1989; 1992).

Besides the agentless passive, the use of *modal auxiliaries, adverbs, adjectives, full verbs, nouns, clausal elements or conditional sentences* and *passive infinitives* that were found in this study can also be considered as hedges. Just as stated by Markkanen and Schroder, the use of certain *pronouns* and *avoidance of others, the use of impersonal expressions, the passive and other agentless constructions, in addition to the use of modal verbs, adverbs and particles* are also usually included in hedges.

This study shows an interesting phenomenon that the use of passive infinitives happened to have the lowest frequency (0.33%), but the use of agentless passives happened to be the highest (38.34%). This is shown in table 28. Obviously, there is a significant difference between the lowest and the highest, that is, 38.01%.

This phenomenon happened due to the characteristics of the text genre used in this study, that is, academic writing. The general features that are believed to characterize academic writing are complex, formal, objective, explicit, hedged, and responsible (<http://elc.polyu.edu.hk/CILL/comstud1/acadwrit.htm>).

When they used agentless passives, they were actually using a rhetoric strategy to emphasize objects instead of subjects. This does not mean that the writer did not know who or what the subjects were; this is only a matter of focus, that is, which ideas the writer wishes to foreground and which he wishes to background.

A contrast occurred in the use of passive infinitives because the subjects seldom used them in their theses. In fact, the use of passive infinitives is generally motivated to hide agents because the writer has no idea about who or what the subjects are. This strategy is often drawn upon in writing fictional works such as novels or short stories.

Reasons of Using Hedging in Scientific Writing

Essentially, hedges in this study indicate the subjects' anticipation of the possibility of opposition to their statements. While they show indeterminacy of meaning, and there is certainly some overlap between these categories, hedges offer three fundamental reasons in gaining reader approval of claims (Hyland 1998).

First, hedges enabled the subjects to express propositions with greater accuracy in areas often characterized by reformulation and reinterpretation. The term "*hedging*" in this case is an important means of precisely stating tentative scientific claims with appropriate caution.

Hyland says that scientific writing is a blend of facts and evaluation because writers attempt to present information as fully, accurately and objectively as possible. In this study, the subjects often said, "*X may cause Y*" rather than "*X causes Y*" to specify the actual state of knowledge on their part. Hedges here differentiate the actual from the potential or inferential.

The second reason has to do with the subjects' need to anticipate possible negative effects of being proven wrong. Academic credibility, in Hyland's view, increases in accordance with strong claims about particular evidence, but there is also a need to prevent arguments from exaggeration (Hyland 1998). As the four subjects wrote academic works, which were supposed to show a high level of credibility and reliability, they had to resort to hedges.

It appears that hedges in this study had the function of assisting the subjects to shun personal responsibility for statements in order to protect their reputations as scholars and limit the damage which may result from errors. This usage is associated with Lakoff's perspective that considered hedges as similar to "fuzziness" (Hyland 1998), but in this case, hedges were used to blur the relationship between the subjects and their propositions when referring to tentative possibilities.

Finally, hedges contributed to the development of the writer-reader relationship, addressing the need for deference and cooperation in gaining reader approval of the subjects' claims. This finding is in line with Hyland's (1998:35) idea that "hedges appeal to readers as intelligent colleague, capable of deciding the issues, and indicate that statements are provisional, pending acceptance by one's peers."

Directions for Future Research

This study has examined the types of hedging used in theses, the distribution of hedges among the theses, and the writers' awareness of their use of hedging as reflected in the reasons that they wrote based on both the Stimulated Recall Method and Hyland's criteria.

Data Collection

We recognize that the study is limited in terms of the sampled texts and subjects. We only used four theses written by four subjects, that is, two S-1 graduates (a male and a female) and two S-2 graduates (a male and a female). We actually intended to have another two subjects, that is, an S-3 male graduate and an S-3 female graduate; however, we had to drop them as they were too busy.

Future researchers are recommended to use more sampled texts and subjects, especially, by

involving S-3 graduates. This is because there would be a potential variation in terms of the distribution of hedges and their reasons for using hedges in their works, resulting from their S-3 education background.

Scope of Investigation

This study is limited in terms of its scope of investigation, that is, it only covers broader issues such as types of hedging, distribution and reasons. As a result, there remain many aspects unanswered.

Our findings and discussion on hedging are limited to hedging types such modal auxiliaries and agentless passives. We discussed these hedges only from the typology provided by Hyland, whereas it would have been more interesting to look at hedges in a more specific manner.

Implications of the Study

Educators

The findings of this study have important implications to the study of academic writing as one of the compulsory courses taught in Indonesian universities. It has been indicated earlier that writers' awareness of the use of hedging in writing is essential because the ability to use hedging appropriately helps writers craft their statements to produce credible, rational, and convincing claims.

Following are three arguments that explain why hedging should be taught to students of academic writing. First, knowledge on hedges enables writers to express propositions with greater accuracy in areas often characterized by reformulation and reinterpretation such as in academic writing.

Second, as has been indicated earlier, writers' awareness of the use of hedging in writing is essential because the ability to use hedging appropriately helps writers soften their statements to avoid overstated claims. Novice writers tend to make "big claims" while they are not aware of the effect of their claims.

Hedging is important because writers need to maintain academic credibility. This study has proven that hedges can assist writers to shun personal responsibility for statements in order to protect their reputations as scholars and limit the damage which may result from errors. This usage is associated with Lakoff's perspective that considered hedges as similar to "fuzziness" (Hyland 1998).

Third, hedges can contribute to the development of the writer-reader relationship, addressing the need for deference and cooperation in gaining reader approval of the subjects' claims. This finding is in line with Hyland's (1998:35) idea that "hedges appeal to readers as intelligent colleague, capable of deciding the issues, and indicate that statements are provisional, pending acceptance by one's peers."

Students

Foreign students generally find the expressions of commitment and detachment to their propositions problematic. L2 writers, even those with a good command of English grammar and lexis are likely to fail to hedge statements adequately. This fact can badly impede a student's participation in a research world dominated by the international lingua franca of English.

A Non Native Speaker who wishes to function in the international research world must be familiar with its conventions and be able to recognize and use hedging devices appropriately. Therefore, the study of hedges can assist non-native students to participate more fully and successfully in the world of academic research. In order to sharpen their writing skills, students should start to learn to recognize and use hedging in their writing. This way would boost their confidence in their productive skills in both written and spoken English.

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