Lexical verbs of hedging in English research articles by native and non-native speakers

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Article Info	Abstract
	This study aims to compare verb variation and the functions of hedges used in English scientific research articles written by English native speakers (NS) and non-native speakers from Indonesia (NNS). The data were collected from a corpus of 30 international journal articles. The analysis was conducted quantitatively using a normalization system and statistical tests to determine the frequency and distribution of lexical verbs and qualitatively using Palmer's (2001) and Hyland's (1996) hedging model to identify the forms and specific functions of the hedges. The findings demonstrate that both NS and NNS used speculative, deductive, quotative, and sensorial verbs as hedges. However, NS used speculative and sensorial verbs more frequently, while NNS used deductive and quotative verbs more frequently. Statistically, the frequency and distribution of hedges in the two categories of writers were not significantly different. Both NS and NNS tend to use lexical verbs to protect themselves as writers by limiting personal commitments and to protect their readers by anticipating rejection based on subjectivity. These findings contribute to the understanding of hedging use in academic writing by NNS from Indonesia and provide implications for English language teaching and learning.

INTRODUCTION

Research articles published in scientific journals, hereinafter referred to as journal articles, serve as a reflection of the current scientific development. They function as one of the means of social communication for science where academics can present and document the ideas or findings of their research in written forms. In this regard, it is common that academics worldwide are highly encouraged to contribute by publishing research articles not only in national journals but also in international ones. In Indonesia, as stated in the Regulation of the Minister of Research, Technology, and Higher Education Number 20 of 2017, Chief Lecturers and Professors are obliged to regularly publish articles in reputable international journals. However, it is noteworthy that the percentage of Indonesian academics who have successfully published their writings in leading international journals is still considerably low (Sanjaya, 2013). This fact leads to an assumption that becoming a part of an international scientific community is not an easy task, especially for non-native speakers of the language (Alonso, Alonso, & Marinas, 2012).

According to Sanjaya (2013), the key challenge faced by most academics to be a part of the international scientific community is their lack of attention as well as knowledge of the distinctive language features characterizing scientific research articles. As for the case of English international publications, Salager-Meyer (1994) notes that the scientific community values humility, coyness, and carefulness over arrogance and excitement. Furthermore, Hyland (1998) adds that academic discourses frequently require mitigation in making claims. To achieve that goal, a language strategy, namely the use of hedging devices, needs to be considered by the writers (Hyland, 1996ab, 1998; Salager-Meyer, 1994).

Hedging devices, such as the use of 'seem', 'might', or 'perhaps', was conceptually introduced by George Lakoff (1973) as words that can strengthen or weaken messages. In the context of scientific journal article writing, such device can indicate the tentativeness of the writers' proposition. According to Hyland (1998), the use of hedging is crucial in distinguishing research articles as the primary medium for disseminating new knowledge among academic discourses. Furthermore, the use of hedging devices demonstrates the application of politeness strategy (Myers, 1989), which is important in maintaining a positive relationship between readers and writers, as claims are categorically avoided.

Given the importance of hedging devices in English scientific research article writing (Budiarti & Faris, 2018; Hardjanto, 2016; Hyland, 1996ab, 1998; Myers, 1989; Salager-Meyer, 1994; Swales, 1990; Varttala, 2001), especially in international publications, a plethora of research investigating the hedging devices in non-native speakers community has been conducted. Some of them have examined their use by those from Iran (Atai & Sadr, 2008; Nasiri, 2012), Malaysia (Tan, 2002), Turkey (Yagiz & Demir, 2014), and the Czech Republic and Slovakia (Sládková, 2010). Furthermore, of the many lingual forms of hedging in English that have been formulated by previous researchers (see, e.g., Crompton, 1997; Hyland, 1994, 1996ab, 1998; Salager-Meyer, 1994; Varttala, 2001), several of them have been specifically reviewed, such as adverb (Perez-Paredes, et al., 2011), modal auxiliary verbs (Bashir, et al., 2018; Hardjanto, 2016a), and lexical verbs (Vass, 2017). However, related research on the use of lexical verb hedging by non-native speakers from Indonesia is still scarce. Hence, this research generally aims at comparing the lexical verbs used in exercising hedging strategy in international journal articles written by English native speakers and non-native speakers from Indonesia. It is expected that the results of the study shed light on potential differences mainly in the variation and functions of the lexical verbs and help inform best practices for academic writing as well as enhance the clarity and credibility of research articles.

Hedging in scientific research articles

In general, Swales (1990) defines a research article as a written text that aims to report the results of research that has been carried out by one or a group of authors. The results of the studies will usually be associated with the results of previous studies. He also stated that the research article will be published or has already been published in a research journal or an edited book containing a collection of articles. In this regard, Hyland (1998) argues that writing a research article can be classified as a social act considering that what is written needs to go through a process of negotiation and ratification before it can finally be accepted as new knowledge at least by members of the scientific community. Therefore, in this context, the use of language including the writer's rhetorical ability during the 'negotiating' process needs to be considered. One of which is by considering the use of hedging devices in writing.

The concept of hedges as the use of the words 'seem', 'might', and 'suggest' was originally introduced by George Lakoff (1973) as words that function to make something more or less fuzzy. In the context of writing scientific research articles, Hyland (1998) states that hedging is a strategy to show the author's level of belief in the truth of his proposition, avoid commitment to categorical statements, and express uncertainty and possibility in communicating an idea. However, he added that hedging is not a strategy to show confusion or

ambiguity, but rather a convention to be used as one of the characteristics of writing academic discourses. In other words, hedging is a form of realization of the author's desire not to express a definite commitment on the basis of his understanding of the characteristics of science which will always develop. In relation to this, Hyland (1996) stated that the author intended the use of hedging devices as a form of anticipation against the possibility of various oppositions from readers, including the reviewers of journal articles, namely the party that determines whether or not a journal article passes for publication. Therefore, it can be concluded that the writers of scientific research articles are expected to be able to compose an utterance with the use of appropriate hedging devices in order to produce a strong claim, but at the same time be prepared for the possibility of opposition from the readers of the article.

Apart from being a form of self-protection, Myers (1989) with reference to the theory from Brown & Levinson (1987) examines the use of hedging devices specially as a politeness strategy. Based on this perspective, he argues that by fortifying a proposition, the author seems to be making a claim as something temporary and shows that he is willing to delay or wait for the decision to accept the claim by members of the scientific community by giving them space and time in advance to discuss it. Thus, it can be stated that the author will be far from being arrogant and at least socially acceptable as "the humble servants of the discipline" as illustrated by Myers (1989, p. 4) as one of the most important characters to be owned by a researcher.

Lexical verb of hedging

Lexical verbs as hedging devices generally refer to verbs that are commonly used to perform actions such as doubting and evaluating something rather than simply describing actions (Perkins, 1983). Therefore, lexical verbs in this case are often also referred to as "speech act" verbs (Brown, as cited in Hyland, 1998). As mentioned earlier, a number of previous studies that examined hedging in academic discourses found that hedging devices in the form of lexical verbs such as the use of the

words 'suggest', 'indicate', 'seem', and 'conclude' usually show a relatively higher frequency of occurrence compared to it in other forms (see, eg, Holmes, 1988; Hyland, 1994; 1998; Salager-Meyer, 1994). According to Hyland (1998), this reflects the flexibility of lexical verbs in expressing hedges effectively according to what the author intended.

In its practice, Palmer (2001) states that there are at least four ways to express hedging in the form of lexical verbs, namely (1) speculative, (2) deductive, (3) quotative, and (4) sensorial. In summary, the speculative verb form is used when the author makes a claim based on his own subjective opinion, the deductive verb form is used when the author makes a conclusion based on the statements he made previously, the quotative verb form is used when the author quotes another person's statement, and the sensorial verb form is used when the writer puts forward a proposition based on what he feels right in his view.

In connection with the presented elaboration, a number of previous related studies have confirmed that English native speakers generally hedge more (see, for example, Budiarti & Faris, 2018; Thabet, 2018; Salager-Meyer, 1994). It is observed that the underuse of hedging by the non-native speakers of the language might be due to limited language proficiency or a lack of familiarity with academic writing conventions. They may also be influenced by their first language, which may not have the same types of hedging devices as English. In contrast, native speakers tend to have a better command of the language and a deeper understanding of the cultural norms and expectations of academic writing. They are also believed to be more familiar with the conventions of academic discourse, which allows them to use hedging to indicate uncertainty or to qualify claims in a nuanced way.

METHODS

The main objects investigated in this research are hedging devices in the form of lexical verbs, such as 'suggest', 'indicate', and 'believe', published in international journal articles authored

by English native speakers and non-native speakers from Indonesia. Therefore, this research collected written expressions in the forms of clauses and sentences that contain hedging devices in international journal articles. The articles were selected based on several criteria, namely: (a) based on empirical research, (b) covering applied linguistics issues, and (c) published online in Scopus-indexed international journals.

After applying those above criteria, 30 journal articles have been selected. There are 15 articles journals numbered 01-15 for each category. Articles journals written by native speakers were coded as 'NS', and those written by non-native speakers were coded as 'NNS'. Based on the codification, the article codes for both subjects in this research are NS01-NS015 and NNS01-NNS15, respectively. Furthermore, the data in this research were generated by the assistance of computer software, namely *AntConc 3.5.7* (Anthony, 2018), by inputting the keywords, *i.e.* lexical verbs expressing hedging, listed and identified by Hardjanto (2016), Holmes (1988), Hyland (2000; 2005), Kennedy (1987), and Varttala (2001). Lastly, the data filtering method was conducted by removing clauses or sentences containing keywords, that do not belong to any hedging devices.

Next, some procedures were conducted to analyze the data. Firstly, lexical verbs expressing hedging devices in each writer category were listed and classified based on Palmer's (2001) theory, which categorized the verbs into speculative, deductive, quotative, and sensorial verbs. Then, the data were categorized based on their function in the hedging process based on the hedging model proposed by Hyland (1996a; 1998), which divides the function of hedging devices into proposition protection (he further divides the function into accuracy protection and writer protection) and reader protection. To reveal the variation of lexical verbs used by each writer category, the frequency of the lexical verbs used was calculated generally and specifically in each form. The calculation was conducted by applying a normalization system used by Hyland (1998), Varttala (2001), and Hardjanto (2016) as the length of each article

varies. The following is the formula of the calculation:

$$\text{Normal frequency} = \frac{\text{Hedging devices raw frequency}}{\text{Number of words}} \times 10.000$$

Additionally, in order to determine the significance of the difference in hedging variation used by the two groups, statistical tests including chi-square and probability value (p-value) tests were conducted using SPSS Statistics 24 software. Finally, the results of these analyses for both written by NS and NNS were compared to conclude the research.

RESULTS AND DISCUSSION

Lexical verbs of hedging

Lexical verb types used as hedging strategies in the corpus of the study are found more various in NS group than in NNS group, *i.e.* 50 and 40 verb types respectively. In addition to the number of variations in the lexical verb types, based on the results of raw calculations, it was found that the frequency of occurrence of lexical verbs as a hedging device was also greater in journal articles written by NS than NNS, i.e. 795 times and 501 times. However, considering the difference in the length of the articles in the two groups, the raw frequency is not directly proportional to the number of normal frequencies as can be seen in the following table.

Table 1. Frequency of Lexical Verb of Hedging in the Corpus

Writer Category	Number of Words	Raw Frequency	Normal Frequency
NS	126,870	795	62.66
NNS	75,954	501	65.96

Referring to the table above, in general, the results of normal frequency calculations show that lexical verbs of hedging, on the other hand, were more often used by NNS (65.96) than by NS (62.66). However, the value of $X^2_{(1)} = 0.069$ and the value of $p = 0.792$ ($p > 0.05$), first, indicate insignificant differences in the frequency of lexical verb use of hedging by the two groups of writers as a whole. This implies that NS and NNS in this study show similar tendency in terms of the

intensity of using lexical verbs to reveal hedging strategies in the scientific research articles they write.

Furthermore, to see the frequency of use of each form category by NS and NNS, all types of lexical verbs found in each group of writers were classified. As discussed earlier in the Methods section, the data classification process in this study refers to categorization that has been formulated by Palmer (2001), which divides lexical verb into four forms: 1) speculative, 2) deductive, 3) quotative, and 4) sensorial. As a short description, speculative forms are used to present information based on the writer's subjective opinions, deductive forms are used to express a deductive conclusion, quotative forms are used to quote or report other people's statements, and sensorial forms are used to express propositions based on evidence obtained through senses. As for the results of the data classification that has been done, it was found that the four forms of lexical verb formation were used by both NS and NNS. Table 2 below summarizes the raw frequency (FM), normal frequency (FN), and distribution of the use of the four forms of lexical verb of hedging adopted from Palmer (2001).

Table 2. Frequency and Distribution of Use of Lexical Verb Forms

Forms of Lexical Verbs	NS		NNS	
	FM	FN	FM	FN
Speculative	402	31.69	216	28.44
Deductive	17	1.34	41	5.40
Quotative	150	11.82	124	16.33
Sensorial	226	17.81	120	15.80
Total	795	62.66	501	65.96

Viewed in more detail, the table above shows that the more normal frequency of use of lexical verb hedging by NNS groups than NS, as discussed earlier, does not always seem to apply to every form. Referring to the table above, it can be seen that speculative and sensorial forms are more often used by NS (31.69 and 17.81) than NNS (28.44 and 15.80), while deductive and quotative forms are more often used by NNS (5.40 and 16.33) than NS (1.34 and 11.82). In addition, the table above also shows that lexical verb of hedging with speculative and deductive forms both show the frequency of use which, respectively, is the highest and lowest in the two groups. Same as the

previous one, the frequency and distribution of the use of these lexical verb forms by NS and NNS did not show a significant difference ($X^2{}_{(3)}$ = 3.592. p = 0.309; p > 0.05).

Speculative lexical verbs

Speculative lexical verbs are usually realized in performative verb forms, such as the use of '*suggest*', '*propose*', and '*argue*' or also in the form of cognitive verbs, such as the use of '*believe*', '*speculate*', and '*think*'. As for the corpus of this study, there are 23 speculative verbs used by NS and 15 speculative verbs used by NNS. Regarding the 3 types of verbs that are the most popular or most often used as hedging devices, the two groups of writers show the same findings even in different order of frequencies, namely '*indicate*', '*suggest*', and '*consider*' with successive frequencies according to 5,20, 7,72, and 5,20 by NS and 10,40, 5,58, and 4,38 by NNS.

As a speculative form, the use of lexical verbs in a clause or sentence is generally preceded by a subject in the form of personal pronoun "*I*" (1) or "*we*" (2) or pronouns with impersonal construction (3) as in the following examples.

(1) (...) I **_argue_** that previous scholarship tends to put learners in a position of dependence within dialogic interactions (...) (NS06)

(2) (...), we **_believe_** there is value in providing students with compositional freedom to pursue their own multimodal codemeshing paths. (NS12)

(3) Those statistical figures **_suggest_** that the more familiar the students with the texts they are reading, the better their reading performance is. (NNS15)

Deductive lexical verbs

Compared to what is owned by the other forms, the verb type variations of deductive lexical verbs in the corpus of this study were found in the least number, namely 7 types of verbs by NS and 9 types of verbs by NNS. Verbs with the top 3 frequency numbers in the NS group are '*conclude*' (0.32), '*imply*' (0.32), and '*conceptualize*' (0.32), while in the NNS group are '*conclude*' (1.45), '*assume*' (1.32), and '*infer*' (0.92).

As with speculative forms, deductive lexical verbs are usually preceded by the subject "*I*" or

"*we*" to explicitly show that the proposition is the result of the writer's personal inference or usually preceded by an impersonal construct. Several examples of their use found in the corpus of this study can be seen below.

(4) Therefore, it can **_be concluded_** that the students with the low level of grammatical sensitivity who were treated with indirect corrective feedback did not have significantly better writing accuracy (...) (NNS11)

(5) We **_interpret_** the patterns as components of academic writing skills development, of stance taking in argumentation, of information packaging, and of efforts to provide coherence across an essay. (NS14)

(6) The finding **_implies_** that at a very young age, a child that is exposed to two different languages and hears the two languages regularly already has the capacity to become bilingual, even if one language is dominant. (NNS07)

Based on the examples above, it can be noted that the lexical verbs classified to this form are generally used to indicate that the utterances made are based on inferential reasoning or the writer's theoretical calculations on the findings of his research or on the findings of previous studies he reviewed. This opinion also seems to be supported by Vass (2017) who suggests that the use of deductive verbs signals the application of logic to facts for reaching a conclusion.

Quotative lexical verbs

Contrary to the deductive form whose the fewest number of lexical verb types, this quotative form has the highest number of lexical verb types in journal articles written by NS or NNS. NS employed a wider range of 25 verb types compared to NNS, who only utilized 18 types of verbs. The verbs that are most commonly used by NS include '*suggest*' (2.44), '*argue*' (2.36), and '*believe*' (1.34) and the most commonly used by NNS include '*suggest*' (4.08), '*argue*' (2.37), and '*propose*' (2.24).

Most verb types of this form have many similarities to those used in speculative forms. However, if the utterances hedged by speculative lexical verbs are some of them marked by the personal pronoun "*I*" or "*we*" as discussed earlier,

the utterances hedged by quotative lexical verbs are generally preceded by third person subject which is usually marked by quoting someone's name. Several examples of its use can be seen in sentence (7) to (9).

(7) Jones (2016) also strongly **_believes_** in the potential of creativity to alter the status quo: (...) (NS02)

(8) Jacobsen (2016) **_argues_** that CL materials can only be utilized by those who have undergone prior training in CL and formed positive opinions and beliefs regarding the efficacy of CL-oriented L2 instruction. (NNS01)

(9) Laufer and Nation (1995, p. 307) **_maintain_** that "a well-used rich vocabulary is likely to have a positive effect on the reader". (NNS14)

Sensorial lexical verbs

As the name suggests, this last form of lexical verb form generally involves the use of the five senses. Therefore, it allows hedges by using lexical verbs such as '*see*', '*sound*', and '*look*' to be classified in this form category. The study found 11 types of sensorial verbs used by NS and 10 types of sensorial verbs used by NNS.

Regarding frequency and function, the top three sensorial lexical verbs that are most often used as a hedging strategy for both NS and NNS experiences similarities even with different sequence patterns. The three verbs are '*seem*', '*see*', dan '*appear*' with frequency numbers in a row 3.39, 3.94, and 3.63 by NS and 5.27, 2.50, and 1.58 by NNS. Furthermore, it is interesting to note that the top three verbs seem to have similarities, which are related to the visual senses. This finding seems to support Hyland (1998, p. 125) who suggested that "*in science writing items distinguishing sensorial evidence from categorical assertion are often visual*". As an illustration of its use in clauses or sentences, the following are some examples.

(10) These activities **_seem_** to meet basic competencies for other subjects such as mathematics. (NNS03)

(11) Similarly, physical ailments, such as head-aches and back problems, might not be **_seen_** as stress-related, but at times will be experienced as a proxy foemotional distress. (NS07)

(12) However, students who ***appear*** to be in serious distress should be referred directly to the campus counseling center for additional support. (NS07)

Functions of using lexical verbs to reveal hedging strategies

In general, the use of lexical verbs in the corpus of this study occupies the two main functions of hedging according to Hyland (1996ab; 1998), namely as a protector of propositions and a protector of readers. However, its use as a protector of propositions was only found to protect writers.

To protect the writers, hedging in the corpus of this study is applied by using all categories of lexical verb forms. As for its function to protect the readers, its realization is limited to only two lexical verb form categories, namely speculative and deductive. Furthermore, the table below presents the frequency and distribution of each of these function categories which are presented based on the realization of their form.

Table 3. Function Frequency of Lexical Verb of Hedging

Forms of Lexical Verbs	Writer Protector		Reader Protector	
	NS	NNS	NS	NNS
Speculative	29.79	26.99	1.89	1.45
Deductive	0.95	5.13	0.39	0.26
Quotative	11.82	16.33	0.00	0.00
Sensorial	17.81	15.8	0.00	0.00
Total	60.37	64.25	2.29	1.71

First of all, the table above shows that most of the lexical verbs of hedging in this study were used to protect the writers. In this case, it can be noted that NNS shows an overall frequency number greater than NS, which is 64.25 and 60.37, respectively. Conversely, the frequency numbers indicated by NS in the function category as a reader protector are slightly greater than those indicated by NNS, which are respectively 2.29 and 1.71.

Furthermore, highlighting the distribution of each of the lexical verb forms used to realize each of these functions, it seems that there are similarities and also differences between the sequence patterns of frequency of use by NS and by NNS. To protect the writer, NS most often used speculative verbs (29.79), followed by sensorial verbs (17.81), then quotative verbs (11.82), and finally deductive verbs (0.95). For the same function, NNS also most often used speculative verbs (26.99) and most rarely used deductive verbs (5.13). However, unlike NS, the use of the quotative verbs by NNS for this function is more often compared to the sensorial verbs. As for protecting the readers, it is interesting to point out that the frequency numbers for both speculative and deductive verb forms are slightly larger indicated by NS than NNS. NS used speculative and deductive verb forms for this purpose with a frequency of 1.89 and 0.39, while NNS with a frequency of 1.45 and 0.26.

Hedging as writer protectors

First of all, the use of lexical verbs of hedging to protect writers can be seen in clauses or sentences with "abstract rhetors" (This term was first used by Halloran, 1984: 75). Abstract rhetors refer to "impersonal subjects which are used rhetorically as agents of a research-related activity" (Kowalski, 2005: 181) That is, abstract rhetors will usually collocate with certain lexical verbs to replace the writer's position. Thus, as stated by Meyer (1997: 27), the writer can seem to divert his responsibility to the information contained in the clause or sentence that he conveys to "facts" or he calls the term as "speaking facts". The following are the examples.

(13) ***The result of analysis indicated*** that the difference was significant at .003 level. (NNS06)

For a sentence construction like the one above, the lexical verbs used are usually speculative or deductive. This is because both of them aim to present information in the form of an argument which, respectively, is based on the results of the writers' subjective judgment or on the results of inferential reasoning or the writers' theoretical calculations. Given the process of making arguments that tends to be subjective, thus, the writers need to use this way in order to avoid the threats that may come from the readers. This way can hide the presence of the writers directly and can give a more objective impression of the

utterances expressed compared to when the lexical verbs are juxtaposed with subjects that are personal ("*I*" or "we"). In other words, for example, if the proposition contained in sentence (13) is denied by some readers because they find something that is considered wrong, the writers can protect themselves by saying that the error was caused by the results of the analysis, not by them.

Similarly, the lexical verb of hedging with this function can then be seen in utterances involving the subject in the form of a third person or commonly found in the presence of quotative verbs such as the following.

(14) ***Cohn (1989) claims*** that monomorphemic words have main stress on the penultimate syllable no matter how many syllables a word has, (...) (NNS13)

In accordance with the terms used, quotative verbs are basically used when writers quote the results of previous studies. As for protecting the writers themselves, such quotations are usually intended to support the claims that they submitted or speculations they made based on the results of their research. Similar to the previous one, in this way the writers can reduce their responsibility for the claim or speculation as if they are charging the truth of the propositions to the names they quoted. In the example above, the name is Cohn.

Next, it was found that another way the writer did to protect himself from the threat of the readers was by hedging his utterances using passive lexical verbs. The example can be seen below.

(15) Thus, reducing the cognitive complexity of a language task *is thought* to aid in the production of complex and/or accurate oral language. (NS10)

As the last verb form that can show its function to protect the writers, sensorial verbs, the corpus of this study also finds its use variously with their specific objectives. In example (16), the use of sensorial verb "*seems*" indicates that the writer avoids the indication that he is totally convinced of the propositions contained in the utterances that he put forward. Moreover, for this purpose the writer also often combines lexical verb forms with modal verbs, such as in the following example '*would*',

and also in impersonal construction. The addition of modal auxiliary verbs seems to indicate that the writer wants to show a higher level of tentativeity in the truth of the accompanying speech content (Hardjanto, 2016), while the use of lexical verbs with impersonal construction makes the sentence seem lifeless, so the reader can focus more on the contents of the utterance.

(16) ***It would seem that*** the more dialogue established among the university and school can help PSETs understand their roles as a teacher and (...). (NNS10)

In addition, there are also other specific goals that can be seen in the use of sensorial verbs in carrying out their functions as writer protectors. As can be seen in example (17), such hedging devices are generally carried out by a writer when he feels that he knows if something really happened, and wants to make a claim for it, but he has not been able to prove it (see Hyland, 1998). Moreover, if the findings are new or clearly show contradiction with the results of previous studies, then the writer's awareness will increase the probability of getting rejection from readers, especially from scientists with the same interest, making him more careful in expressing his ideas.

(17) This approach ***seems*** particularly helpful for identifying the patterns used by developing writers and to inform areas for instruction. (NS14)

Hedging as reader protectors

Hedging as a protector of the readers is the second and the last main function to be discussed in this article. If previously it was stated that the hedging function of lexical verb form shows the relationship between the writers and the proposition they made, the hedging function at this point emphasizes the writers-the readers relationship of their writing. That is, hedging is carried out on the basis of the writers' awareness that acceptance from the readers is a very important key for them to be part of a particular scientific community.

Regarding the context of its use in journal articles, the most striking difference between the functions of protecting the readers and protecting the writers lies in the subject that precedes the verb.

If in the previous function the lexical verb is preceded by an impersonal subject or the subject with a third person with the intention of hiding the presence of the writer, on the contrary, in this function the subject is actually very personal, in which the writers explicitly show their involvement as the perpetrator of the action. In this regard, it seems to be reasonable if this function is not found in a quotative or sensorial forms given the limited characteristics of these forms to involve personal subjects.

As mentioned earlier, the main feature of this function is the use of personal subjects such as "*we*" in the example below.

(18) *We would propose* that in the next experiment the input-based task only requires learners to choose the diagram that represents the core meaning. (NNS01)

By using the verb '*propose*', it can be assumed that what the writer put forward is only a proposal, so it is impressive that there is no compulsion at all for the readers to approve the proposal. By giving such concessions, the readers are assumed to be more likely to consider their decision than to be directly presented with categorical claims, so the possibility of rejection is expected to decrease. In this regard, Kopple & Crismore (1990) stated that in general, members of the scientific journal community were more enthusiastic to read hedged texts. By using hedges, the writers will be considered to have prepared a place for them to express their comments, so that in the end they were able to show their own friendly impression for the writers. Thus, on the contrary, arguments without hedging will appear to be rude and arrogant (Abdi & Behnam, 2014).

In addition to the form of personal pronouns "*I*" and "*we*", this study also found the use of personal subjects that refer, for example, to findings, data, and analysis to show the function of lexical verb of hedging as a reader protector. However, different from the similar case in its function as a writer protector, here the writers are more explicitly show their involvement in making propositions, which are usually indicated by the addition of possessive pronouns such as "*my*" and "*our*". In the corpus of this study, such constructions are very rarely used and are not even found in the NNS group.

(19) However, *our data suggest* this future may still be a long way off, with most journals in our sample purporting rigid ideologies. (NS03)

Similar to the previous one, utterances as shown in the example above indicate that the writer is open to the judgment of the readers who may have a different view.

The last way to use lexical verbs to protect the readers is to involve the readers in the process of making an argument. In this case, the writers show their efforts to treat the readers as people who are equally capable of concluding things. This strategy is usually marked by the use of the subject "*one*" and not infrequently followed by modal auxiliary verb forms such as "*can*", "*could*", and "*might*" before being hedged by epistemic lexical verbs. However, same as the previous way, this way is also very rarely found in the corpus of this study. The following are some examples of the collected data.

(20) Based on the results of this study, *one can infer* that CF (familiar and unfamiliar texts) influences the readers' comprehension.. (NNS15)

(21) (...), *one could argue* that Indonesian learners are also influenced by their L1 as they express spatial relationships in English that require them to use in, on, and at. (NNS01)

CONCLUSION

Based on the presented findings and discussion, it can be concluded that the variation of lexical verbs used by both NS and NNS to express hedging strategies and their usage in clauses or sentences to indicate specific functions shows that this has a very important role in writing scientific research articles, especially in English. This also suggests that the presence of hedging devices is expected by the readers, underscoring the need for academics to use them accurately in order to increase the likelihood of their articles being accepted and published in reputable international journals. Thus, academics are encouraged to employ these strategies to enhance the clarity and

credibility of their research articles. As for further research, it is highly recommended to use a larger research corpus to provide a richer analysis result, which is assumed to provide more comprehensive explanations and can be utilized more extensively, especially in the teaching of English as a foreign language, translation, and text editing.

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