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교육학석사학위논문

Hedging in Korean EFL High School  
Graduates' Writing

한국 고등학교 졸업 영어 학습자들의 작문에 나타난  
유보 표현

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# Hedging in Korean EFL High School Graduates' Writing

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# Hedging in Korean EFL High School Graduates' Writing

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## ABSTRACT

As the focus of writing research has turned from linguistic aspects to a more pragmatic level, the importance of qualifying arguments has received more attention. Hedging, as an essential linguistic resource that realizes epistemic modality, serves to mitigate the force of claims and allows writers to signal that their ideas and opinions are more negotiable, thereby engaging the reader. Hedges have been subject to many studies under a variety of fields and research topics due to their function regarding interaction in written discourse. However, studies of the hedging practice of Korean high school graduates' argumentative writing are relatively fewer in number, especially compared to those about writings of more advanced levels. In this regard, the current study investigated Korean L2 high school graduates' use of lexical hedges and the hedging strategies applied in the construction of impersonal sentences.

The investigation of hedging devices in this study was based on epistemic devices. To investigate lexical hedges, corpora of short essay writings were organized into three proficiency levels, consisting of Korean learners of two proficiency groups and native speakers. Using a concordance program, epistemic devices were retrieved and sorted into five grammar classes and five semantic categories of epistemic functions. The use of epistemic devices in the writings of each group was then investigated and compared in terms of overall distribution, grammatical distribution, and semantic distribution. This comparison was expected to show the usage patterns of potential hedging devices by different proficiency groups. The most used items in each grammar class were then examined. Items that exhibited the most distinct usage patterns between the groups were then investigated for their characteristic use in context. Finally, the use of epistemic clusters and the construction of impersonal sentences, namely passive and depersonalized forms, were examined for their

hedging practice characteristics.

The findings revealed a parallel between general language proficiency and pragmatic ability and awareness of hedging practice as well as certain characteristics in Korean learners' hedging practices. First, native speakers employed more hedging devices with more attenuated epistemic certainty and a wider variety of items. In contrast, Korean learners employed hedging items of less mitigation, and this tendency was found to be more extreme in less proficient learners.

This pattern was accompanied by several other features in the Korean learners' writings. To begin with, the choice of hedging devices of higher certainty as opposed to the devices of more moderate certainty revealed certain patterns of misuse. Next, they exhibited informal features in writing such as the use of spoken hedges and frequent use of first person pronouns. Third, they showed some difficulty matching the specific meanings of the expressions and the related statement when using hedging expressions in patterned forms. Finally, Korean students generally tended to hedge opinions other than their own, which exhibited the need for instruction in the interactional aspect of hedging function in writing and the benefit of using hedges to qualify their own arguments.

When students enter university for the first time, they are sure to face obligatory English courses and essays writing tasks. Unfortunately, the difficulty of presenting their arguments with an intended degree of certainty due to their lack of experience and understanding in using hedges often leads to less effective argumentation and disappointing grades. To this end, secondary schools should consider supplementing the current English instruction with pragmatic notions and skills such that students would be familiarized with them at a relatively early stage before they are required to demonstrate them in university.

Key Words: Hedging, Hedges, Epistemic Modality, L2 Writing, High School Graduates

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# CHAPTER 1

## INTRODUCTION

The present study investigates how Korean high school graduates use hedges in their English essay writings by using epistemic devices and impersonal syntactic structures. This chapter introduces the rationale and purpose of the study in Section 1.1, then three research questions are presented in Section 1.2. Finally, organization of the study is provided in Section 1.3.

### **1.1 Rationale and Purpose of the Study**

Qualification is an important aspect of argumentation, for unqualified categorical assertions may create the impression that there is no further possibility of negotiation or open dialogue with the other side of argument of opinion (Hyland, 1994). This can be achieved through the use of a range of expressions that mitigate the force of statements. However, without careful attention to how such items are used, writers run the risk of making their writing overly vague or unclear. Striking a balance between writing that is clear yet not overly direct is simultaneously important and difficult.

The means of mitigating a proposition are usually viewed as a function of two key terms. The first, hedging, is largely understood in functional terms in that any expression that reserves commitment to a proposition's verity can be considered a hedge (Hyland, 1996c). The second is epistemic modality. This aspect of the greater sense of modality concerns the

semantic function to help writers express their opinions or beliefs to varying degrees (McEnery & Kifle, 2002). Because the epistemic system is useful in representing a gradience of writer's commitment to the proposition from uncertain possibility and confident assurance (Milton & Hyland, 1999), epistemic modality can serve a purpose as a resource for qualifying categorical assertions (Perkins, 1983).

As both hedging and epistemic modality serve to properly project writers' assurance about their claims, the two concepts are often considered to be interchangeable and can be situated in the function of hedging. Indeed, Hyland (1998b) specifically argued that hedging is one part of epistemic modality as a function of the manifestation of an unwillingness to make an explicit and complete commitment to the truth of propositions. Lexical hedges in the same literature were discussed with the use of epistemic modality as the central focus. While not all instances of epistemic modality can be considered hedges, when the intention to attenuate is present, epistemic modality can be considered to realize the function of hedging. The terms and notions the current study has adopted followed the same framework. Hence, when discussing the different degrees of commitment to claims being made in writing using any of the aforementioned means, these will hereafter be viewed as a function of hedging.

In hedging, a writer should first decide how much commitment to express or withhold over a range of degrees. This should consider various contexts such as the writer's confidence in the reliability of the proposition being presented or the relationship with the anticipated reader. Also, it is not easy to choose the right expression amongst a variety of options to precisely express the intended meaning. Along the same lines, Holmes (1982) suggested the difficulty of expressing the correct degree of certainty with her study on epistemic modality.

There have been numerous studies on the use of hedges and epistemic modality in L2

texts because of the pragmatic function they can bring to texts (Back, 2011; H. Chen, 2010; Z. Chen, 2012; McEnery & Kifle, 2002; Oh, 2007; Yang, 2013). In addition, hedges were studied along with the counterpart boosters to examine the effect of those contrastive linguistic devices working together to show how they characterize texts by L2 writers (Hinkel, 2005; Holmes, 1990; Hu & Cao, 2011; Hyland, 1998a, 2000; Hyland & Milton, 1997; Milton & Hyland, 1999).

While hedges were initially dealt with as a linguistic feature since the first use by Lakoff (1972), they have come to be understood in the framework of interpersonal aspect as the focus of research on writing turned from the linguistic level to a more pragmatic level (Swales et al., 1998). That is, because of its functional characteristic that concerns the interactional dynamic in writing, it was included in a larger, more comprehensive set of linguistic resources to achieve interpersonal goals by applied linguists. The terms may vary, such as attitude (Halliday, 1994), evaluation (Hunston & Thompson, 2000), appraisal (Martin, 2000; Martin & Rose, 2003; Martin & White, 2005), stance (Biber & Finegan, 1989; Hyland, 1999) metadiscourse (Crismore, 1989; Hyland, 1998c, 1999; Vande Kopple, 1985), epistemic certainty markers (Crismore, Markkanen, & Steffensen, 1993); still, they commonly take the perspective that writing is a written form of dialogue that acknowledges readers as the dialogic counterpart.

This view that hedges concern the interaction taking place in writing and that they could also affect certain parts of the way essays were assessed prompted the hypothesis that more signs of effort to consider interpersonal elements in essays may contribute to a higher evaluation. This led to an array of studies in which researchers investigated the role and effect of metadiscoursal features, among which hedges were in most cases more prevalent in presence and quantity, on the quality of student written essays (Cheng & Steffensen, 1996;

Intaraprawat & Steffensen, 1995; Kim, 1999; Lee & Deakin, 2016). Furthermore, there were studies that explored the features of hedging according to established proficiency levels (Hyland & Milton, 1997; Kim & Suh, 2014; Oh & Kang, 2013). Both cases show a pattern of correlation between the use of hedges and improved writing quality.

Little attention has been paid to hedging in high school graduates' argumentative writing. Most work of this sort was done in the context of high level academic writing such as journal articles, in which writers of Master's theses are postulated as novice academic writers (Hu & Cao, 2011; Hyland, 1998c, 2004, 2005c; Hyland & Tse, 2004; Uhm, Kim, Nam, & Oh, 2009). It may be because such features are regarded more importantly in the area of more heavily academically oriented writing with the well-known emphasis on the characteristics of respective disciplinary communities and appropriate levels of deference and commitment required accordingly (Hyland, 1996b, 1998c, 2001, 2004, 2005c). Admittedly, academic writing is a valid area to be investigated for those elements and dynamics of hedging in that respect, and it would thus supposedly have abundant features because of the great necessity mentioned above. However, argumentative writing by university students ought to be considered equally important in terms of the use of hedging, for it is a potential cornerstone toward the ultimate goal of advancing to more professional academic writing (Christie, 1997; Johns, 1995; Wu, 2006). To facilitate the aspect of writing both in the learning material (Holmes, 1988; Hyland, 1994, 1999) and teaching curriculum in the university classroom more effectively, it would be of great importance to analyze the characteristics of writings by high school graduates in using those features such that instructors would be better prepared and able to fulfill students' needs more effectively.

Based on the need for hedging and the importance of instruction targeting university-level students' writing, this study seeks to investigate hedging in high school graduates'

essays with the purpose of providing diagnostic insight for students' subsequent writing instruction in university. More specifically, it will first examine students' use of epistemic devices for the lexical dimension of hedging with a focus on two different proficiency levels in comparison to the native speakers' use. Then, contextual analyses will be done on the features of lexical hedges as well as an aspect of syntactic hedging (i.e., the construction of impersonal sentences) to investigate characteristics of hedging in Korean students' texts. In this respect, the direction of the study is twofold: to investigate the use of epistemic devices by different proficiency groups and to observe the characteristics present in Korean L2 students' hedging practice. Ultimately, however, the purpose is uniformed in the expectation that understanding their hedging practice will provide pedagogically grounded ideas as to how to help them in the area.

## **1.2 Research Questions**

The study has two points of focus under the same purpose of exploring Korean high school graduates' hedging practice in their writings: The former is on the difference in terms of the use of epistemic devices (i.e., lexical hedges) by students of two proficiency levels compared to that of the native speakers; the latter focuses on the characteristics present in Korean writers' hedging practices involving contexts and the construction of impersonal sentences. In light of the purpose, the following research questions have been presented:

- 1.** How do the density and the range of epistemic devices used in writing differ between Korean L2 learners of two proficiency groups and native English

speakers?

2. What are the distributional characteristics of epistemic devices across different proficiency groups in terms of grammatical and semantic aspects?
3. How are epistemic devices used by different proficiency groups in the aspect of hedging?
4. How do Korean learners construct epistemic clusters and impersonal sentences for the purpose of hedging?

### **1.3 Organization of the Study**

This study consists of five chapters. In the first chapter, the rationale and purpose of the study is presented with the following research questions. In Chapter 2, the concept and terms used in the study are introduced and explained with previous studies. Chapter 3 describes the data and methodology employed in the study. Next, results and discussions are presented in Chapter 4. Finally, the summary of the findings of the study is provided with pedagogical implications in Chapter 5. Limitations of the study and suggestions for further studies are stated at the end.

## **CHAPTER 2**

### **Theoretical Background and Literature Review**

Prior to the current study, the theoretical background and previous studies are outlined in this chapter. First, the definition and function of hedges are explored in Section 2.1 and Section 2.2, respectively. Then, in Section 2.3, the concept of epistemic modality is presented, and the key terms adopted in the current study are established based on the notional background. Following that, studies that investigated hedges and epistemic modality in academic research writing settings are discussed in Section 2.4. Finally, studies on hedges and epistemic modality in L2 learners' writings are reviewed in Section 2.5.

#### **2.1 Hedges in Language Use**

Despite the attention and a large volume of research on the subject, it is difficult to establish a universally uniform definition of hedges. Hedges in writing are generally understood as the means and strategies by which writers express tentativeness and uncertainty in the claims and statements they make (Hyland, 2005b). A pair of seemingly similar but distinct enough definitions are those by Zuck and Zuck (1986) and Markkanen and Schröder (1989). For Zuck and Zuck (1986), hedging was referred to as “the process whereby the author reduces the strength of a statement,” while for Markkanen and Schröder (1989), “it is any manipulative, non-direct sentence strategy of saying less than one means” (Hyland, 1998b).

The distinction can be made in the implication that, in the former, the statement is still the same only with the illocutionary force adjusted; on the other hand, in the latter, what one means is compromised in the expression of a lesser degree. Hyland's (1998b) perspective of hedges was more similar to that of Zuck and Zuck (1986) because this position allows the writers to express what they mean precisely; only how it is delivered will be strategically adjusted. These comments of Hyland's to this point indicate his view that the ultimate purpose of hedging is to help express the intended meaning more precisely and in a more cautious and acceptable manner, not to be deliberately vague *per se*.

Based on the purpose of hedging as such, Hyland (1996a, 1998b) used the term hedge to refer to "any linguistic means used to indicate either a lack of complete commitment to the truth value of an accompanying proposition or a desire to express that commitment categorically." Whether it is a linguistic means or a desire, what they entail in common is that there is a dimension of commitment involved in addition to a rigid fact. Therefore, the writer is able to present a proposition as an opinion rather than a fact using this resource. The current study followed the conceptual baseline of hedges by Zuck and Zuck (1986) and Hyland (1996a, 1998b), for its focus relates to the commitment levels surrounding the content of a writer's proposition itself.

The linguistic aspect of hedging is reflected in the many names that have been given by researchers over the years. For instance, Quirk, Greenbaum, Leech, and Svartvik (1972) called these devices "downtoners," while Crystal and Davy (1975) called them "softeners." They have also been referred to as "downgraders" (House & Kasper, 1981), "compromisers" (James, 1983), "weakeners" (Brown & Levinson, 1987), and "mitigators" (Caffi, 1999).

More recently, hedges have been recognized for their significance in terms of their functional roles with their epistemic nature. In the context of academic writing in particular,

hedges enable the writer to express opinions distinguished from facts with the precise degree of commitment they intend. Therefore, understanding the features of hedges and being able to manipulate them means that writers can make effective argument.

## 2.2 Different Types of Hedges

The notion and the pragmatic function of hedges have now become well recognized in the area of written as well as spoken discourse. However, there are different dimensions of hedging according to the motivations of the writer.

The term ‘hedge’ in linguistics was first introduced by Lakoff (1972) to refer to “words whose job it is to make things more or less fuzzy.” His interest was on the linguistic properties or semantic categories of those words in the context of declarative sentences. To be specific, his concept of hedges was a list of expressions that had either attenuating (e.g., *sort of, kind of*) or reinforcing (e.g., *really, very*) effects on the words they modified. Hedges thereby adjust the degree of truth value of the proposition or the content being discussed. To this end, Fraser (2010) referred to these types of hedges as “propositional hedges,” while Hyland (1996c, 1998b) termed them “accuracy-oriented hedges.” As the names suggests, these hedges are concerned with the accuracy of the proposition and are therefore used for the purpose of hedging the writer’s assessment on the reliability or attribute of expressions.

Not only do hedges play the role of modifying the proposition itself, but they also express the force of speech act and (inter)personal concerns in the context of discourse. Fraser (1975) discussed the concept of hedged performatives, in which certain performative verbs are under the attenuating influence of specific modal auxiliary verbs. In a sentence as “I should *apologize* for stepping on your foot,” for example, the illocutionary force of the

performative verb *apologize* is weakened by the modal verb *should*, and in that sense *should* is considered to be a hedge. Brown and Levinson (1987) further developed this idea beyond performative verbs and tried to explain the notion of politeness phenomena in relation to the hedges that express the different illocutionary force of speech acts, which Fraser (2010) referred to as “speech act hedges”.

Prince, Fraser, and Bosk (1982) included two subclasses of hedges: one concerning the truth condition of the proposition (i.e., “approximators”) and the other concerning the level of uncertainty regarding the commitment to the proposition (i.e., “shields”). This second type of hedge was categorized under the term “writer-oriented hedges” by Hyland (1996c, 1998b), according to whom hedging one’s commitment to the statement is motivated by the desire to protect the writer from the potential threat of objection or possible fallacies that might be anticipated (Hunston, 1994; Hyland, 2005b; Salager-Meyer, 1994). Therefore, the characteristic of such hedges is generalized with the absence of writer agentivity (i.e., impersonal expressions) as a means to imply that the writer is not fully committed to the truth of the proposition or at least trying to minimize the involvement. Commonly it is realized in the form of evaluative *that* structures with non-agentive subjects and modal devices (Hyland & Tse, 2005). Representative examples of this are agentless passive constructions and sentences with abstract rhetors as the subject, together with certain epistemic lexical verbs (*assume, suggest*) (Hyland, 1996c, 1998b) employed as in ‘*it is assumed (that) ~*’ or ‘... *suggests (that) ~*’. Since the structural shift of sentences is concerned with writer-oriented hedging strategy, Hyland (1998b) referred to it as syntactic hedging.

As discussed above, hedges help express not only the degree of probability of a statement but also a reflective index of a relation between the writer and the reader (Coates,

1987; Holmes, 1984; Myers, 1989; Skelton, 1988). While the previous category was motivated by the desire to avoid author's "degree of liability" (Hübler, 1983), certain hedging strategies are motivated by an interpersonal purpose such that the writer can develop a relationship with the reader. Specific realization of hedges of this kind is achieved by explicitly expressing the presence of the writer as the source of the claim together with the use of epistemic verbs of judgment (e.g., *believe*) and deduction (e.g., *infer*). By revealing themselves, writers signal that the statement is only one of many possibilities that is still to be accredited and ratified by the readers (Hyland, 1996c, 1998b, 2005a). For example, a proposition introduced with '*I believe ~ (that)*' or '*I suggest ~ (that)*' clearly marks that the statement to follow is a personal belief or opinion, therefore creating the impression that there is room for further dialogue or negotiation, which acknowledges the presence and active role of the reader.

Expressions of personal belief using the direct reference to the writer's involvement are a conscious choice of strategy and signal that they are personal positions rather than suggesting the generalizability of the claim (Myers, 1989). Obviously, writer- and reader-oriented hedges are both premised upon a reader's presence and aim to protect the writer from the risk of disapproval by the reader. Hyland (1998b) argued that even though all hedges are writer-oriented in this sense, reader-oriented hedges are different in that they anticipate the possibility and address the source of reference instead of the content.

To summarize, conceptions of hedges by different researchers were grouped into three categories according to motivation, adopting Hyland's pragmatic perspective on hedges. The first two – accuracy- and writer-oriented hedges – fall under the larger category of content-oriented hedges, for they both concern the precision or possible liability of the content, which is about the relation between the writer and the content. On the other hand, the

major characteristic of the last category, reader-oriented hedges, concerns the relationship of the writer and the audience of the written discourse, the reader. Thus, the focus is more explicitly on the interpersonal aspect. It should be noted, however, that even though the orientation and functions of hedging may differ, what they all have in common is that hedges involve the writer withholding full commitment to their statement (Hyland, 1998b).

## **2.3 Epistemic Modality**

Modality has been dealt with in great depth and breadth, spanning such subject areas as semantic linguistics (Lyons, 1977; Perkins, 1983; Palmer, 1986, 1990), discourse analysis (He, 1993), corpus studies (Coates, 1983), applied linguistics (Holmes, 1983), and pragmatics (Klinge, 1993; Stubbs, 1986), to say nothing of the volume of studies. Thus, it would be hard to say there is a single definable semantic category of modality. Still, the central role of modality involves qualifying definitive facts that are expressed with declarative statement or proposition.

According to Quirk, Greenbaum, Leech, and Svartvik (1985), it is defined as “the manner in which the meaning of a clause is qualified so as to reflect the speaker’s judgment of the likelihood of the proposition it expresses being true” (p. 219). Halliday (1994) used the term polarity, which is the range of choice between positive and negative poles, to show the contrastive meaning of modality that refers collectively to various kinds of intermediate possibilities in between the choice of either yes or no. Considering Lyons (1977) that modality concerns the opinion and attitude of the speaker along with Portner (2009) that “modality is the linguistic phenomenon whereby grammar allows one to say things about, or on the basis of, situations which need not be real” (p. 1) helps with basic understanding of the

notion that modality does not concern actual events or rigidly set truth but instead the possibilities and potential of the event.

The whole system of modality is widely recognized to have two distinguishing parts: root modality and epistemic modality (Coates, 1983; Holmes, 1982; Lyons, 1977; Palmer, 1990, Quirk et al., 1985). Root modality, which is also called deontic modality or non-epistemic modality, expresses the meaning of permission, obligation, and volition. On the other hand, epistemic modality is concerned with expressions of possibility, necessity, and prediction, which have to do with the writer's knowledge and epistemic commitment as the term suggests.

- (a) John must be sick.
- (b) John must apologize.
- (c) John may be sick.
- (d) John may go home.

To consider some examples, in the pairs of modal auxiliary verbs *must* (a and b) and *may* (c and d), (a) and (c) express the writer's conjecture, whereas (b) and (d) concern obligation (b) and permission (d), respectively. Therefore, using the terms for subdivisions of modality that have just been presented, (a) and (c) are the examples of epistemic modality, and (b) and (d) are the examples of root modality. Through the fact that (a) through (d) are all modal auxiliary verbs, it would be fair to say that epistemic modality can be recognized semantically in context, rather than certain categories of grammatical classes.

Next, as has been mentioned, epistemic modality expresses different degrees of epistemic commitment through different epistemic lexical devices. In the above examples of epistemic modality (a and c), the proposition '*John is sick*' is qualified by *must* and *may*, respectively, both projecting the meaning of conjecture of the proposition. The distinction lies,



Although there is no rigid rule on the level of certainty for all epistemic lexical devices, many studies have used this semantic categorization of different levels in epistemic commitment established by previous researchers of this line of studies both theoretically and empirically (Back, 2011; Halliday, 1994; Holmes, 1982; Hyland & Milton, 1997; Kim, 2011; McEnery & Kiffle, 2002; Milton & Hyland, 1999; Oh, 2007; Oh & Kang, 2013).

Lastly, epistemic modality counts in not only modal (auxiliary) verbs but also other grammatical categories such as lexical verbs, adverbials, nouns, and adjectives, and in each and all of which a different epistemic meaning a speaker or a writer intends to express is potentially encoded. In fact, some linguists tended to focus on modal verbs as the subject area of modality (Boyd & Thorne, 1969; Coates, 1983; Hermerèn, 1978; Palmer, 1990), but there are many studies on the semantic function of modality that included the other grammar classes (Halliday, 1994; Høye, 1997; Leech & Svartvik, 1983; Lyons, 1977; Quirk et al., 1985). Considering it is the semantic properties that count in defining epistemic modality, it would make a more comprehensive inventory to include those devices that are of different grammatical categories than just modal verbs as long as they carry an epistemic sense. This study adopted the extended list of epistemic devices (Holmes, 1982; Hyland & Milton, 1997; McEnery & Kiffle, 2002; Oh, 2007; Oh & Kang, 2013; Rizomilioti, 2006) and identified epistemic devices of all five grammatical classes – epistemic modal (auxiliary) verbs (e.g., *would, may*), lexical verbs (e.g., *believe, suggest*), adverbials (e.g., *probably, in my opinion*), nouns (e.g., *doubt, fact*), and adjectives (e.g., *possible, certain*).

Acknowledging the connection between the semantic aspect of epistemic modality and the functional aspect of hedges, Hyland (1998b) argued that hedges are a part of epistemic modality. However, despite the interchangeable use of the terms of hedges and epistemic modality or their overlapping nature, there is a need for clarifying a boundary for

the use of these two key terms in the study. This is because of the fact that not all epistemic devices function as hedges; namely, some epistemic devices that convey high degrees of certainty are not included in hedges. Also, it is necessary to consider that even epistemic devices of high certainty express less certainty or determination than unqualified declarative sentences. According to Halliday (1994), “You only say you are certain when you are not” (p. 89); this entails that it is necessary to examine the entire semantic scope of epistemic devices as potential hedging devices, yet it is imperative that each case be considered to determine if a specific epistemic device was used with the intention of hedging. It is necessary to remark that any such determination must be made in absence of the writer and will therefore depend on the researcher’s individual judgement.

Just as not all epistemic devices are considered hedges, there is some distinction within the broader framework of metadiscourse between hedges and their counterpart, boosters, as they both convey epistemic commitment and function to express the writer’s certainty by qualifying bare assertions (Brown & Levinson, 1987; Holmes, 1982; Hu & Cao, 2011; Hyland, 2000, 2005b; Hyland, & Milton, 1997; Milton & Hyland, 1999). Either by reducing (i.e., hedges) or strengthening (i.e., boosters) the force of the statements, they maintain the balance of the claim effectively together (Hyland, 1998a). According to Silver (as cited in Yang, 2013), however, treating hedges and boosters as two separate categories can be problematic because of the complexity of discourse context and the possible interpretations of those devices that may vary. To this end, other than certain representative booster items (e.g., *of course*, *sure*), the epistemic devices of all three semantic categories of certainty were included in the discussion of hedging (see also Yang, 2013).

In the current study, there is a further focus of hedging beyond the aspect of lexical hedges realized by epistemic devices. The importance of syntactic hedging has been

confirmed by many researchers that have covered clauses of condition such as *if*-clauses (Quirk et al., 1972; Perkins, 1983), concessive clauses (Quirk et al., 1972), questions (Perkins, 1983), tags (Coates, 1987, 1988; Holmes, 1984, 1990), the passive voice (Rounds, 1982), and depersonalization (Holmes, 1982; Hyland, 1996c, 1998b). These are the cases in which the pragmatic functions of hedges are realized through the shift of syntactic structure rather than by employing a lexical device with epistemic sense, hence syntactic hedging (Hyland, 1998b). Among various types of syntactic structures that can realize hedging intention and effect, the construction of passivization (passive voice) and depersonalization was included to examine the aspect of syntactic hedging in this study.

Based on the conceptual backgrounds of hedges and epistemic modality, the key terms that were used in the current study have been established. These terms needed to be set up with the recognition that many studies of similar topics tended to have their own definitions of fine details even though the main frameworks they were based on were not different. To reiterate, hedges in the study covered different ranges of certainty degree as long as they did not serve as boosters. Also, this study deployed the terms epistemic device and hedge (or hedging) distinctively to prevent misconception or confusion while still maintaining the main focus on hedging practice of Korean high school graduates in English L2 writing.

## **2.4 Hedges and Epistemic Modality in L2 Texts**

Academic writing is a genre in which scholars including students report their findings and claims. As a critical factor in successful writing, hedging has been the focus of

many such studies, with the interest of understanding the role of hedging and epistemic modality with respect to various types of academic writing. In this line of research, lists of lexical items that have potential to be hedges (e.g., epistemic devices) are usually investigated in the text for distributional patterns, and, for more interpretative purposes, contexts around those devices are analyzed beyond lexical items for other hedging strategies at the sentence level and further at the discourse level. In this section, studies on hedging in academic research writing will be reviewed in terms of cross-linguistic/cultural and cross-disciplinary perspectives, respectively.

It was confirmed in the previous sections that hedging has drawn the attention of various research fields for its pragmatic nature and resourcefulness in language use. As the perception of academic writing as an impersonal and objective genre with information moved towards the view that there is an interaction taking place between the writer, reader, and information (proposition) (Hyland, 1998c), hedges were specified as one of the metadiscourse resources and were studied even more actively within the framework of metadiscourse (Abdi, 2002; Ädel, 2006; Dahl, 2004; Gillaerts & Van de Velde, 2010; Hu & Cao, 2011; Hyland, 2005a, 2005b; Hyland & Tse, 2004; Lindeberg, 2004). Admittedly, there are varying types of metadiscourse schemes proposed by different researchers (e.g., Crismore, 1989; Hyland, 1998c, 2005a; Hyland & Tse, 2004; Vande Kopple, 1985); however, the position of hedges was secured for its significance in the interaction in written discourse.

Studies on hedges in the genre of academic writing have been ample in volume, among which more favored topics include those on cross-cultural/linguistic or cross-disciplinary. That is, those comparative studies have shown their interests in the distinctive characteristics present in texts written by academics of different linguistic or cultural backgrounds or of different disciplinary backgrounds in terms of how they employ and

manipulate hedges or hedging strategies. Writers use hedges (and boosters) to “engage with the socially determined positions of others” (Hyland, 2005a, p. 52) and to “signal commitment, beliefs and attitudes that are socioculturally situated” (Hu & Cao, 2011, p. 2796). In this view, hedges are supposed to convey and express writers’ cultural, linguistic belief and attitude in their own rhetorical conventions, communicative norms, discursive practices as well as power relations (Connor, 1996; Holmes, 1988). Therefore, studies on hedges in the academic genre expect to find those features that are shared by writers of certain linguistic / cultural or disciplinary groups.

Hedging practice in the academic research writing by different L1 backgrounds has had a variety of points of focus. One of the areas that have drawn attention is research articles written by native speakers and non-native speakers. For instance, Vassileva (2001) examined research articles in linguistics written in English, Bulgarian English, and Bulgarian for hedges and boosters. Bulgarian writers used expressions of strong commitment in their English writing, whereas native English writers were distinct in that they used a higher proportion of modal verbs for hedging purposes. A similar study was conducted by Yang (2013), although the three groups compared were articles in English, Chinese, and English written by Chinese writers. As in the previous study, English writers used more hedges than Chinese writers. The results were along the same lines, and both studies attributed the results to the cultural influence of L1 as well as the unfamiliarity of English hedges. Korean postgraduate level EFL writers were reported to exhibit similar characteristics in their writing (Back, 2011). Because of their frequent use of high certainty epistemic devices, the writing showed strong commitment compared to that of L1 writers. One of the exceptions to such tendencies in L2 writers’ texts was Uhm et al. (2009). In their study, hedges used in Korean English-medium research articles were not different from those of English research articles.

Second, hedges were examined in the context of different disciplines and found to have distinct features that reflect the disciplinary discourse and convention (Abdi, 2002; Hyland, 1998a, 1998b, 2005b; Millán, 2008; Vold, 2006). In this line of studies, features found by analyses of hedges and boosters revealed how texts were influenced by disciplinary areas, and, by comparing those features across disciplines, particular discourse practices and the social organization of disciplinary communities shared by the membership have become more distinctly defined. One of the major findings that is now widely known is that more hedges were found in the research articles of so-called soft disciplines (e.g., humanities, social sciences) than in that of hard disciplines (e.g., science, engineering) (Hyland, 1998b, 1998c, 2004, 2005c; Hyland & Tse, 2004). Understanding these interactional aspects could be used to establish distinctive norms shared among members of different cultural or disciplinary communities. To take an example, it was supposed by Uhm et al. (2009) that Korean English articles did not differ in the use of hedges from English articles probably due to the great awareness of the community convention of Korean L2 writers, being professionals in the field of applied linguistics. If that is the case indeed, it may be suggested that it is possible to develop and nurture components such as pragmatic understanding. Working from this premise, in Section 2.5, studies on English L2 essays will be discussed.

## **2.5 Hedges and Epistemic Modality in L2 Learners' Writing**

While the focus of the previous section was on the difference in hedging practices with disciplinary and cultural / linguistic backgrounds as variances, studies of L2 learners' hedging practices posit the fact that the writers' language ability is still in its developmental

stages and acknowledges their resultant difficulties. Indeed, there are many studies that reported L2 learners' difficulties in maneuvering epistemic modality – for which many studies focused on epistemic lexical devices – or other forms of linguistic hedges in general. As a result, these L2 learners end up with problematic writings containing inappropriate degrees of assertions and thereby failing to make effective arguments. L2 writers, for example, were noted for making unnecessarily strong claims or unqualified assertions, which in turn left no room for different opinions or objections by the reader (Allison, 1995; Flowerdew, 2000; Hu, D. Brown, & L. Brown, 1982; Hyland & Milton, 1997; Milton & Hyland, 1999; Oh, 2007; Skelton, 1988). Interestingly, the textual characteristic of making strong assertions was commonly reported in studies on various L2 writers regardless of their L1 background. In addition to the Korean and Chinese L2 learners in the aforementioned studies, for instance, texts written by Arab students were found to have a similar tendency of using more boosters and fewer hedges (Scarcella & Brunak, 1981). Contrary to this tendency of L2 writing that is overly direct and forceful, indirect and/or implicit patterns of argumentation by EFL writers were observed by such studies as Choi (1988), Hinds (1983), Hinkel (2005), Mauranen (1993), and McEnery and Kifle (2002).

From these two extreme tendencies, it is supposed that L2 writers struggle with finding a contextually appropriate degree upon which they establish their argument. Furthermore, this appears to be a greater problem for L2 writers of lower proficiency levels than those of higher proficiency levels. Among the many studies that have examined L2 writings in the way the tone and strength of assertions were expressed, Hyland and Milton (1997) were the first to investigate different proficiency levels in the use of expressions of certainty and doubt. They compared different levels of essays written by Hong Kong L2 students with those written by native English speaking British students of a similar age and

educational background. Their findings indicated that L2 writers relied on a narrower range of epistemic devices than NS writers, half of which were used to express high degrees of certainty, rendering the writing very direct and assertive; in contrast, L2 writers of more advanced proficiency levels made more moderate claims using more epistemic devices of lower degrees of certainty, similar to the NS writers.

Subsequent studies involving the proficiency levels of L2 writers have observed that more advanced writers tended to employ more epistemic devices of moderate certainty (e.g., probability, possibility) or hedged expressions as opposed to the tendency of less proficient writers to use direct expressions and bare assertions (H. Chen, 2010; Z. Chen, 2012; Hu & Li, 2015; Kim & Suh, 2014; Milton & Hyland, 1999; Oh & Kang, 2013). This indicates a possible relation between general proficiency level and the ability to manipulate this aspect of pragmatic competence. More specific reasons for this pragmatic incompetence were inferred on the basis of the analysis of a number of different factors, including the semantic complexity of epistemic expressions (Holmes, 1982; Hyland & Milton, 1997), the quality of learning materials (Holmes, 1988; Hyland, 1994; McEnery & Kifle, 2002), the transfer of L1 rhetoric (Z. Chen, 2012; Long & Xu, 2010), the use of features in the spoken register (Back, 2011; Oh, 2007), the dynamic integration of two or more contributing factors (Hu & Li, 2015), and even bidirectional transfer of L1 and L2 (Oh & Kang, 2013).

As was the case in the genre of academic writing, hedges in L2 students' essays were studied along with other interactional resources. Specifically, hedges were recognized to constitute an important, and perhaps the most significant, element among other interactional metadiscourse resources that help enhance the aspect of metalinguistic functions (Crismore & Farnsworth, 1989; Hyland, 1998a, 1998b). For this reason, hedges have been studied with a focus on the relation between the aspect of their use and the quality of essays along with

other interactional resources. For example, Intaraprawat and Steffensen (1995) examined the overall quality of essays, finding a strong correlation between the use of metadiscourse and the quality of students' essays. Similarly, in her analytic studies on L2 students' essays, Wu (2006), who focused on the distinct use of interpersonal resources, found that high-rated essays tended to include more interpersonal metadiscoursal markers, particularly hedges, attitude markers, and engagement markers. Also, Lee and Deakin (2016) analyzed students' essays in terms of quality and metadiscourse use and found that more successful essays tended to have more hedges and showed greater authorial identity than less successful essays. These studies commonly suggested that the presence of these metalinguistic features appeared to be helpful factors in improving the quality of the writing based on the significant correlation found in each study, and hedges were discussed as one of the most contributing elements among other resources.

The research interest extended beyond examining essays for various features of hedges. The role and effect of instruction specifically focused on the pragmatic aspect has been supported by many studies. Wishnoff (2000), for example, argued that explicit instruction in pragmatics raised students' metapragmatic awareness and as a result it was particularly helpful in the acquisition of hedges. However, these studies on the interlanguage pragmatics emphasized the importance of learners' developmental stage in the effectiveness of the variability of the results (Bardovi-Harlig, 1999; Shaw & Liu, 1998; Wishnoff, 2000).

To sum up, the pragmatic skill of maneuvering hedges has been acknowledged to be a great asset for improving the quality of writing for L2 writers. Despite the interest and volume of the research on the topic in many L2 texts, however, there are very few studies that have focused on hedging practice in high school graduates' writings, particularly in Korean context. The majority of the studies that have investigated hedging or even epistemic

modality examined writing by college students or higher-level writers, while studies in which texts by secondary school learners were analyzed examined different points of focus than the pragmatic component of hedges. In this regard, understanding Korean high school graduates' hedging practice will be meaningful in that the findings can be used for planning their subsequent studies in English at the university level. Also, it could play a role of supporting and supplementing the current learning practice and materials used in earlier stages of learning so as to bolster preparedness for the writing requirements of the post-secondary level.

# **CHAPTER 3**

## **METHODOLOGY**

This chapter describes the research method of the study. First, the information on the corpora in the study is provided in Section 3.1. Second, the selection and classification of the epistemic devices is presented in Section 3.2. Lastly, the procedure of data analysis is explained in Section 3.3.

### **3.1 Corpora**

This study used two corpora, both of which were adapted and reorganized by the researcher for the purpose of the present study. One was Yonsei English Learner Corpus 2011 (henceforth, YELC) (Rhee & Jung, 2012), and the other was The International Corpus Network of Asian Learners of English, Version 2.0 (henceforth, ICNALE) (Ishikawa, 2017). The description of each corpus will be followed by the description of the corpora specifically set up for the study.

#### **3.1.1 Description of YELC**

YELC was compiled based on the result of student English placement test (YEPT, Yonsei English Placement Test) developed by Yonsei University. Every student admitted to Yonsei University was required to take the test; the only students that were exempted from the obligation were the ones admitted in Underwood International College and the ones who

had acquired high scores on a standardized English proficiency test recognized by the school. This test (YEPT) consists of 20 minutes of speaking and 60 minutes of writing components, with the writing section subdivided into three parts. Among these three parts of writing, students' writing in parts two and three were compiled as YELC and re-named Part 1 and Part 2 in the corpus. For Part 1, miscellaneous/familiar topics on everyday life were given for free-style writing within the range of 100 words. For Part 2, more academic topics were given for argumentative writing within the range of 300 words (Rhee & Jung, 2014). Table 1 shows the overall description of texts in YELC including both Part 1 and 2, and Table 2 describes the texts in YELC Part 2, the selected parts of which were reorganized and used for the current study, along with the corresponding proficiency levels.

**Table 1**  
**Statistics of YELC 2011 (Rhee & Jung, 2014)**

	Part 1	Part 2	YELC 2011
Number of Texts	3,286	3,286	6,572
Number of Tokens	315,317	770,511	1,085,828
Number of Types	11,308	16,416	21,839
Standard Type-Token Ratio	73.38	76.79	75.93
Number of Sentences	25,386	52,814	78,200
Number of Words per Sentence	12.36	14.57	13.85

**Table 2**  
**Description of YELC Part 2 Texts by Proficiency Levels**

	C2	C1	B2+	B2	B1+	B1	A2	A1+	A1
Number of Texts	2	37	81	378	705	1173	684	185	41
Number of Tokens	629	11,411	24,358	108,404	191,967	276,414	133,675	22,100	1,544
Tokens per Text	314.5	308.4	300.7	286.8	272.3	235.6	195.4	119.5	37.7

Based on the six proficiency levels of CEFR (Common European Framework of Reference for Languages), three more levels were added, and finally the total of nine proficiency levels were organized into which students' writings were classified. After filtering inadequate writings due to abnormalities such as the inclusion of Korean expressions or emoticons, and/or writings of insufficient length, YELC was compiled with 6,572 texts by 3,286 students (Rhee & Jung, 2014). The topics of the writings were not provided in the information sheet that was distributed with the corpus, but there was a study on the writing topics of YELC Part 2, in which the researchers arranged six topical keywords (i.e., discipline, animal, smoking, cellphone, military, Internet) adopting hierarchical agglomeration clustering (Choe & Song, 2013). Referring to these topical keywords and the actual texts, six writing topics were logically inferred and specified for the present study.

Do you agree or disagree with this statement?

- (A) Allowing teachers' physical discipline of students at school
- (B) Animal experimentation for the development of new medicine
- (C) Banning smoking in all public buildings
- (D) Allowing the use of cellphones while driving
- (E) Korean men's mandatory military service
- (F) The obligatory use of one's real name on the Internet

As was mentioned earlier, the texts used for the present study were subgroups of YELC Part 2. Thus, the topics for YELC Part 1 were not investigated.

### **3.1.2 Description of ICNALE**

ICNALE was led by Dr. Shin'ichiro Ishikawa and is the largest corpus ever compiled with a total of almost 20 million tokens as of 2017. Currently it has three modules: Spoken Monologue (SM), ICNALE Written Essays (WE), and ICNALE Edited Essays (EE). A fourth module on spoken dialogue (ICNALE Spoken Dialogue, SD) is to be released by 2020. Uniquely, for all three modules, topics of monologues and writings were controlled, and there were only two topics as presented below from which all the spoken and written data were collected (Ishikawa, 2013).

Do you agree or disagree with this statement? Use reasons and specific details to support your claim.

(A) It is important for college students to have a part-time job.

(B) Smoking should be completely banned at all the restaurants in the country.

Its participants consisted of L2 students, including graduate students from 10 different Asian countries, and native speakers of English, including students, teachers, and others. Table 3 provides comprehensive information about the ICNALE Written Essays (WE) with regard to the background of participants and the texts (Ishikawa, 2013).

**Table 3**  
**Countries and Areas Represented in the ICNALE (Ishikawa, 2013)**

Type	Code	Countries	Number of Writers	Number of Essays	Number of Tokens (Download Version)	Number of Tokens (Online Version)
ENL	ENS	USA, UK, AUS, etc.	200	400	90,613	88,792
ESL	HKG	Hong Kong	100	200	47,505	46,111
	PAK	Pakistan	200	400	94,523	93,100
	PHL	The Philippines	200	400	99,463	96,586
	SIN	Singapore	200	400	99,267	96,733
	Total	-	700	1,400	340,758	332,530
	EFL	CHN	China	400	800	202,725
IDN		Indonesia	200	400	93,277	92,316
JPN		Japan	400	800	179,042	176,537
KOR		Korea	300	600	136,346	130,626
THA		Thailand	400	800	181,120	176,936
TWN		Taiwan	200	400	92,384	89,736
Total		-	1,900	3,800	884,894	860,764
ALL		Total	-	2,800	5,600	1,316,265

The participants wrote a 200-300 word essay on each of the two topics mentioned above. Due to the nature of such writing topics, the text type of the writing samples was opinion-based argumentative writing. They were given 40-80 minutes for both essays, with no dictionary or other reference tool use allowed. The non-native English speaking participants had to provide their English proficiency test scores (e.g., TOEIC, TOEFL, or IELTS) as they submitted their essays, and, as in YELC, the scores were converted to the standard of CEFR's six proficiency bands afterwards, then finally re-classified into four proficiency levels. As for the English native speaking participants, which consisted of three subgroups of college students, teachers, and other adults, however, no proficiency level was required (Ishikawa, 2013).

### **3.1.3 Description of the Corpora in the Present Study**

From the description of YELC (Part 2) and ICNALE to this point, common text variables (Shaw & Liu, 1998) between the two corpora such as length and text type were identified. Moreover, further correspondences were noted such as the similar nature of the topics given, including one that were nearly identical, as well as the fact that they were both timed writing tasks with no dictionaries or other reference resources permitted. Thus, it was considered that the two corpora would make a comparable set of Korean L2 students and English L1 writers. To prepare two student groups and one native English speaker/writer group, the study chose four proficiency groups from YELC and reorganized them into two corpora and chose one group (i.e., teachers) of the three subgroups from the native English speakers in ICNALE.

Because in YELC, all 6,572 text files were listed together, it was necessary to first separate and sort them into Part 1 and Part 2. As was mentioned earlier, only the data selected from Part 2 were used in the study for the adequacy in terms of comparability to ICNALE. Then, the three highest proficiency levels (C2, C1, and B2+) were grouped together to construct the corpus of high and high-intermediate (HI) level students. The writing of the B1+ level, which was officially referred to as the medium proficiency level in the article written by the compilers in charge of the YELC project (Rhee & Jung, 2014), comprised the low-intermediate Korean corpus (LI). The writing in the B2 level, which was between the two proficiency levels mentioned above, was excluded as some of the writing in the group was considered to be similar to the ones in the HI group in terms of their proficiency, whereas other writings were considered to be similar to the ones in the LI group. As a result, however, it was expected that by excluding one group in between the two contrasted groups, the

distinctiveness of each group would manifest itself more clearly. It is important to note, moreover, that the lower level writings, such as the ones in B1, A2, A1+, and A1 proficiency bands, were also excluded from the analysis. A careful vetting of the writings in those proficiency bands determined that they were lacking either in length (with many falling under 200 words) or basic writing skill, making them inappropriate for consideration in the present study.

As for the native English speaker (NS) reference group, the present study used a selection of the ICNALE Written Essays (WE) consisting of texts written by teachers<sup>1</sup> (88 texts, 19,867 tokens, 225.8 tokens per text). The other two subgroups (i.e., college students and other adults) were excluded from consideration. The reason for selecting the texts written by teachers was due to the present study's need for model writings rather than samples from writers who are of a similar age and educational background with only a different L1 background. According to Bloor and Bloor (1991) and Skelton (1988), unqualified direct writing was a characteristic found amongst not only EFL writers but also poor adult native speaking writers, suggesting that the nativeness of the language may not suffice to serve as the reference group in light of the focus of the study. In a similar vein, the other two groups of native corpora in ICNALE consisted of student writings and writings by other groups including many different backgrounds such as fashion models and homemakers. These were deemed inappropriate for the purpose of the study, which sought to examine a more academically oriented style of writing.

Table 4 shows the organization of corpora used in the study and description of the numbers of texts, tokens, and tokens per text, respectively.

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<sup>1</sup> It was not further specified what kind of teachers in the description of ICNALE by the compiler.

**Table 4**  
**Description of the Corpora in the Study**

	YELC (Korean L2 Students)		ICNALE (Native Speakers)
	Lower Intermediate (LI)	Higher Intermediate (HI)	(NS)
Number of Texts	705	120	88
Number of Tokens	191,967	36,398	19,867
Tokens per Text	272.3	303	225.8

### **3.2 The selection and classification of the epistemic devices used in the study**

The present study adopted the list of 110 epistemic devices from Oh (2007), which was based on Holmes (1983, 1988) and Hyland and Milton (1997) for the validity of items used in English native-speaker corpora. It was speculated in addition that since Oh's study dealt with university students' essay writings with some similar nature of topics to the texts of the current study, the items used as epistemic devices in her study would make a good index as a starting point for a list to investigate. Other studies on hedges and/or epistemic modality were consulted for available lists (Hyland, 2005a; Kim & Suh, 2014; Lee & Deakin, 2016; McEnery & Kifle, 2002), and more devices were added in, finalizing the list with 124 items. The full list of epistemic devices investigated can be found in the Appendix.

As was mentioned in the literature review in Section 2.3, examining the use of epistemic devices in the entire scope of the semantic category was considered a necessary step prior to investigating hedging devices and their usage for several reasons. First, the current study based lexical hedges on epistemic devices. However, it was observed that some

of the devices that are typically placed in the certainty category in studies that dealt with epistemic modality were treated as hedges in studies that focused on hedging. The fluidity of the categories and the range of different classification observed in other studies made it necessary to broaden the focus to include such items. For instance, *think*, which was dealt with as a hedge in studies of hedges and is a representative spoken hedge, was placed in the certainty category in studies of epistemic modality. Had the certainty category been left out of the present study, this hedge would have been excluded from consideration. The alternative of moving this item to the next highest category (i.e., probability) was likewise undesirable as there was a need to maintain distinction between items based on their relative epistemic force. The difference between *think* and a verb like *seem*, which is from the probability category, would be lost as a consequence. The difficulty of reconciling categorizing with hedging items appeared to be due to the restrictions of categorizing items into three certainty levels as the semantic scope of epistemic modality is often discussed in terms of a continuum or gradience.

Next, investigating the entire semantic scope was expected to provide an insight as to the relative position of potential hedging devices in the entire epistemic continuum. The dynamic of hedges across the proficiency levels cannot be properly understood in isolation. If only epistemic devices of probability and possibility were subject to study, the proportion of high certainty items, which directly affects the other levels, would be absent, making figures less meaningful. That is to say, the high certainty category is needed to better understand the tendencies in the lower certainty category. In this respect, investigating the entire semantic range of epistemic devices as a comprehensive picture was regarded as a necessary step before examining the specific aspects related to hedging devices with a focused analysis.

The final reason was associated with the comparability of the epistemic device use in

the present study to other studies of epistemic modality. Since most other studies of epistemic modality tended to include the entire semantic category, results of these studies would be difficult to validate in relation to the present study without the inclusion of the high certainty category. As in the previous reason, the basis for full comparison would be lost, rendering results less meaningful. Comparing the tendencies of high school graduates' epistemic device use to that of other learners in other studies would thus prove difficult, and it would not be possible to determine in detail which components were lacking or which were over- or underused in the writing of high school graduates.

For these reasons, it was deemed necessary to investigate epistemic devices of all semantic degrees rather than omitting the highest certainty level. Ultimately, the list constituted of seven modal (auxiliary) verbs, 24 lexical verbs, 60 adverbials, 14 nouns, and 19 adjectives were selected, totaling 124 epistemic devices.

### **3.3 Data Analysis Procedure**

The process of data analysis consists of the retrieval of epistemic devices, analyses of the distributions of epistemic devices, and analyses focused on hedging practices. First, all of the epistemic devices in the selection list above were searched for using the concordance function in *WordSmith Tools* package (Version 7.0, Scott, 2017). Each item and its context were carefully examined to verify if it was indeed used in an epistemic meaning rather than its root meaning. For example, in the case of searching for the word *about*, only those instances in which *about* means 'approximately' were selected, and other meanings such as 'concerning, involving' were not counted as epistemic use and were omitted from the results.

Misspellings and grammatically incorrect usages were counted in as long as they were estimated to be an attempt to express an epistemic sense so as to ensure that the results were as comprehensive as possible and because the purpose of the study was to examine the pattern of usage and preference by the writers, not to check lexico-grammatical competency. In some cases, it was difficult to discern whether or not an item was used as an epistemic device solely based on what was shown in the concordance lines; as such, it was necessary to trace back through the whole sentence, or even further, the whole paragraph for context. This was done with the utmost care to ensure that all items included in the findings could be reliably identified as having epistemic meaning. In the majority of cases, recognizing the meaning in the responses of native writers was decidedly more straightforward than in those of Korean EFL students; however, higher group students' writing was somewhat clearer than the lower group writings.

Second, the frequency of the selected items was checked for density and normalized per 10,000 tokens to contrast the use of epistemic devices across the three groups in the study. Then, the ten most frequently used devices by each of the three groups were arranged in rank order along with the normalized frequency multiplied by 100,000 to examine the variety of items chosen and the favored devices by each group.

Next, all 124 epistemic devices were categorized in terms of two criteria of classifications: grammatical classes and semantic categories. First, they were arranged into five grammatical classes (i.e., modal verbs, lexical verbs, adverbials, adjectives, and nouns) to be examined for relative grammatical distribution. For the semantic categorization, on the other hand, a scheme of five semantic categories was deployed. That is, three different degrees of certainty (i.e., certainty, probability, and possibility) were added along with usuality and approximation. The five types of semantic categorization of epistemic modality

were used in many previous studies to examine the semantic distribution of epistemic devices and have proven to be useful for gauging the strength of arguments (Hu & Li, 2015; Hyland & Milton, 1997; Kim, 2011; Kim & Suh, 2014; McEnery & Kifle, 2002; Milton & Hyland, 1999; Oh, 2007; Oh & Kang, 2013). As was noted in Oh and Kang (2013), however, the identification of the semantic classification of certain devices was at times ambiguous, and previous studies presented only core examples that were clear in epistemic degrees. Still, some studies such as Milton and Hyland (1999) provided a larger amount of examples than did others, which were useful as a further reference. Ultimately, for the full coverage of semantic categorization, grammar books, dictionaries, and thesaurus were also consulted to check for contextual and functional definitions as well as synonyms. The result by the grammatical classes and semantic categories was respectively arranged into relative distribution in each corpus and examined for usage pattern across the three proficiency groups. Also, the differences exhibited between groups were checked for statistical significance using a Chi-square test.

In the third step, more detailed analyses were performed with a focus on the hedging items and their characteristics found in the process of previous analyses. To begin with, epistemic devices were subdivided into each grammatical class, and the use of most frequent items in each were compared across the corpora. Then, the hedging items that exhibited a distinct amount of use between Korean learners and native speakers were examined for the characteristic features considering the contextual use. Also, the semantic distribution of the specific grammar class was compared across the corpora to determine if the use of certain epistemic devices could account for the semantic distribution and its relevance to hedging items in each corpus.

After that, the aspect of epistemic cluster use was investigated. An epistemic cluster

refers to two or more epistemic devices used together in connection, achieving a greater semantic effect in terms of epistemic expression (Hyland & Milton, 1997). In other words, more effective hedging could be achieved by matching the epistemic devices of similar degree of attenuated certainty. To this end, the concordance lines that had been collected in the process of the previous quantitative analysis were used. Since the focus of this phase of analysis was on the common pattern of misuses found in Korean learners' writings, the unique patterns noticed in the process of judging epistemic devices at the earlier stage were collected and categorized by similar sorts. Then, by discussing the examples within the context, some characteristics were narrowed down.

Finally, impersonal sentences, which are the syntactic structures that have the potential to function as hedges, were examined by considering examples of the passive voice and depersonalization. Those epistemic devices that were used empirically within the above-mentioned constructions in the literature (e.g., Hyland, 1998b) were retrieved and then checked for the adequacy of the construction as a realization of hedging. To take depersonalized constructions for an example, the epistemic lexical verb *suggest* was searched for, and if the subject of the verb was a non-writer (e.g., *Research suggests ~*), it was taken as an example subject to further discussion. Following that, characteristic tendencies that could be generalized among Korean learners' texts were discussed.

## **CHAPTER 4**

### **RESULTS AND DISCUSSION**

In this chapter, the findings of the study are reported and discussed. First, the overall frequency of epistemic devices is presented in Section 4.1. Then, the grammatical and semantic distributions of epistemic devices are discussed, respectively, in Section 4.2. Following that, the usage pattern of epistemic devices is investigated in each grammar class to examine more detailed aspects of epistemic devices in relation to hedging practices in Section 4.3. Finally, students' hedging practices are examined regarding the construction of epistemic clusters and impersonal sentences in Section 4.4.

#### **4.1 Overall Frequency of Epistemic Devices**

As mentioned earlier, since the writer's degree of certainty on the proposition is projected in the use of epistemic devices, they were used as a means to determine the potential of lexical hedges in the present study. Thus, the distribution of the epistemic devices was subject to investigation prior to examining the way they were used for hedging functions. First, the total number of epistemic devices was counted and compared across three groups. After the raw frequency was counted, each number was normalized to tokens per 10,000 words to make the comparison between groups of different sizes.

**Table 5<sup>2</sup>**  
**Overall Frequency of Epistemic Devices in Three Corpora**

	NNS		NS	$\chi^2$ value
	LI	HI		
Total Number	4565	889	655	63.393***
Tokens per 10,000 words	238	244	330	
Top 10 devices	3232 (71%)	543 (61%)	327 (62%)	46.699***
Top 20 devices	3865 (85%)	696 (78%)	423 (76%)	46.830***

\*\*\*  $p < .001$

As can be seen in Table 5, there was a significant difference between the three groups in terms of the overall frequency of epistemic devices ( $\chi^2=63.393$ ,  $df=2$ ,  $p<.001$ ). The normalized frequency of each group was 238 in LI, 244 in HI, and 330 in NS, demonstrating that more proficient writers employed a greater number of epistemic devices in their writing. This was in line with those studies that reported greater use of epistemic devices in native speakers' writing than NNSs' writing (e.g., Kim, 2011; Kim & Suh, 2014; McEnery & Kifle, 2002; Oh & Kang, 2013) although the list of epistemic devices investigated and the actual figures varied in each study. On the other hand, there were also studies in which the number of epistemic devices used by NS and NNS revealed similarity, such as Hyland and Milton (1997) and Oh (2007). In spite of the seemingly close figures when counted as a whole in Oh (2007), however, different patterns of usage were shown between the NS and NNS use when compared by the relative use of the 10 and 20 most frequent items, which demonstrated the degree of reliance of each corpus on a certain range of devices. More specifically, the NS writers employed a wider range of devices, while the NNS writers used restricted range of

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<sup>2</sup> The figures have been rounded up to the nearest whole number or percent.

items.

The figures of the top 10 and 20 devices of the present study bore some similarities with the aforementioned studies in terms of the range of the devices used: the former showed that the entire epistemic device use by LI relied more heavily on the ten most frequently used items than HI and NS groups (71% in LI versus 61% in HI and 62% NS). As for the latter, the reliance on the twenty most frequent items decreased along with the proficiency level 85% in LI, 78% in HI, and 76% in NS). This suggested that that the range of items used was broader in the more proficient language group, which was also observed by Oh and Kang (2013).

**Table 6**  
**Ten Most Frequent Epistemic Devices in Rank Order**

Rank	LI	HI	NS
1	<i>think</i>	556	<i>think</i> 341
2	<i>will</i>	375	<i>will</i> 319
3	<i>would</i>	156	<i>would</i> 195
4	<i>opinion</i>	120	<i>could</i> 146
5	<i>could</i>	109	<i>believe</i> 110
6	<i>may</i>	95	<i>might</i> 104
7	<i>might</i>	83	<i>may</i> 102
8	<i>of course</i>	73	<i>opinion</i> 74
9	<i>know</i>	66	<i>actually</i> 52
10	<i>always</i>	51	<i>always</i> 49

The top 10 most frequently used devices in each group were extracted and ranked in order of normalized frequency per 100,000 words (Table 6). When comparing the Korean corpora and the NS corpus in terms of the rank of devices, there were several differences. To begin with, both Korean corpora had the same devices, *think*, *will* and *would*, for the first three ranks and in the same order. Those three devices comprised three out of the four topmost used items by the NNS corpus in Hyland and Milton (1997) as well as in the

advanced learner corpus in Oh and Kang (2013). On the other hand, in the present study, the top three in NS were all modal verbs: *would* being the topmost, followed by *will* and *may*. This was exactly the same as the top three by NS in Hyland and Milton (1997) in terms of both items and order. It is noteworthy that the most frequently used item among Korean students, *think*, was significantly lower in the NS corpus, sharing fourth place in terms of frequency with *believe*. Moreover, the frequency itself showed a substantial decrease compared to the Korean corpora.

Next, while Korean students used *will* more than *would*, NS showed the opposite order. The NNSs' greater use of *will* over *would* in contrast to the greater use of *would* over *will* by the NS was also found in previous studies of similar topics (Back, 2011; Hyland & Milton, 1997; Kim, 2011; Kim & Suh, 2014; McEnery & Kifle, 2002; Oh, 2007; Oh & Kang, 2013).

The third item of note was that only one other lexical verb was included in each of the Korean corpora in addition to their common topmost, *think*. This was *know* in LI and *believe* in HI. Nevertheless, there were several lexical verbs in the NS corpus: *believe*, *think*, *feel*, *seem*, and *know*, exhibiting a wider variety of verb use.

A final similarity of the two Korean groups that accentuated the distinction between Korean and NS corpora was that there were five more devices that appeared in both of them (*could*, *may*, *might*, *opinion*, and *always*), totaling eight devices in the top 10 in common. The NS corpus contained only two of these in the top ten: *may* and *could*. This meant that five of the top 10 NS items did not appear in both Korean corpora; furthermore, only one item of these five was shared with another Korean corpus: *know* with LI and *believe* with HI. As a result, there were three items in the NS top ten that did not appear in either Korean corpus: *feel*, *seem*, and *quite*. Overall, the Korean corpora shared a number of significant

characteristics that differentiated them from the NS corpus.

Looking closely at the frequency of some items, however, there were also some notable similarities of HI to NS. First, the relative frequency of *think* revealed one such similarity. HI use of *think* decreased significantly compared to in LI, which occurred more than one-and-a-half times more frequently in LI than in HI. This led to the result that the HI use of this verb was closer to that of NS. Also, the second most frequent lexical verb, *believe*, had been already mentioned as the shared topmost frequent verb item in NS with *think*. This item was notably absent from the LI top 10. These key correspondences, the proximity of the use *think* and *believe*, revealed a certain degree of similarity between the HI and NS corpora.

As a whole, it would be fair to say that characteristics found in Korean corpora exhibited a number of notable differences from the NS corpus, yet they themselves were different in certain respects, with the group of more advanced proficiency showing some signs of similarities to NS as well.

To summarize what has been observed so far, there are several points to be noted about the frequency of use in the three corpora. First, the types of frequently used epistemic devices showed greater similarity between the two Korean proficiency groups than the NS group. This could suggest the possibility that there are preferred devices shared by Korean learners' writing that are distinct from those preferred by NS. Next, NS tended to use a variety of devices, while Korean writers relied heavily upon fewer items and, as a result, probably used them repeatedly. The third point concerned the characteristic of the HI corpus posited as the medium group: it had some features similar to the NS corpus and other features similar to LI on the other hand in the use of epistemic devices, suggesting that there may be a relationship between general proficiency level and the ability to use the items of a functional category. For example, in an absolute sense, both LI and HI writers used *think* heavily; still,

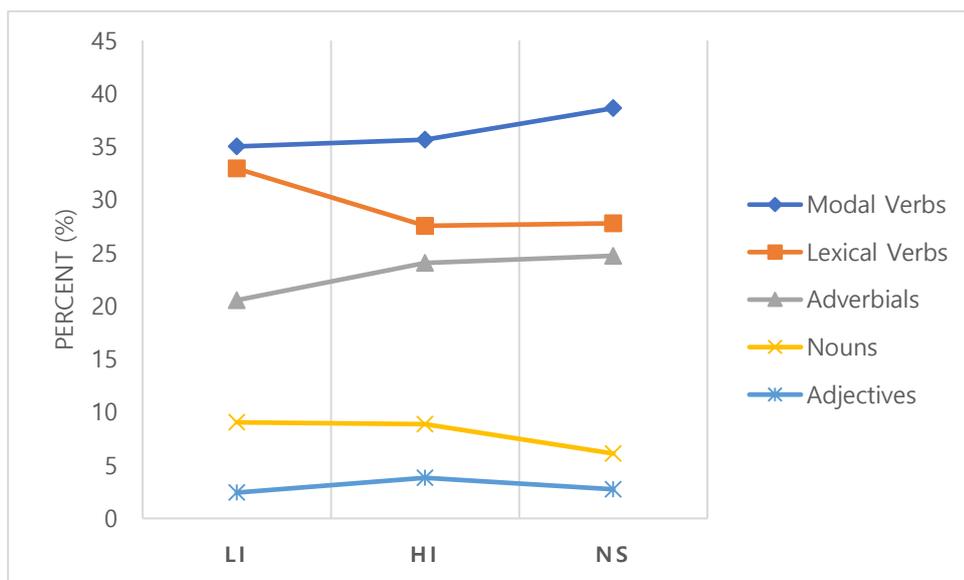
when considered relatively, the HI group used this verb significantly less than the LI group did. Also, the HI corpus showed a further similarity to the NS in that their second most used verb device was *believe*.

In the following sections, more in-depth factors will be examined through grammatical and semantic analyses. These will utilize the density and favored devices in each corpus.

## **4.2. Grammatical and Semantic Distributions of Epistemic Devices**

### **4.2.1 Grammatical Distribution of Epistemic Devices**

Epistemic devices were subcategorized into five grammatical classes (i.e., modal verbs, lexical verbs, adverbials, nouns, and adjectives) to identify the relative distribution ratio of devices by each grammatical category (Figure 2). This distributional pattern reveals which grammatical classes were used more favorably to realize epistemic functions and enables the comparison of these aspects across the corpora.



**Figure 2**  
**Grammatical Distribution of Epistemic Devices across Proficiency Levels**

Unlike the initial expectation that the rank of each grammatical category would differ across the corpora, all three showed the same distributional pattern of devices from top to bottom in the order of modal verbs, lexical verbs, adverbials, nouns, and adjectives. The distinction among the corpora, however, rested in the different ratios within each category. The results were in line with studies such as Back (2011) and Kim (2011) in two respects: in their studies, the order of preferred grammar classes was the same both overall and between groups irrespective of L1 and L2 participants.

Looking across the distributional patterns, each grammatical category showed a somewhat different tendency. The use of modal verbs was the lowest in LI (35%) and showed a slight increase through HI (36%) toward NS (39%). As for lexical verbs, there was a decrease from LI to HI (from 33% to 28%), with NS use being the same as in HI (28%). That is, the use of modal verbs increased while that of lexical verbs decreased as the writer's proficiency level rose. Adverbial devices showed a steady increase, from LI (21%) through HI (24%) to NS (25%), while nouns were at 9%, 9%, and 6% for LI, HI, and NS, respectively.

Adjectives did not appear to have a notable tendency, marking 2%, 4%, 3% in the order of LI, HI, and NS.

Being the topmost and the second topmost, the changing patterns of modal verbs and lexical verbs across the proficiency levels were worthy of further discussion. Partially congruent with Hyland and Milton (1997), the use of modal verbs was the highest in all three corpora. In their study, however, modal use by the L2 students was heavier than that of their NS counterparts. In the present study, the use of modal verbs showed a slight increase as the proficiency level increased although it was not statistically significant. Usually in studies of similar topics, modal verb use by L2 learners showed some differences from that of native speakers or more proficient L2 learners, and this tended to be manifest in either overuse or underuse due to its widely recognized difficulties for them (e.g., Hyland & Milton, 1997; McEnery & Kifle, 2002; Oh & Kang, 2013). One point in common in those incongruent studies was that modal verb expressions are semantically complex for many less-experienced writers due to their polypragmatic nature (Coates, 1987; Holmes, 1982; Hyland, 1998b; Hyland & Milton, 1997). That is, there is no clear one-to-one relationship in modal verbs with their meaning; rather, the meaning is realized in the context, and one form can have multiple meanings, which can be perceived as a challenging aspect, particularly for second- or foreign-language learners. As a result, those for whom the use of modal verbs is recognized as a complicated factor are likely to avoid using them (Milton & Hyland, 1999), employing other expressions that belong to a different grammatical category instead in order to express epistemic meaning. Having considered that the L2 learners in the study would not be that different in terms of their perceived difficulties with modal verbs, a closer investigation was conducted with a focus on the individual modal verbs, and a significant aspect was indeed observed between the use of *will* and *would*. This will be addressed in

detail in Section 4.3.1.

The second most frequently used grammatical class by all three groups was lexical verbs. In contrast to modal verbs, the use of lexical verbs decreased as the proficiency level rose, which seemed to be partially in line with Oh and Kang (2013), except that in their study, lexical verbs were used more than modal verbs by the Korean learners of all three proficiency groups.

Epistemic lexical verbs are argued to be a useful resource for their diverse meanings and effects according to the ways they are used in various syntactic structures. That is, they offer more overt and precise means to modify claims by signaling the writer's commitment, authorizing the claim, or even providing evidential justifications (Hyland, 1996b). The fact that the diverse meanings of epistemic verbs were exclusively subject to a study supports the claim (e.g., Salazar & Verdaguer, 2009). However, this also entails the difficulties of choosing the right verbs and employing them in the appropriate construction in accordance with the proposition and the intended amount of commitment as well (Hyland & Milton, 1997). Considering the fact that less proficient writers employed more verbs than more proficient writers, it necessitated a more detailed examination within the whole category of verbs.

Indeed, despite the seemingly highest use amongst all three groups, it was revealed that the use of verbs was quite different across the groups. That is, the potential effect of lexical verbs did not appear to be fully realized in the Korean learners' writings due to the lack of variety of items, particularly in the case of LI writers. To elaborate, the item *think* was the most frequently used device of all the lexical verbs, taking up 71% and 51% of the total verbs in LI and HI, respectively, whereas it was only 23% in the NS corpus. The undue use of *think* by LI learners and the discrepancy between groups were significant. This will be further

discussed in Section 4.3.2.

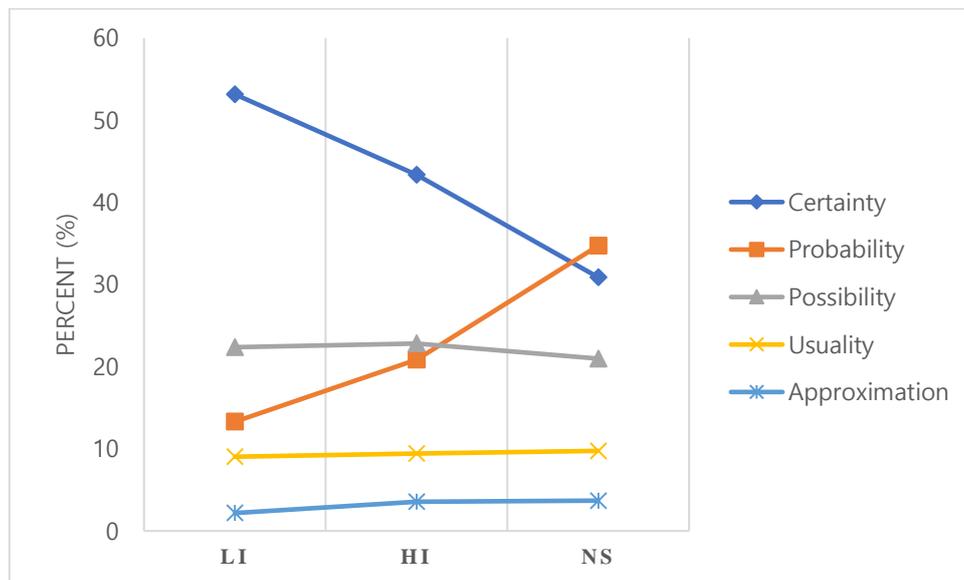
Although modal verbs and lexical verbs comprised the majority of the epistemic devices, the use of adverbial devices was relatively higher than the other two categories of nouns and adjectives. The syntactic mobility in clause structures and the semantic property that indicates clear scalable distinction along with the invariable formal characteristic of adverbials were discussed by many researchers (Hinkel, 2003; Jacobson, 1964, 1975; Quirk et al., 1972), and it may have appealed to even the less proficient writers as having a low risk of error (Milton & Hyland, 1999). However, between groups, the use of adverbial expressions increased with the proficiency level in the study, which was not in line with studies in which L2 learners employed more adverbials than L1 writers (e.g., Hyland & Milton, 1997; Oh, 2007; Oh & Kang, 2013). Despite the similar results of adverbial usage found in Back (2011) and Kim (2011), it was not specifically accounted for as to why except the conjecture of the data set characteristics in those studies. Nevertheless, the possibility that adverbial devices replaced lexical verbs between LI and HI was suggested by the decrease in lexical verbs and increase in adverbials, which mirrored each other in Figure 2.

To sum up this section, epistemic modal verbs and lexical verbs were the two major devices of qualifying arguments both by the two Korean groups and the NS writers compared to the devices in the other grammatical categories. It was also observed that as the proficiency level advanced there were slightly more epistemic modal verbs and fewer lexical verbs used. However, in order to understand the characteristics of each group in relation to the use of epistemic devices more comprehensively, it was necessary to examine other aspects of epistemic devices as well, such as the semantic dimension or the subdivision of each grammar class to confirm that the observed similarities or dissimilarities were not merely superficial.

## 4.2.2 Semantic Distribution of Epistemic Devices

Numerous studies have acknowledged the semantic aspect as the core of epistemic modality (Hoye, 1997; Nuyts, 2001; Pic & Furmaniak, 2012; White, 2003). When this is applied to the current study, the value of epistemic modality regarding hedging lies in the degree of certainty presented in the epistemic devices in a text. In this regard, it is critical to examine epistemic devices at the semantic level by classifying their use by different levels of certainty. The use of epistemic devices has been presented in the form of a few grammatical categories that have been discussed so far, but it is the semantic aspect that makes a lexico-grammatical item epistemic or, more specifically, a hedging device. Also, in the sense that individual hedging devices express different degree of certainty, they are reflective of distinct levels of hedging intention.

Inspired by previous studies (e.g., Hyland & Milton, 1997; McEnery & Kifle, 2002; Oh & Kang, 2013), each of the epistemic devices was arranged into one of five groups of epistemic commitment. These included three groups indicating different degrees of certainty (i.e., certainty, probability, and possibility) as well as one indicating expressions of usuality (e.g., *sometimes*, *usually*) and a final group dealing with approximation (e.g., *about*, *approximately*). In the process of arranging, the epistemic devices *always* and *never* were counted in each category of certainty and usuality, respectively, due to their dual semantic characteristics (Oh & Kang, 2013). Therefore, they were counted twice in the total number of epistemic devices. As was the case in the previous section, which discussed grammatical categories, the relative distribution ratio of the five categories of epistemic devices was investigated (Figure 3).



**Figure 3**  
**Semantic Distribution of Epistemic Devices across Proficiency Levels**

To begin with, the focus was given to the distribution rate of semantic categories within the respective groups. In the LI corpus, certainty (i.e., the highest level of probability) was expressed in 53% of the total use of epistemic devices; the next was possibility (i.e., the lowest level of certainty among the three certainty levels) with 22%; and finally probability (i.e., literally the middle range of probability) was used the least with 13%. Based on these results, LI exhibited a generally strong commitment to propositions, with the greatest number of uses of high certainty markers. Likewise, HI showed the same order in terms of the semantic levels, yet the distributional rate differed. To be specific, certainty was the highest at 43%, followed by possibility at 23%, and then probability at 21%. The same order of semantic levels shared by these two corpora notwithstanding, it needs to be noted that the extreme discrepancy between certainty and probability in LI was quite substantially diminished in HI. On the other hand, the NS corpus demonstrated a noticeable variation in order and proportion, the highest being probability at 35%, followed by certainty at 31%, and

possibility at 21%.

An investigation of the changes in certainty level across proficiency groups showed several notable patterns. First of all, certainty decreased dramatically as proficiency increased (i.e., 53% in LI, 43% in HI, and 31% in NS). In contrast, the opposite was true for probability, which showed a marked increase from LI through NS (i.e., 13% in LI, 21% in HI, and 35% in NS). The category of possibility, however, did not show a specific pattern across the corpora (i.e., 22% in LI, 23% in HI, and 21% in NS), and neither did usuality (i.e., 9% in LI, 9% in HI, and 10% in NS). Finally, there was a slight increase in approximation between LI and HI (i.e., 2% in LI, 4% in HI, and 4% in NS). On the whole, the discrepancies between different semantic categories became smaller as the proficiency level increased, ultimately forming a much more even distribution at NS compared to the other two groups.

To discuss the observations, there was a pattern of growing probability and waning certainty with the increasing proficiency level, and the certainty levels became more evenly distributed as proficiency increased. This tendency, along with strong arguments made by L2 writers using high certainty markers, was reported in many previous studies (Allison, 1995; Back, 2011; Hu et al., 1982; Hyland & Milton, 1997; Kim, 2011; Kim & Suh, 2014; Oh, 2007; Oh & Kang, 2013).

Proper hedging can be achieved through skilled manipulation and control of epistemic devices of diverse certainty levels according to the deliberate force of qualification. When compared to the semantic distribution of epistemic devices by NS, Korean writers' hedging practice through the use of epistemic devices did not appear to be as active or sufficient, and this was even more apparent among the lower proficiency writers. In addition, the fact that there were positive patterns between the intensity of hedging effect and proficiency levels suggested the relation between general writing proficiency and hedging

practice.

The other characteristic is that low proficiency writers tended to exhibit polarized use of devices of certainty and possibility (i.e., lowest certainty level), skipping probability (i.e., medium certainty level), which was also noted by McEnery and Kifle (2002) and Kim (2011). The polarization of the two opposite points of certainty suggested the possibility that expressions of high and low certainty might co-exist in the same text. While many studies of the similar topic involved the possibility of L1 rhetorical transfer or the perceived view of different writing convention in L2 being responsible for L2 writers' preference for strong certainty, it is hard to understand them as a possible explanation considering the mixed use of devices from opposite ends of the certainty continuum. Although more reasonable answers could only be determined by analysis with a more text-oriented focus, it was likely attributable to unsophisticated control or less-successful adjustment of certainty levels due to insufficient linguistic and pragmatic ability, particularly with writers below the tertiary education level.

In this section, the tendency of semantic characteristics of texts in each group was discussed. However, as was mentioned at the end of the previous section, the need for more detailed investigation into the specific devices constituting the grammar and semantic category was contemplated for a better understanding of the general tendency thus far observed.

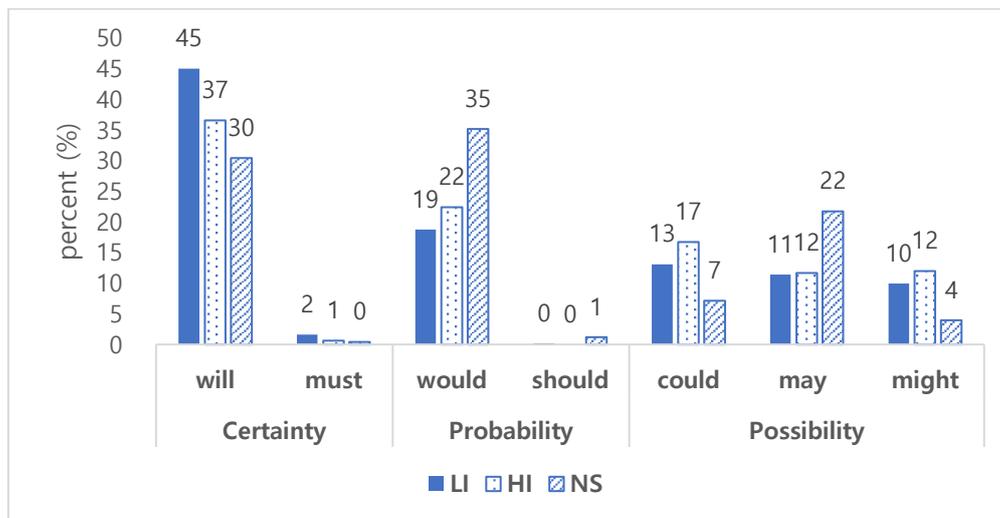
## 4.3 Semantic Distributions of Epistemic Devices by Different Grammatical Classes

To this point, different patterns in the use of epistemic devices by the three groups have been discussed separately within the categories of grammar classes and semantic levels. In this section, the two aspects were incorporated. Analyses focused on frequently occurring devices in each grammatical class with the anticipation that they might reveal which devices in particular caused the prevalent semantic characteristics of the class. Ultimately, these analyses were expected to identify characteristics of the use of hedging devices by Korean learners through the focused analyses.

### 4.3.1 Semantic Distribution of Modal Verbs

In this study, all seven types epistemic modal verbs were subject to investigation: *will*, *would*, *could*, *may*, *might*, *must*, and *should*. Coates (1983) organized the meanings of modal verbs, including those of epistemic function: *must* and *should* relate to assumption, and *may*, *might*, and *could* relate to tentative/epistemic possibilities. The first two, *will* and *would*, function as conjectural hedges in that *will* makes a prediction about the present, signaling a relatively high level of confidence projected in the conjecture, while *would* is used to express a hypothetical epistemic prediction, which shows a more attenuated degree of conjecture than *will*. Figure 4 shows the rate of each modal verb in the total use of epistemic modal verbs devices according to three different degrees of certainty. The semantic categorization was based on these semantic functions available in Coates (1983) and Hyland (1998b) as well as

the categorization by Cornillie (2009). According to these classifications, *will* and *must* are considered to indicate the highest degree of certainty amongst the prediction and are therefore placed under the category of certainty; *would* and *should* are somewhat more moderate yet still to a probable degree; and *could*, *may*, and *might* express possibility regarding the validity of what the writer says.



**Figure 4**  
Relative Distribution of Modal Verbs in Semantic Categories

As can be seen in Figure 4, certain patterns were formed around different use of modal verbs in making hedged predictions. Korean learners showed greater use of *will*, *could*, and *might* than did NS writers and less use of *would* and *may*. Most notable among them was that the two most used modal verbs, *will* and *would*, exhibited contrasting patterns in terms of preference by the level of proficiency. First, *will* was favored by LI writers the most, followed by HI and NS. *Would*, on the other hand, was favored by the NS writers the most, then in the order of HI and NS. In this regard, the prominent changes in the patterns of *will* and *would* across the groups may indicate the developmental characteristics of modal verb use regarding

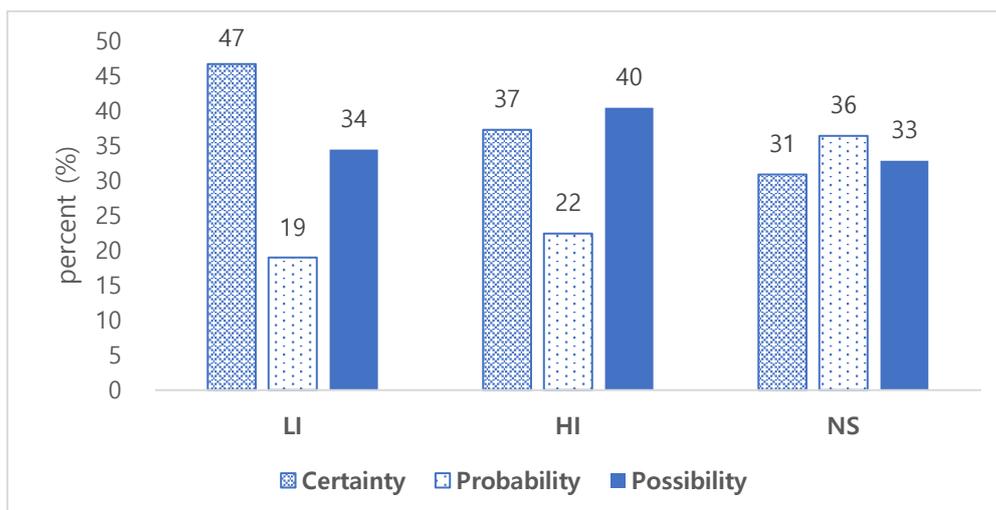
different degrees in the hedging intention; that is, less proficient learners are more inclined to use *will*, and the use of *would* increases as they develop their language proficiency, which is indicative of diminished commitment. One possible explanation for the lower level learners' preference of *will* over *would* could be found in the vocabulary list by the National Curriculum (National Curriculum, 2017), in which *will* was marked as one of the recommended items to be taught in the elementary school stage, whereas *would* was not as such. This suggests that students tended to be introduced to *will* at an earlier age, including both root and epistemic usages, and become more familiarized with it before learning *would*. This staggered exposure might have led them to internalize *will* as the modal verb for expressing prediction before being properly exposed to *would*. Subsequent instruction may not have sufficiently differentiated the two, leading learners to rely – perhaps excessively – on the more familiar *will*. In fact, many instances of misuse of *will* and *would* by Korean learners were observed (i.e., using *will* when *would* was supposed to be used in hypothetical predictions). This particular pattern of misuse was commonly found, probably due to the topic characteristics of the writings in the corpora that prompted the writers to frequently posit hypothetical situations. These examples in (1) and (2) not only illustrated the common mistakes Korean learners' make but also highlighted their inclination to use *will*.

- 1) Shortly we should make a rule to expose our real name. That will make people behave much more nicely on the internet. (LI)
- 2) But if the military service become selective, all these problems will dissappear, ... (HI)

Another aspect to be considered as the possible source of Korean learners' preference for *will* over *would* is textbooks. A number of studies explained L2 students' characteristics of modality use in relation to the textbook students were taught with (Holmes, 1988; Hyland,

1994; McEnery & Kifle, 2002). They pointed out that the textbooks they examined did not deal with content on modality or the focus was disproportionate either to root modality or epistemic modality. In fact, Choi (2011) analyzed modal verbs in six Korean high school textbooks, in which the use of *will* and *would*, in particular, was 21.6% and 16.5%, respectively. This may not be as big of a difference compared to the discrepancy shown in the use of *will* and *would* particularly by LI learners. Nevertheless, coupled with students' conceivable earlier exposure to *will*, it is not out of question that students noticed *will* more than *would* in the textbook as well. Also, considering that textbooks are one of the main and probably most influential sources for students' language input that are likely to have impact on other learning materials developed for them, the effect it would have on the use and distributional rates of modal verbs cannot be ignored. The need for developing learning materials that reflect modality appropriately in terms of functional and semantic use was therefore contemplated.

When all seven modal devices were arranged according to the three semantic categories in Figure 5, it formed a similar pattern to that of the whole range of epistemic devices shown in Figure 3 in that more probability and less certainty was used in the more advanced level. To be specific, the modal verbs LI writers used expressed high certainty, and this tendency changed toward lower certainty and higher probability as the proficiency level increased.



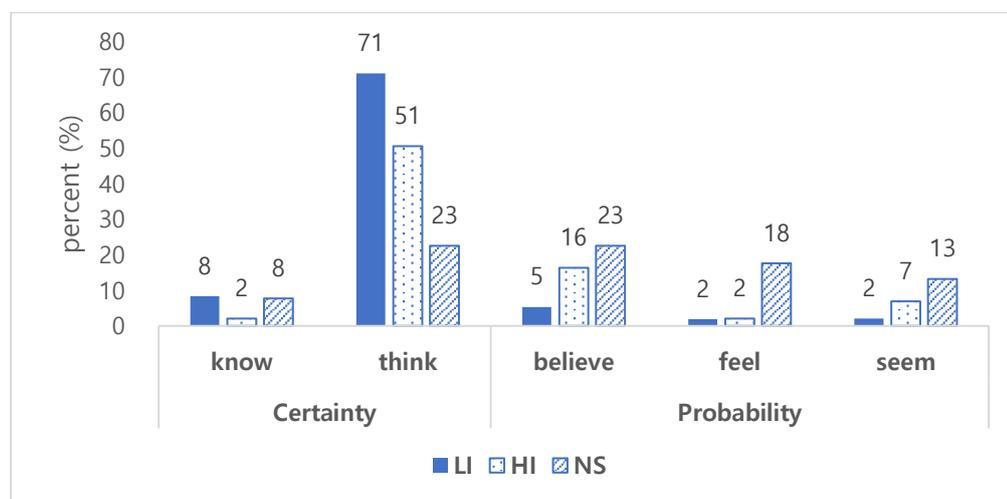
**Figure 5**  
**Degrees of Certainty Realized by Modal Verbs**

Thus, it can be inferred that, together with the fact that modal verbs were the most frequently used category amongst the grammatical classes, the overall strong certainty expressed by LI writers (see Figure 3) was partly due to the high usage of the modal verb *will*. Similarly, heavier use of *would* than *will* by NS writers might have contributed to the overall higher probability. Here, the changing dynamics between groups was noteworthy: the high certainty of LI fed into probability and possibility in HI, and the semantic level was fully inverted in NS, with probability emerging as the predominant and certainty the lowest category. It can be summarized that as the writers become more proficient in terms of general language competence, they tend to use epistemic conjectural modal verbs that express conjecture to hedge these ideas with more attenuated degrees of commitment.

### 4.3.2 Semantic Distribution of Lexical Verbs

The next most frequently used grammatical class across the groups, lexical verbs

were more closely examined focusing on the most frequent devices and the semantic levels as was done with modal verbs in the previous section. In the case of modal verbs, there were only seven types that were analyzed in the study; therefore, it was possible to present all seven of them together in the figure to compare the distribution. The difficulty of presenting all 24 lexical verbs that were subject to retrieval necessitated the examination of the more representative ones, that is, the most frequently occurring verbs (Figure 6).



**Figure 6**  
**Relative Distribution of Most Frequent Lexical Verbs in Semantic Categories**

The most frequently used lexical verbs were *think*, *believe*, *feel*, *seem*, and *know* across the three corpora. These five devices comprised 89% of the entire verb category in LI, 78% in HI, and 84% in NS, which can be considered representative of the verb category. Except for *know*, which is used to emphasize definite conviction, the remaining items were used to signal hedging intentions. In addition, the usage patterns of these hedging devices formed more or less regular increases or decreases, showing the connection of verb items with the proficiency levels. The tendency was that, as students developed higher proficiency,

they used fewer hedges of higher certainty and, instead, employed more attenuated degrees of hedges.

The main point of discussion is the remarkable predominance of *think*. The intensive use of this verb, particularly by LI, was first noted in Section 4.1 and then found to be a major contributing factor for high lexical verb use in the LI corpus in Section 4.2.1. As mentioned earlier, the heavy use of *think* needed to be discussed for the potential problem it may bring to the text and what it entails.

First, there are two possible misapprehensions on the part of the writers with respect to the use of *I think*, which was the construction used in the majority of instances of *think* (70% and 60% of the total uses of *think* in LI and HI, respectively). For one thing, it suggested that the Korean learners might not sufficiently distinguish between spoken and written registers. The construction *I think* as a representative conversational hedge has been studied by many researchers and is generally classified as a parenthetical element in the spoken register (Aijmer, 1997; Holmes, 1990; Kärkkäinen, 2003; Kaltenböck, 2005; Schneider, 2007). Examples that fit the description of parenthetical *I think* were also found in the corpora in the study. Here, the structure was found at the end of the sentences, as in (3) and (4), with no syntactic need for its presence. While this structure may be intended to withhold full commitment to the preceding statement, it is likely a sign of spoken register transfer.

- 3) This way is a truly bad education I think. (LI)
- 4) There is nothing good about smoking , I think. (LI)

On the other hand, Vande Kopple (1985) argued that *I think* was employed by less proficient writers while more advanced writers exhibited a greater use of modals and grammatically complex structures for the purpose of hedging. This suggests an alternative

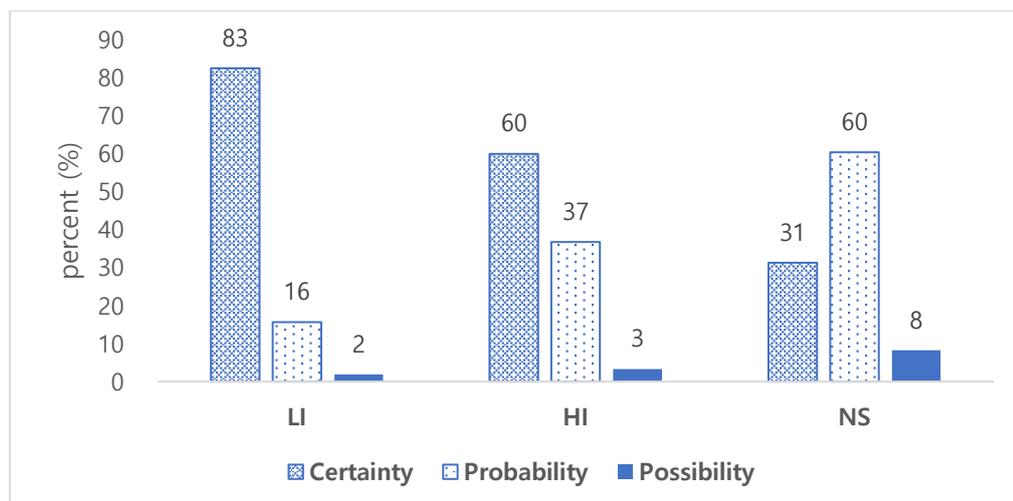
approach to the matter that less proficient writers lack the linguistic resources (e.g., vocabulary, expressions, or even syntactic structures) to exploit. As was discussed earlier in Section 4.2.1, epistemic lexical verbs were considered a resourceful grammatical class because they carry specific meanings and epistemic degrees to modify the proposition that follows. As much as the generic meaning and versatile functions of *think* to signal the hedging purpose may be appealing to learners with limited vocabulary resources, sophisticated expressions and intention that could have been realized by various epistemic verbs were lost in the exclusive use of *think*.

It is difficult to determine with any certainty which of the two possibilities above drove Korean students to use *think* so excessively. The fact that both of them are issues that are brought up in relation to lower linguistic competence suggested the relevance of this pragmatic ability to general language ability. They had a further point of commonality in terms of the effect of the heavily repeated use of *think* on the writing: they ran the risk of rendering the sentence and even the whole text repetitive and monotonous.

The final point is that the writer's presence was pervasive in the text in the process of using lexical verbs with the personal pronoun *I*. Along with the large proportion of the structure *I think*, other verbs were used in the form of the active voice. For example, the structure '*I (strongly) argue (that) ~,*' which contained the personal pronoun *I* and a lexical verb in the active voice, was frequently found in the LI corpus, as a means of expressing strong claims. Expressing the presence of the writer is considered one of the strategic methods of hedging (i.e., reader-oriented hedges) (Hyland, 1996c, 1998b) and has been dealt with in studies with a focus on the functional uses of self-mention or first person pronouns (Hyland, 2001, 2005a; Ivanič, 1998; Kuo, 1999, Tang & John, 1999). Acknowledging the useful functional diversity and roles of such devices, it would be wrong to discourage the use

of these forms altogether. However, the occasions in which the writer was referred to seemed to be neither necessary nor strategic. Instead, based on the examples and the discussion related to the signs of low language proficiency, the uses appeared to be more incidental, occurring as a consequence of the verbs used or at least not done with the explicit intention of hedging.

Moving to the semantic aspect, considering the fact that *think* belongs to the semantic category of certainty, it is not difficult to understand that certainty would be the predominant semantic category expressed by lexical verbs in the LI corpus. The occurrence of *think* was not only the highest in LI but also both the HI and NS corpora. However, the difference lay in the concentration in the other two groups, illustrating a significant decrease over the proficiency level. This in turn entailed the use of more diverse kinds of lexical verbs by the HI and NS when compared to LI. In addition to the diversity alone, the use of such verbs that fall into different semantic categories such as *believe* and *feel* changed the semantic dynamics realized through lexical verbs in the HI and NS corpus (see Figure 7).



**Figure 7**  
**Degrees of Certainty Realized by Lexical Verbs**

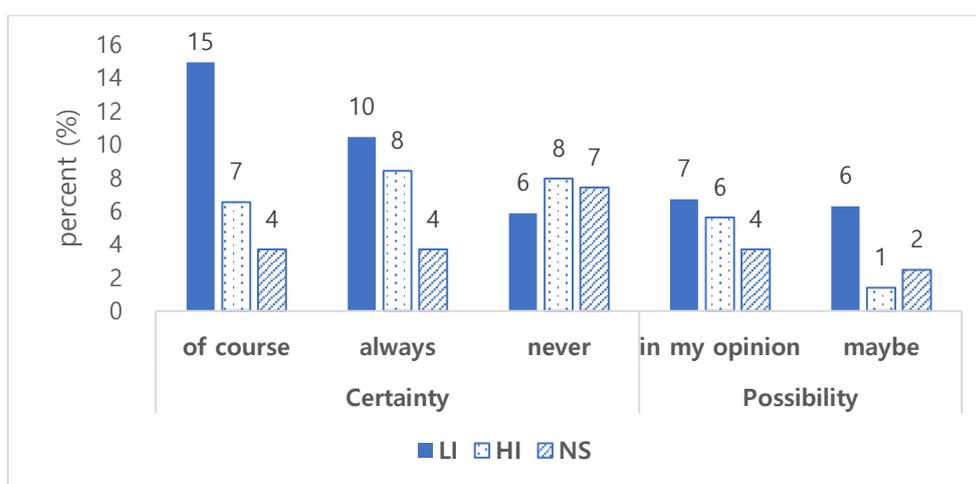
Figure 7 presents the degree of certainty expressed by the entirety of epistemic lexical verbs (not only by the five most frequent verbs as in Figure 6). Certainty was the highest group for both HI and LI. Nevertheless, the extent of severity is not nearly as prominent in HI as in LI, probably due to significantly reduced use of *think* for the most part. The NS was distinct from the other two in that probability was expressed the most by verbs such as *believe*, *feel*, and *seem*. The use of the lexical verb items exhibited a clear pattern along the increase of proficiency levels: decreasing certainty and increasing lower degrees of certainty, particularly the ones that express probability more noticeably than the range of possibility.

To summarize, the semantic distribution of lexical verbs by LI writers was notably uneven and unbalanced due to the disproportionately high use of *think*. As a result, a great majority of the verbs used by LI writers expressed the highest level of (high) certainty, and this concentration subsided with increased level of the other certainty levels (i.e., probability and possibility). On the other hand, the verbs employed by NS writers expressed probability the most, showing the most even semantic distributions among the three groups. The same can be said about the diversity of the lexical verbs; that is, the more proficient the writers were, the wider range of verb items were employed as hedges in their writings.

### **4.3.3 Semantic Distribution of Adverbials**

Adverbials were the third most frequently used grammatical category. Since there were 60 adverbial devices investigated, only the most frequently used devices were chosen to be examined as was the case in the lexical verb category. Figure 8 shows the five most

frequently used adverbial items in the three groups arranged by the semantic categories. What needs to be mentioned here is that only the items that express certainty levels (certainty, probability, and possibility) were chosen and compared in order to examine the aspect of hedges that concern levels of certainty; the devices that express usuality and approximation were not counted as was the case in Section 4.2.2. As a result, the rates in the three categories in Figure 8 did not add up to 100% in each group.



**Figure 8**  
**Relative Distribution of Most Frequent Adverbials in Semantic Categories**

Figure 8 shows that certainty was the primary semantic category realized by adverbial items in all three corpora, followed by possibility. Although there was no strikingly notable preference as was the case in modal and lexical verbs, the tendency of favoring certain items and using devices of high certainty was still the most evident in the LI corpus, marking the highest numbers among the three groups. Also, it was noteworthy that the most frequently used adverbial items fell in the category of either certainty or possibility, bypassing the intermediary certainty level of probability. Related to the certainty category, another item of note was that the most frequently used epistemic devices in the certainty

category were representative items that function as boosters, not hedges of higher degree of certainty. Thus, it can be suggested that many adverbial items were employed for the purposes of creating either boosting or very overt hedging effects.

Focusing on the devices of hedging, the two most frequently used items were *in my opinion* and *maybe*, which took up most of the devices in the possibility category in the LI corpus. First, the majority of the occurrences of *maybe* in the possibility category were found in the LI writings. In addition to being marked informal in the list of epistemic adverb items (Quirk et al., 1985), the use of *maybe* as a means to express uncertainty has been deemed inappropriate for use in academic written discourse in many studies. For example, Pic and Furmaniak (2012) argued that *maybe* was not well received in academic writing because it expressed unsupported conjectures and the recourse for ungrounded assumptions. Oh (2007) also noted the transfer of spoken feature *maybe* in Korean L2 writing and found that the distributional rate of *maybe* in the students' writings was proportionally comparable to what was found in spoken data. Hu and Li (2015) reported the same overuse of *maybe* among lower proficiency level Chinese students' writings and surmised that it might be due to the form complexity and difficult pronunciation of other epistemic adverbs of similar function (e.g., *probably*) that they preferred to use *maybe* verbally. Consequently, the transfer to written form took place as a result of familiarity or lack of register awareness.

In addition to the fact that it is an informal expression that is generally colloquial, examples of the misuse of *maybe* were observed in the Korean corpora.

- 5) They would feel uncomfortable and maybe they will try to escape those places. (HI)
- 6) And maybe it will be the best method for human and animals live with together. (LI)
- 7) If Korea, where the population of smoker are rapidly increasing, starts

policy like these, maybe most of smoker will not agree with, and fight against the government. (LI)

- 8) maybe most of smoker will not agree with, and fight against the government. (LI)

The use of *maybe* in examples (5) through (8) appeared to have the intention of withholding full commitment by expressing uncertain conjecture or expectation. However, considering the context of each use, it was supposed that students used *maybe* and *will* together to express the meaning of *may*, which was a common pattern of misuse among Korean learners. Also, this type of misuse seemed to have contributed to the higher frequency of *will* and lower frequency of *may* than had they made the appropriate decision to use *may*. Further, it could partly help explain Korean students' higher use of *will* and lower use of *may* relative to the NS writers in Figure 4. Overuse and misuse of *will* were discussed earlier (see Section 4.3.1), paired with another modal verb *would*, suggesting that the Korean writers did not only exhibit a lack of understanding of *will* but that it also extended to insufficient knowledge of the use and function of other items such as *maybe*, *may*, and *would*. The common reason for these may be partly attributable to their misunderstanding of *will* based on the Korean equivalent expression, which functions to express a wide range of conjecture or expectation within the word. The tendency of employing English items on a one-to-one basis could be indicative of Korean writers' insufficient ability to express their conjectures in the conventions of English.

Next, there were some notable observations made in relation the preferred use of *in my opinion* by Korean learners in both groups. While it is a useful hedging expression that signals that a proposition is restricted to the view of the writer and that its validity is open to discussion, it involves the presence of the writer explicitly with an inclusion of the personal reference *my*. However, having two overt first-person pronouns, *my* and *I*, in such proximity

in the same sentence (as in examples 9 and 10) was not only redundant but also hardly appropriate for the expected purpose of reader-oriented hedges.

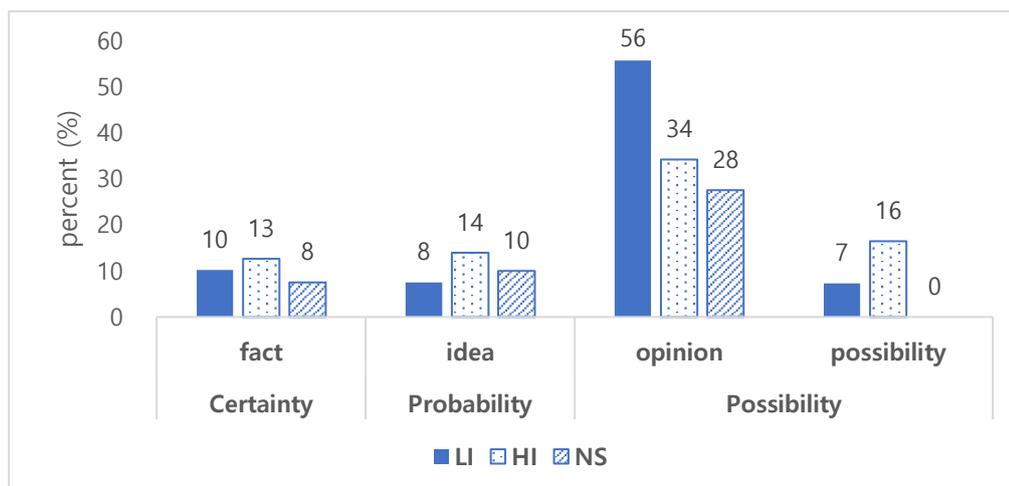
9) In my opinion, I think smoking should be banned in all public buildings. (LI)

10) In my extremely personal opinion, I think cigarette must be eradicated from the earth. I hate smoking people. (LI)

The explicit presence of the writer expressed through the use of the first pronoun *I* was true for *think* in that it was used extensively in the collocation *I think* in Section 4.3.2. Considering the context of the two examples (9) and (10) above, it was not certain if the straightforward and assertive messages presented together with these potential hedging devices were indeed motivated by the intention to hedge. Also, the degree of epistemic commitment expressed by the two hedge items did not quite match, with one (i.e., *in my opinion*) being in the lower degree of possibility and the other (i.e., *think*) belonging to the high certainty. Thus, from the unclear hedging intention, it was suspected that the students were not quite aware of the precise meaning or function when they chose these expressions. Rather, it appeared that the use of these potential hedging devices might be an inadvertent consequence of the exploitation of all available, albeit distinctly limited, linguistic resources.

#### **4.3.4 Semantic Distribution of Nouns and Adjectives**

As noted earlier, nouns and adjectives were the lowest in number among all the grammatical classes investigated in Section 4.2.1. For this reason, these two categories will be discussed in tandem in this section.



**Figure 9**

**Relative Distribution of Most Frequent Nouns in Semantic Categories**

It was indicated in Figure 9 that possibility is the dominant semantic category expressed by epistemic noun devices in all three corpora. From a closer investigation of individual items, it could be understood that the heavy use of *opinion* in all three corpora was attributable to the high result of possibility in the noun category (i.e., 56%, 34% 28% respectively from LI through NS). Indeed, there were no other devices that were used nearly as intensively as *opinion* in the noun category. Observing that *possibility*, which of course fell in the semantic category of possibility, was also one of the most frequently used devices in LI and HI, it is conceivable that the dominant semantic category of the noun device would be possibility. As was mentioned about the NS writers' use of nouns, however, a variety of noun devices that belong to the probability category were used by NS writers, marking similar levels of probability and possibility in nouns despite their frequent use of *opinion*.

In the previous section on adverbials (Section 4.3.3), the use of *in my opinion* has been discussed. In the current study, devices such as *fact* and *opinion* that appeared as a part

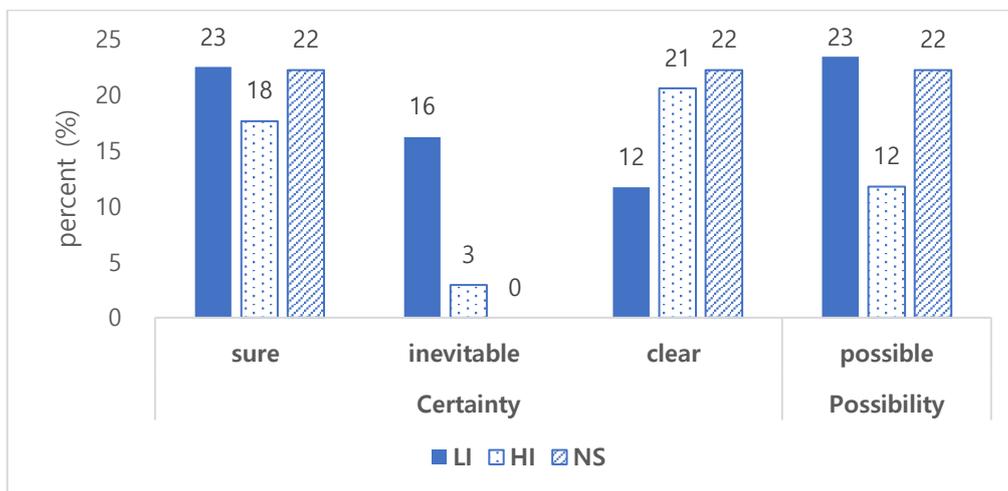
of expressions such as *in fact* and *in my opinion* were only counted as either noun or adverbial, respectively. This was due to the notion that these expressions were thought to be independent enough from the nouns in terms of high frequency of occurrence in chunks, and the chunks themselves function as adverbials as a whole. In spite of the separation as such, it was notable that *opinion / in my opinion* and *fact / in fact* still stood out as some of the preferred devices in each grammatical category, showing a relatively high contribution in the semantic category each of them belongs to.

One feature unique to nouns was that the construction tended to appear in the form of collocations commonly used by many students. For example, *opinion* was used with person pronouns such as *my* and *their* (i.e., *my opinion*, *their opinion*); *fact* and *idea* were in the form of ‘*the fact/idea that ~*,’ and *possibility* was used most frequently with *of* as in ‘*the possibility of ~*’. Related to this patterned use, it was noteworthy that they did not seem to specify the use of each item with its definition in mind. Considering the context, what was referred to as *fact* in (11) was more likely a possibility and in (12) an opinion or argumentative position similar to what was presented in (13) with the proper item of *opinion*. (14) appeared to be the writer’s opinion as well, with an unwarranted non-fact referred to as a well-known truth.

- 11) It is fact that many people do something wrong relying on fate name. (LI)
- 12) Even though I agree the fact that animals also have their own lives, I agree with the fact that animals should be used in medical experiments. (LI)
- 13) The opinion that smoking in public buildings could be harmful for non-smokers is right. (LI)
- 14) The fact that Second hand smoking is more harmful than direct smoking is well-known truth. (LI)

Observations of this type of patterned yet semantically inappropriate uses suggested the possibility that Korean learners’ epistemic expressions seemed to have been acquired as

chunks, rather than being understood according to their specific epistemic meanings. As a result, they ended up choosing contextually inadequate items, instead of which implied with hedging intention could have been more adequate to express the ideas.



**Figure 10**  
**Relative Distribution of Most Frequent Adjectives in Semantic Categories**

The last grammatical category to be examined was adjectives, which were used the least among all the epistemic devices in all three corpora (2%, 4%, and 3% from LI through NS). Because of the low use in this category, it did not appear to have contributed greatly in the whole semantic distribution. Still, there was a concentrated use of certain items here as well. Figure 10 shows the most frequently used items among epistemic adjectives, and these four devices comprised 74% of LI, 53% of HI, and 67% of NS, from which it can be inferred the use of adjectives was quite limited in range in all three groups. Accordingly, the dominant semantic degree(s) expressed in the whole noun category would have been decided by these four.

As can be seen, none of the items in the certainty category in adjectives were hedges,

but they are representative items for emphasizing certainty and confidence. Nevertheless, the only item in the possibility category (i.e., *possible*) also showed active use by LI and NS. Thus, adjectives appeared to be used to express either evident confidence or a clear intention of hedging.

The notable point of the adjective devices in relation to the semantic distribution is similar to what was observed in the adverbial devices: most of the items in the adjective category were used to realize either certainty or possibility and, accordingly, functioned to have a clear boosting or hedging effect on the text. Still, no conspicuous concentration was observed at least among these most frequently used items, as was the case in some other grammar classes, suggesting that all of them were used more or less evenly.

The only hedging device in the adjective in Figure 10, *possible*, did not exhibit any particular characteristics in Korean writings. However, the most used boosting device, *sure*, was found to have two patterns of common misuse by Korean writers, which suggested hedging might not be the only troublesome area. First, many students falsely employed the construction '*it is (not) sure (that) ~*' instead of '*I am (not) sure (that) ~*' (examples 15 through 19). This was rather unexpected because the discussion so far has identified the cases in which the explicit presence of the writer as a consequence of some popular choice of expression among students did not seem to be adequate in the writing. In contrast, in this pattern, students employed the construction in which *it* served as a subject instead of the correct use of personal pronouns. Not only did LI learners use this construction, but also instances were found in the HI corpus.

15) It is not sure that only the driver who is using cellular dies by car accident.

(HI)

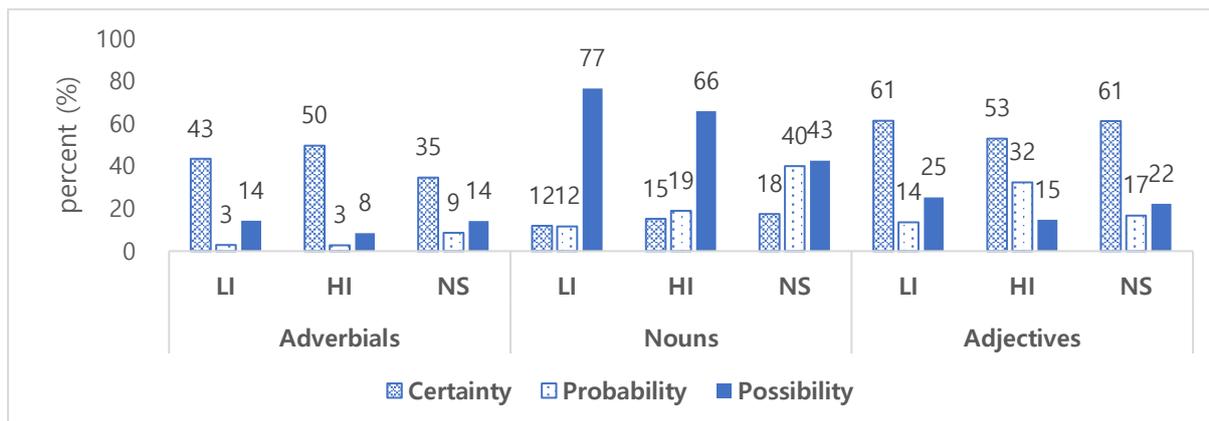
16) Even drugs for cold will be difficult to make because it's not sure whether it

- is secure to use the drugs if there's no such experimets. (HI)
- 17) So when the driver is both driving and talking on the cellular phone, it is sure that he is paying less attention to driving and more attention to the talk on the cellular phone. (LI)
- 18) It is sure that one who smoke would be getting unhealthy in short time. (LI)
- 19) It's sure that there will be problems in continuing another class. (LI)

Another misused pattern observed in the LI corpus was that *sure* was used as though it were a verb as shown in examples (20), (21), and (22).

- 20) In that time, I definitely sure that the physical punishment must be implemented when students do bad things. (LI)
- 21) There must be a lot of opposite opinions to mine, but I can sure that many people can agree with my opinion after reading my essay. (LI)
- 22) We do not sure when the North Korea will shot the missile or nuclear bomb to us. (LI)

Because *sure* is a basic vocabulary item that most Korean students probably learned and became familiarized with early enough, it might be easily overlooked. Although it was hardly possible to tell whether it was an actual misuse caused by insufficient or incorrect knowledge or simply a mistake as a consequence of the pressing nature of timed writing, it evoked the need to make certain that students are provided with the means to apply their epistemic items in the right structure along with having a sufficient collection of epistemic devices from which to exploit various items. The instances of misuses found even in the use of boosting devices call for specific and refined instruction on epistemic modality and devices in general along with comprehensive work with the notion and function of boosting and hedging.



**Figure 11**  
**Degrees of Certainty Realized by Adverbials, Nouns, and Adjectives**

Finally, the degrees of certainty realized by three grammar classes were arranged by three groups in Figure 11. Interestingly, each grammatical category had a salient representative certainty level regardless of the groups. To be specific, certainty was the highest among adverbials, possibility among nouns, and certainty among adjectives. Nevertheless, there were some differences in degrees between groups, and the semantic concentrations tended to be still most obvious in LI, with the tendency subsiding in HI and NS showing more balanced distributions than the other two groups.

In Section 4.2, the use of epistemic devices in the three corpora was examined with respect to grammatical and semantic distributions. Although the results revealed several patterns across proficiency groups, further analyses were required in order to examine why those results were present and what their significance might be. By taking a tighter focus on more frequently used items, the findings from this section provided some explanations to support the previous results and also identified some characteristics related to hedges in Korean learners' writings.

## 4.4. Aspects of Hedging at the Sentence Level

### 4.4.1 Epistemic clusters

When two or more epistemic devices of the same degree of certainty are used together, they construct what is referred to as an epistemic cluster (Hyland & Milton, 1997). According to Lyon (1977), the use of “modally harmonic” devices together enabled a double realization of the degree of certainty being expressed. In other words, when two or more epistemic devices of the similar degree of certainty are properly used together, they could enhance each other’s semantic effect, thereby more effectively conveying the epistemic meaning. Achieving this effect requires choosing and combining the right items and applying them correctly in the sentence, which are complicating factors for most L2 writers. However, as challenging as it can be, it could serve as an index to gauge their understanding of epistemic modality, which will be the basis for understanding and choosing appropriate hedging devices. Since a number of the aspects and characteristics that have been discussed with regard to pairs of epistemic expressions not working together properly also fall into this area of discussion, this section will focus more on the general tendency of usage with multiple epistemic devices shown by Korean learners as opposed to the NS writers.

- 23) She always has a hard time in teaching students because, maybe it might exaggerates some points as it is a drama, some students who are good at studying in her class do not want to listen to her lesson. (HI)
- 24) If the physical punishment of children in schools is restricted, it must be certain that teachers right is vanished, and there will be no more school. (LI)
- 25) Then the society goes very well and it can be possible to have the developement of the society and countri. (LI)
- 26) Maybe it might not serious. (LI)

The first characteristic found in Korean corpora was redundant use of epistemic devices. This tendency did not discriminate based on proficiency level, being present in both HI and LI writers. The devices used together in (23) through (26) appeared to be semantically consistent, but in most cases by adding an epistemic modal verb unnecessarily, or choosing an improper modal verb, sentences were rendered awkward and disharmonic.

- 27) This would seem to support my belief. (NS)
- 28) My experience may seem "casual" because there was no obvious disaster, but the effect of it on me was immense. (HI)
- 29) Using cellular phone while driving may seem very easy. (LI)
- 30) Right now, giving them some punishment can seem to be a invasion of rights. (LI)

Second, when two devices are adjacent to each other in such form that student may recognize almost as an expression as in *may seem*, it did not appear to impose much difficulty even to the lower proficiency group. As can be seen in the Korean learners' examples (28) and (29), the tentativeness accompanied by a moderate level of certainty seemed to be consistent and appropriate considering the context except in (30), with an unnecessary modal verb added to *seem*. However, the expressions of the similar sort found in the Korean corpora exhibited some limited range in that there were no instances of *would seem* as in the NS example (27), nor did they use *may/would appear*, which were used by NS counterparts.

When there were more than two epistemic devices involved or when they were not closely connected, on the other hand, students seemed to have greater difficulty employing semantically consistent epistemic devices. In this regard, they were unable to use multiple devices harmoniously as in the NS corpus (examples 31 through 34).

- 31) These may seem like basic things but many students may not have learned

- these things at home and might not been taught at their college. (NS)
- 32) ... it would seem that having a part-time job in college would be a great way for students to become more responsible and expand their experiences. (NS)
- 33) Banning smoking would be bad for the economy, as less and less people would want to eat out. (NS)
- 34) it would be unsuitable in their case and would be causing them hardships that could quite possibly be avoided. (NS)
- 35) They would feel uncomfortable and maybe they will try to escape those places. (HI)
- 36) Surely, teaching wrong actions and correctiong them might be possible by words, without physical punishment. (LI)
- 37) if somkers consider their loved one, who would suffer vital deases because of them, they will follow the law. (LI)
- 38) drivers will also certainly think that it does not matter to their saftey. (HI)
- 39) In my point of view, some people might argue that they can do two things perfectly at once, but it is impossible. (LI)

These examples from the Korean corpora illustrated disharmonious combinations of epistemic devices in connected clauses (examples 35 through 39). In (35), first of all, even though the epistemic devices (*would*, *maybe*, and *will*) are all part of the same expectation and thus should be consistent, they expressed distinct levels of certainty from one another, rendering the intended epistemic degree unclear. Also, the concurrence of epistemic devices expressing different degrees of certainty *surely* (high certainty) and *might be possible* (*might* and *possible* both fell in the possibility category) colliding in the same sentence (36) made it difficult to fathom the writer's intended level of certainty. Similar discordance was found in (37) between *would* and *will*. Not only was it a matter of inconsistency between epistemic devices involved, but it also appeared at times in absence of them. Considering example (38) by an HI learner, the devices *will*, *certainly*, and *think* were well matched but were followed by the subsequent subordinate clause with no epistemic devices. Such an unqualified declarative statement struck an odd contrast with the heavily qualified sentence within which it was found. Finally, in (39), which is an LI example, devices were not epistemically

consistent and, further, were followed by an unqualified clause. As a consequence, this sentence was modally inconsistent as well as grammatically incorrect.

In keeping with the last examples, which were partially missing qualification, the sentences with a qualified statement followed by an unqualified statement were observed in many Korean learners' writings, exhibiting a common pattern.

- 40) **Although** it seems that sometimes the 'physical' thing equals fast and clean, education **should** be the subject of applying that formula. (HI)
- 41) Some would not agree with my opinion, **but** as far as I'm concerned, **I strongly argue** that animals **should** be used in medical experiments **no matter what** critics say due to some convincing reasons. (HI)
- 42) Some people believe it should not be used because it could violate people's privacy. **However** I am **convinced** that it has more benefits to use the real name. (LI)
- 43) Some people may think it is okay, **but I think** that kind of thing is to be forbidden **absolutely**. (LI)

As can be seen, the first part of each sentence included such items as epistemic devices of moderate certainty, concessive clause structures (40), impersonalized or depersonalized clause structures (41), (42), and (43) and, in some cases, more than one of these. All of these were hedging strategies motivated by the desire to signal that the writer is less than fully committed to the proposition. Considering the context, however, it was observed that the writers hedged the parts that were not their assertions. There were two possible explanations for this tendency. One possibility is that the hedged parts could have been set up as a means to express the writer's acknowledgement or anticipation of other possible positions or responses. On the other hand, this may have been intended to deliberately undermine the opposing view so as to strengthen their own position on the matter. Whichever motivation they might have had, when the writer's point was finally introduced at the later part following *but* or *however*, it was usually expressed in a bare assertion, with an

emphasis on the validity of the statement using non-epistemic *should* (meaning obligatory) or other emphatics. In short, they tended to employ hedges to mitigate other opinions than their own and express strong certainty to stress their arguments through bare assertions. This seemed to come from an absence of understanding that they could get higher acceptability and agreement by using a more hedged, moderate tone of argumentation to signal that they were willing to accommodate the reader. While using hedges and boosters together in certain sections of writing has the merit of creating and enhancing different rhetorical effects (Hyland, 1998a), Korean students, both LI and HI, appeared to need some guidance as to where to apply hedges and boosters to achieve the expected effect of using them together. That is, given some instruction on the awareness that presenting their own ideas with hedging may in fact improve reader response, students may be able to utilize the hedging skills they already possess and apply them in a way that could better benefit their argument.

A further consideration is that students may have been linguistically incapable of expressing their intention or motivation properly in English, even if they might have meant otherwise in their L1. Be that as it may, there remains a need for instruction on the awareness of the pragmatic component and general language items to express their ideas as they intend precisely in that students should understand how their ideas could possibly be received differently from their intention.

To summarize, several characteristics of students' understanding of epistemic devices were revealed by observing Korean learners' epistemic cluster use, and it also shed light on their perception of hedging. The fact that students frequently employed more than one epistemic device seemed to demonstrate their general understanding that these devices often work together. However, Korean learners frequently made combinations of epistemic devices that were either inconsistent in terms of the degree of certainty or semantically redundant.

Furthermore, in longer sentences with multiple clauses, they seemed to have more difficulty keeping the epistemic devices semantically and grammatically consistent, failing to utilize the hedging function effectively. Finally, Korean students commonly applied hedging strategies to attenuate the force of the other opinions or possibilities than their own ultimate claims. They used hedges to signal that they were not fully committed to the other opinions although they acknowledge the alternative viewpoint, and then subsequently made their own claims with high certainty markers and/or bare assertions to express strong commitment.

#### **4.4.2 Construction of Impersonal Sentences**

In the previous sections, lexical hedges were examined, focusing on epistemic devices. Viewed from a pragmatic perspective, the use of impersonal expressions is a strategic choice by a writer with writer-oriented concerns in terms of hedging functions. As was discussed in Section 2.2, writer-motivated hedges are characterized by the absence of writer agentivity for the purpose of distancing or minimizing the involvement of the writer from the proposition being presented. According to Holmes (1982), skillful writers employ this construction as a purposeful means to leave the readers uncertain as to the information's source or the view projected in the statement. To achieve this purpose, syntactic manipulation is needed, hence the term syntactic hedging (Hyland, 1998b). The findings from the previous sections that students made such frequent use of writer pronouns necessitated an investigation into their use of impersonal constructions functioning as hedging. With regard to impersonal sentences, the use of the passive voice and depersonalization by the writers in the study were examined.

### 4.4.2.1 Passivization

Voice changes make it possible to view the action of sentence in a different way without changing the facts reported (Quirk et al., 1985). From a more functional view, there are a few reasons for choosing the passive form, one of which seems to be suitable to the function of writer-oriented hedging: to make the agent implicit by leaving it out (Halliday, 1994). With respect to hedging, this is expected to have the effect of disguising the source of epistemic judgment explicitly by removing the writer from the discussion. To collect passive forms that suit the purpose and motivation of writer-oriented hedging, epistemic lexical verbs were searched for in the past participial form and those that matched the standard of hedging in forms of the passive voice were selected and analyzed.

First, there were some examples of passivization constructed around the epistemic verb *know*. Even in the same type of construction with the same purpose, it was speculated that the different certainty level of the epistemic lexical verb would affect the credibility given to the proposition that followed. *Know* being a representative of the (high) certainty category, it presupposed a strong case for what was being said.

- 44) It is widely known that smoking is closely related to cancer. (HI)
- 45) It is a widely known fact that indirect smoking is more detrimental to the human body than direct smoking. (HI)
- 46) It is well known that a person who does not respect animals also does not respect people. (HI)
- 47) It is well-known that it is not allowed to shout loudly in public buildings, as it makes many other people annoying. (LI)

As can be seen in both example (44) and (45), the writers' ideas are subordinated in the passive form, rendering the source of the idea or information implicit. Further, by using

words such as *widely* and *fact* (another epistemic device indicating a high degree of certainty), it comes across as if it were a fact rather than a part of the writer's contention. Both of the writers used this premise as the basis of further development of ideas subsequently, probably without the potential concern of objection directed toward them. Although the structure itself resembled (44) and (45), the subordinated propositions in examples (46) and (47) seemed to be somewhat different. More specifically, while the propositions in (44) and (45) were more generally recognized as an objective result of science and actually widely known, those in the latter examples (46 and 47) were more subjective than factual. Presenting the proposition in a passive form expecting the effect of enhanced objectivity and acceptability seemed like a good strategic choice, but the LI writers showed some cases of misuse of the specific items, in which cases the meaning did not properly correspond to the nature of their propositions.

48) it has been suggested by several medical studies that the evidence is inconclusive in relation to the potential harm caused by passive smoking.

(NS)

49) Traffic congestion is suggested to be a main source of air pollution. (HI)

In the case of the passive sentences in which *suggest* was used, the NS writer (48) revealed the source of the information as the evidence that was the result of several medical studies to give more reliability to the basis of the contention to come. It is noteworthy that instead of leaving the agent implicit, the writer purposefully expressed the agent in order to raise the validity of the information source, making the best of the strategy of using passive structures. From the HI corpus, (49) is essentially the same idea in that the place of the empty subject *it* was filled with what would have been the subject of the subordinate clause, changing the structure from '*It is suggested (that) ~ is ...*' to '*~ is suggested to be ....*'. Despite the ample instances of the passive voice with *know*, passive structures with the

epistemic sense of *suggest* were not found in the LI corpus.

The passive form using the epistemic verb *believe* was also investigated. *Believe* was generally used to express an opinion or belief in the NS corpus, and NS writers used active forms with the first person pronoun *I*, such as in *I believe*. Interestingly, the passive form with the verb *believe* was only found in the LI corpus.

- 50) First of all, it is generally believed that people can't concentrate on their driving if they are talking on the phone. (LI)
- 51) While the amount of distraction differs from person to person, it is believed that using mobile phone distracts attention in some degree. (LI)
- 52) It is often believed that car drivers may use cell phone while driving. (LI)
- 53) Second, It was widely believed that the physical punishment of children is thing that we cannot help doing in past time. (LI)

*Believe*, because of its meaning, needs to be used to express one's opinion rather than a fact. The LI writers employed this structure both fluently and accurately, some of them even using the correct epistemic adverbs to modify with usuality. However, the proposition in (50) appeared to be a fact, which did not seem to match with *generally believed* regarding its meaning. Likewise, other examples (51 through 53) were ambiguous as to whether the proposition was an excerpt of factual information or general hearsay. This is in line with the problems found in the usage of *know* in passive sentences discussed above, notwithstanding the different nature of the two verbs. Milton and Hyland (1999) reported a similar case in which they provided Hong Kong ESL students with some phrases used by native English speaking students in comparison to their own to help them notice differences in the use of qualifying expressions in their argumentative writing. Subsequently, when the Hong Kong students started using the qualifying phrases in their own writing, they included some inappropriate contexts, for example using '*It is believed (that) ~*' to express a fact instead of

an opinion or one's belief. This may suggest the tendency of many students to learn these constructions as interchangeable chunks of phrasal expression to refer to any cited source rather than to understand the meaning and functions specific to each. The potential hedging effect that can be achieved by using the construction could possibly increase with proper word choice.

#### 4.4.2.2 Depersonalization

The use of depersonalized form (Holmes, 1982) is a way of disguising hedges so that the writer's responsibility in the validity of what is being discussed or argued would seem to depend upon the agent of the sentence (Hyland, 1996c, 1998b). The agent can be another person, a media source, or research. With the construction of "abstract rhetors" (Hyland, 1998b), the perspective of the proposition is shifted to another person or something other than the writer. Accordingly, depersonalization acts as a springboard from which to develop ideas without being held responsible for the proposition's content. In this regard, this strategy is also categorized under writer-oriented hedges, together with the other impersonalized forms such as passivized forms, in that it concerns the protection of the writer in the event of possible disagreement with the reader or the presentation of alternatives. The examples of depersonalized sentences were found in both Korean corpora as well as in NS.

- 54) The researches suggest that second-hand smoking is even more seriously harmful than smoking oneself. (HI)
- 55) This research shows that physical punishment can affect badly to education by watching violent things. (LI)
- 56) Some research showed that reaction speed of driver who uses cellular phone in same time driving a car is almost same as that of driver who is drunken.(LI)
- 57) The feedback that I have received, suggests that it appears that they have put little effort into their resumes, presentation skills and tend to come across

with a persona akin to "Give me the job." (NS)

- 58) Firstly, regarding the health of customers, more and more compelling evidence suggests that the ingestion of second-hand smoke is a direct cause of various lung disorders, predominant of which is lung cancer. (NS)

In all of the examples above, the information or proposition is presented as if it came from an outside source. However, a closer look reveals that the writer employed those agents in order to either gain support from a stronger authority or put some distance between the writer and the proposition being discussed. In examples (54), (55), and (56), by using *research* as the subject of the sentence, the writers both avoided revealing their presence and made a firm basis for their ideas by employing a higher external authority. The depersonalized sentences found in the NS corpus showed greater subject variety as a borrowed source of information as *the feedback* in (57) and *evidence* in (58) as a means of speaking for the writers.

To this point, the focus has been on inanimate, non-human subjects as opposed to depersonalized sentences with third person subjects. To take an example of the latter, (59) referenced the view of *most students* with regard to their time-related issues. While this was, in fact, a projection of the writer's view, the reference to students' opinions supported the writer's idea and also distanced the writer from the proposition.

- 59) The main problem here is that of 'time' which most students would argue they have not enough of, particularly towards the final years of their study when workloads become extremely high in volume. (NS)
- 60) Some people say that we should guarantee privacy on the Internet. (HI)
- 61) somebody may say, the fact that Christ said that human being has the right to use their environment to develop human's own civilization. (LI)

There were instances of depersonalized forms with third person human subjects in Korean learners' writings as well. Examples (60) and (61) fit the description of the

depersonalized structure. Also, the intention of use was presumably similar to that of the examples observed earlier, that is, to have the same effect of withholding the writer's presence. These examples, however, show two common features that are generally considered signs of low proficiency: the use of (compound) assertive pronouns (e.g., *some (people)*, *somebody/someone*) and the reporting verb *say*. This tendency was observed by Channell (1994), who argued that assertive pronouns are lexically vague and that their use in academic genres is considered inappropriate. Furthermore, Greenbaum and Quirk (1990) noted that the use of assertive pronouns is generally avoided in formal discourse. Hinkel (2005), as well, in a comparative study of lexical hedges and intensifiers between NS writers and L2 NNS writers of various nationalities and proficiency groups, found the use of assertive pronouns by L2 writers was significantly more frequent than that of NS writers regardless of the proficiency group.

Another problem was that Korean writers used the reporting verb *say* in quite a number of cases (e.g. '*(may) say*', '*says*') when quoting the source of information in the depersonalized form. Similarly, it was pointed out in Hyland and Milton (1997) that the L2 Hong Kong students seemed to have problems constructing depersonalized forms using different perspectives because of their heavy reliance on *say* instead of choosing a proper epistemic lexical verb as a reporting verb.

To conclude this section, it was observed that Korean students in the study appeared to be aware of, whether consciously or not, and to utilize the hedging effect of impersonal structures to gain objectivity brought to their arguments. However, they showed a lack of understanding as to the necessity of hedging their own arguments as a means to be more effective in terms of the interactive aspect. In order to realize the full potential of the strategy, providing explicit knowledge in relation to the distinctive personal aspects of hedging (i.e.,

writer-oriented vs. reader-oriented) could be helpful for students to decide whether to withhold commitment in their claim or express their presence purposefully. Next, it is crucial for these writers to understand the importance of being more specific in choosing verb items and distinguishing between more objective, reliable sources of information and personal conjecture. Finally, based on the observation of common mistakes in using some of the expressions in this category, attention has to be given to the grammatical structures students have difficulty using such that they may use epistemic devices in a more refined way.

## **CHAPTER 5**

### **CONCLUSION**

This chapter summarizes the findings of the current study and pedagogical implications are discussed. Next, suggestions based on the limitations of the current study are provided.

#### **5.1 Summary of the Findings**

The present study sought to investigate Korean EFL high school graduates' hedging practice in their writings and how it was influenced by their proficiency levels. For this purpose, the use of epistemic devices and the aspect of writer-oriented syntactic hedging (Hyland, 1996c, 1998b) were examined in three corpora comprising writings by two different proficiency levels of Korean learners and a native speaker group. First, a total of 124 epistemic devices were analyzed across three different proficiency groups in terms of the overall frequency and the distribution by grammatical and semantic categories. Then, the most frequent devices in each grammar class were presented and examined for different hedging practices exhibited across the groups considering the context of use and their semantic categories. It was also expected that the semantic distribution of each grammar class was identified to examine its contribution to the overall semantic distribution. Following that, characteristics in the use of epistemic clusters were investigated. To examine their ability to combine multiple epistemic devices in a harmonious manner, Korean learners' texts were given greater focus with the NSs as a reference group. Lastly, construction of impersonal sentences commonly employed for the purpose of hedging (i.e., passive and depersonalized sentences) were collected and discussed for the syntactic aspect of hedging.

First of all, the overall distribution of epistemic devices indicated that Korean writers used fewer epistemic devices within a narrower range of diversity compared to the native speakers. However, higher proficiency level writers used more devices of a wider variety, which demonstrated the feasibility of developmental correspondence between general linguistic competence and the particular pragmatic competence.

Next, the distribution of epistemic devices by five grammar classes exhibited no significant difference in the order of preference across the groups. All three followed the order of modal verbs, lexical verbs, adverbials, nouns, and adjectives. Compared across the proficiency levels, more proficient writers were found to use fewer lexical verbs and more adverbials than less proficient writers. Modal verb uses appeared to increase slightly among the more proficient writers, but it was revealed not statistically significant.

On the other hand, the semantic distribution of epistemic commitments and the further investigation of the epistemic devices focused on Korean students' hedging practices exhibited clear distinct patterns across the proficiency groups. To begin with, lower proficiency writers employed the largest number of (high) certainty markers and least probability markers among the three proficiency groups as well as a smaller range of items, indicating the least active use of hedging devices or use of greater number of hedges with a lower degree of attenuation, creating assertive and forceful sounding texts. As the writers' proficiency increased, however, more probability markers and fewer certainty markers were used, and the discrepancy between the two markers became closer to an even distribution. Moreover, a wider range of items was used as the proficiency level increased. This was understood such that hedges of higher epistemic force decrease while hedges of lower epistemic force increase in the developmental process of the writer, ultimately balancing the quantity and variety of those as they approximate the native-like level.

In addition to the general tendency, several specifics were observed associated with Korean learners' hedging practices. First, Korean learners exhibited a contrasting usage pattern regarding *will* and *would* compared to the NS writers in the modal verb section. A likely implication was that Korean learners frequently misused *will* where *would* should be used. Second, when considering lexical verbs and adverbials, items such as *I think* and *maybe* were frequently observed, suggesting either conversational or low-proficiency tendencies of use. Related to the features of spoken register, they frequently revealed the overt presence of the writer through first person pronouns such as *I* and *my* in their hedging expression. The use of first person pronoun did not appear to be strategic or intentional and was rather counter-effective in terms of interpersonal aspect of writing. Next, Korean students often used patterned structures when they employed hedging expressions that included epistemic nouns. However, their use of these did not match the specific meaning of the epistemic devices when hedging the proposition that followed, such as presenting opinions as facts.

In contrast to the native speakers' epistemic clusters, which were modally harmonious and consistent even within a long sentence and across the clauses, Korean writers' epistemic devices tended to show redundancy or mismatches in terms of degrees of certainty, resulting in awkward sentences in which epistemic commitment was unclear. Also, Korean learners' unique hedging strategies were observed through common tendency of qualifying other opinion than their own, showing their perception that hedging is not for making argument strong and well-received ultimately, but assertive tone seemed to be the way to achieve the purpose.

Finally, while Korean writers employed impersonal constructions for (writer-oriented) hedging concerns, characteristics associated with lower proficiency language users were found in their writing. Such features as unspecific reference and reporting verbs that were

semantically mismatched with the following content indicated that their hedging resources were mostly structure-based chunks, not adequately accompanied with the meaning and function. Nevertheless, the intention and basic strategy of writer-oriented hedging seemed to be present.

## **5.2 Pedagogical Implications**

In order to assist L2 students in recognizing how to use hedging in writing, L2 writing instruction should consider including pragmatic aspects of the language, particularly for lower proficiency writing classes. One of the most prominent findings of the study was that lower proficiency learners tended to overuse expressions of a strong degree of certainty, resulting in assertive texts compared to the more proficient L2 writers and native English speakers. Although the reason for the preference of those expressions could be conscious choice in some cases, the frequency with which it occurred suggested that it is largely due to a lack of pragmatic awareness and insufficient general language competence. Alongside the development of basic linguistic capability, additional focus on a pragmatic understanding of language would enable them to present opinions at varying degrees of commitment more effectively.

To implement this pragmatic instruction, students must be taught an understanding of writing as an interactional discourse, and in that respect, learn how to moderate tone by using hedges actively in appropriate places to be received better by the audience. This is in keeping with suggestions made by previous studies that explicit instruction could be effective in improving students' pragmatic ability (Bardovi-Harlig, 1999; Wishnoff, 2000). They must

also be taught hedging devices of various degrees of epistemic commitment that can be used to attenuate their claims effectively without making them too uncertain. More specific means would include broadening the range of vocabulary items that can be used as hedges (i.e., epistemic devices). In addition, the epistemic function in context and the range of epistemic commitment included in each hedging item should be taught in tandem with the lexical meaning. The instruction can be accompanied by the other related issues found to be relevant in the use of hedging expressions, such as the use of spoken features in writing and the presence of the writer signaled by the first person pronoun. The importance of register differences and the strategic use of writer presence in the interaction with an expected reader can be provided from a pragmatic point of view rather than its usual portrayal as a decontextualized item in writing guidelines. Therefore, the instructional contents and focus currently included in writing classes should be supplemented by functional aspects of language. Having observed the relation between general language proficiency and the pragmatic aspect of hedging practice, appropriate instruction in hedging is expected to mutually benefit students in improving their general language competency as well.

When Korean students first arrive at university, many of them lack the ability to use hedging strategies in L2 writing. This can result in difficulties when they work on English writing as part of the course assignments. Having to distinguish factual information from the writers' own ideas and express their opinions in more nuanced ways in writing assignments presupposes this capability, yet, as the results of this study showed, many of the students lacked the necessary hedging ability to realize this. Regarding this common practice, earlier exposure to and instruction in the pragmatic notion and skills at the secondary level would help students avoid this potential difficulty. In addition, if they are properly equipped with this aspect of language by the time they reach university, their efforts could be put to more

productive use in developing the more advanced writing skills needed to excel. That is, they could advance other components of English writing or, better yet, focus on actual content learning that was originally designed for the course instead of struggling to develop pragmatic skills such as hedging needed to more appropriately express their ideas and perspectives.

### **5.3 Limitations and Suggestions**

There are several limitations to this study that need to be acknowledged along with related suggestions for future studies. First, dealing with corpus data, the result relied upon and was limited to the interpretation of the researcher due to the unavailability of the writers. The writer's perception of pragmatic aspects or motivation for using epistemic expressions would have made a helpful supplement in addition to the examination of the writing. Next, the writing environment was controlled by some factors such as time limits and no reference tools (e.g., dictionaries). It is speculated that in a different writing environment with more time and referential resources, writers could create more refined writing (i.e., essay assignment) in which aspects of hedging practice may reveal some differences from the result of the study.

## REFERENCES

- Abdi, R. (2002). Interpersonal metadiscourse: an indicator of interaction and identity. *Discourse Studies*, 4(2), 139-145.
- Ädel, A. (2006). *Metadiscourse in L1 and L2 English*. Amsterdam, Netherlands: John Benjamins.
- Aijmer, K. (1997). I think – An English modal particle. In T. Swan & O. J. Westvik (Eds.), *Modality in Germanic languages: Historical and comparative perspectives* (pp. 1-47). Berlin: Mouton de Gruyter.
- Aijmer, K. (2002). Modality in advanced Swedish learners' written interlanguage. In S. Granger, J. Hung, & S. Petch-Tyson (Eds.), *Computer learner corpora, second language acquisition and foreign language teaching* (pp. 55-76). Amsterdam, Netherlands: John Benjamins.
- Allison, D. (1995). Assertions and alternatives: Helping ESL undergraduates extend their choices in academic writing. *Journal of Second Language Writing*, 4(1), 1-15.
- Back, J. (2011). A corpus-based study of hedging in Korean EFL students' academic essays. *Studies in Modern Grammar*, 65, 279-307.
- Bardovi-Harlig, K. (1999). Exploring the interlanguage of interlanguage pragmatics: A research agenda for acquisitional pragmatics. *Language Learning*, 49(4), 677-713.
- Biber, D., & Finegan, E. (1989). Styles of stance in English: Lexical and grammatical marking of evidentiality and affect. *Text: Interdisciplinary Journal for the Study of Discourse*, 9(1), 93-124.
- Bloor, M., & Bloor, T. (1991). Cultural expectations and socio-pragmatic failure in academic writing. In P. Adams, B. Heaton, & P. Howarth (Eds.), *Socio-cultural issues in English*

- for academic purposes* (pp. 1-12). Basingstoke: Modern English Publications/British Council.
- Boyd, J., & Thorne, J.P. (1969). The semantics of modal verbs. *Journal of Linguistics*, 5(1), 57-74.
- Brown, P., & Levinson, S. (1987). *Politeness: Some universals in language usage*. Cambridge: Cambridge UP.
- Caffi, C. (1999). On mitigation, *Journal of Pragmatics*, 31(7), 881-909.
- Channell, J. (1994). *Vague Language*. Oxford: Oxford UP.
- Chen, H. (2010). Contrastive learner corpus analysis of epistemic modality and interlanguage pragmatic competence. *Arizona Working Papers in SLA & Teaching*, 17, 2-51.
- Chen, Z. (2012). Expression of epistemic stance in EFL Chinese university students' writing, *English Language Teaching*, 5(10), 173-179.
- Cheng, X., & Steffensen, M. (1996). Metadiscourse: A technique for improving student writing. *Research in the Teaching of English*, 30(2), 149-181.
- Choe, J-W., & Song, J-Y. (2013). The topical classification of essays by college student English learners using hierarchical clustering. *Language Information*, 17, 93-115.
- Choi, J. (2011). *A corpus-based analysis of modal verbs between high-school textbooks and English exam of college scholastic ability test (CSAT)*. Unpublished MA Thesis. Hankuk University of Foreign Studies, Seoul.
- Choi, Y. H. (1988). Text structure of Korean speakers' argumentative essays in English. *World Englishes*, 7(2), 129-142.
- Christie, F (1997). Curriculum macrogenres as forms of initiation into a culture, In F. Christie & J. R. Martin (Eds.), *Genre and Institutions: Social Processes in the Workplace and School* (pp. 134-160). London and New York: Continuum.

- Coates, J. (1983). *The semantics of the modal auxiliaries*. Beckenham: Croom Helm.
- Coates, J. (1987). Epistemic modality and spoken discourse. *Transactions of the Philological Society*, 85(1), 100-131.
- Coates, J. (1988). Gossip revisited: language in all-female groups. In J. Coates & D. Cameron (Eds.), *Women in their speech communities* (pp. 94-122). Harlow: Longman.
- Connor, U. (1996). *Contrastive rhetoric: Cross-cultural aspects of second language writing*. Cambridge UP, Cambridge, UK.
- Cornillie, B. (2009). Evidentiality and epistemic modality: On the close relationship between the two categories. *Functions of Language*, 16(1), 44-62.
- Crismore, A., & Farnsworth, R. (1989). Mr. Darwin and his readers: Exploring interpersonal metadiscourse as a dimension of ethos. *Rhetoric Review*, 8(1), 91-112.
- Crismore, A. (1989). *Talking with readers: Metadiscourse as rhetorical act*. New York: Peter Lang.
- Crismore, A., Markkanen, R., & Steffensen, M. (1993). Metadiscourse in persuasive writing: a study of texts written by American and Finnish university students. *Written Communication*, 10(1), 39-71.
- Crystal, D., & Davy, D. (1975). *Advanced conversational English*. London: Longman.
- Dahl, T. (2004). Textual metadiscourse in research articles: a marker of national culture or of academic discipline? *Journal of Pragmatics*, 36(10), 1807–1825.
- Flowerdew, L. (2000). Investigating referential and pragmatic errors in a learner corpus. In L. Burnard & T. McEnery (Eds.), *Rethinking language pedagogy from a corpus perspective* (pp. 145-154). Berlin: Peter Lang.
- Flowerdew, L. (2001). The exploitation of small learner corpora. In M. Ghadessy, A. Henry, & R. L. Roseberry (Eds.), *Small corpus studies and ELT* (pp. 363-380). Amsterdam and

- Philadelphia, PA: John Benjamins Publishing Company.
- Fraser, B. (1975). Hedged performatives. In P. Cole & J. L. Morgan (Eds.), *Syntax and Semantics*. Vol. 3. (pp. 187–210). New York: Academic Press.
- Fraser, B. (2010). Pragmatic competence: The case of hedging. In S. Schneider, W. Mihatsch, & G. Kaltenböck (Eds.), *New approaches to hedging* (pp. 15-34). Bingley, UK: Brill NV.
- Gillaerts, P., & Van de Velde, F. (2010). Interactional metadiscourse in research article abstracts. *Journal of English for Academic Purposes*, 9, 128–139.
- Greenbaum, S., & Quirk, R. (1990). *A student's grammar of the English language*. London: Longman.
- Halliday, M. (1994). *An introduction to functional grammar*. (2<sup>nd</sup> ed.) London: Edward Arnold.
- He, A. (1993). Exploring modality in institutional interactions: cases from academic counseling encounters. *Text*, 13(2), 503-528.
- Hermerèn, L. (1978). *On modality in English: A study of the semantics of the modals*. Lund: Gleerup.
- Hinds, J. (1983). Contrastive rhetoric: Japanese & English. *Text*, 3(2), 183-195.
- Hinkel, E. (2003). Adverbial markers and tone in L1 and L2 students' writing. *Journal of Pragmatics*, 35, 1049–1068.
- Hinkel, E. (2005). Hedging, inflating and persuading in L2 academic writing. *Applied Language Learning*, 15(1), 29-53.
- Holmes, J. (1982). Expressing doubt and certainty in English. *RELC Journal*, 13(2), 9-28.
- Holmes, J. (1983). Speaking English with the appropriate degree of conviction. In C. Brumfit (Ed.), *Learning and teaching languages for communication: Applied linguistics*

- perspectives* (pp. 100-121). London: British Association of Applied Linguistics.
- Holmes, J. (1984). Modifying illocutionary force. *Journal of Pragmatics*, 8, 345-365.
- Holmes, J. (1988). Doubt and certainty in ESL textbooks. *Applied Linguistics*, 9(1), 20-44.
- Holmes, J. (1990). Hedges and boosters in women's and men's speech. *Language and Communication*, 10(3), 185-205.
- House, J., & Kasper, G. (1981). Politeness markers in English and German. In F. Coulmas (Ed.), *Conversational routine* (pp. 157-185). The Hague: Mouton.
- Hoye, L. F. (1997). *Adverbs and modality in English*. London: Longman.
- Hu, C., & Li, X. (2015). Epistemic modality in the argumentative essays of Chinese EFL Learners. *English Language Teaching*, 8(6), 20-31.
- Hu, G., & Cao, F. (2011). Hedging and boosting in abstracts of applied linguistics articles: a comparative study of English- and Chinese-medium journals. *Journal of Pragmatics*, 43, 2795-2809.
- Hu, Z., Brown, D., & Brown, L. (1982). Some linguistic differences in the written English of Chinese and Australian students. *Language Learning and Communication*, 1, 39-49
- Hübler, A. (1983). *Understatement and hedges in English*. Amsterdam: John Benjamins.
- Hunston, S. (1994). Evaluation and organisation in a sample of academic written discourse. In M. Coulthard (Ed.), *Advances in written text analysis*. London: Routledge.
- Hunston, S., & Thompson, G. (Eds.). (2000). *Evaluation in text*. Oxford: Oxford University Press.
- Hyland, K. (1994). Hedging in academic writing and EAP textbooks. *English for Specific Purposes*, 13(3), 239-256.
- Hyland, K. (1996a). Nurturing hedges in the ESP curriculum. *System*, 24(4), 477-490.
- Hyland, K. (1996b). Talking to the academy: Forms of hedging in science research articles.

- Written Communication*, 13(2), 251-281.
- Hyland, K. (1996c). Writing without conviction? Hedging in science research articles. *Applied Linguistics*, 17(4), 433-454.
- Hyland, K. (1998a). Boosting, hedging and the negotiation of academic knowledge. *Texts*, 18(3), 349-382.
- Hyland, K. (1998b). *Hedging in scientific research articles*. John Benjamins, Amsterdam.
- Hyland, K. (1998c). Persuasion and context: The pragmatics of academic metadiscourse. *Journal of Pragmatics*, 30(4), 437-455.
- Hyland, K. (2000). Hedges, boosters and lexical invisibility: Noticing modifiers in academic texts. *Language Awareness*, 9(4), 179-197.
- Hyland, K. (2001). Humble servants of the discipline? Self-mention in research articles. *English for Specific Purposes*, 20(3), 207-226.
- Hyland, K. (2004). Disciplinary interactions: metadiscourse in L2 postgraduate writing. *Journal of Second Language Writing*, 13(2), 133-151.
- Hyland, K. (2005a). *Metadiscourse: Exploring interaction in writing*. New York: Bloomsbury Publishing.
- Hyland, K. (2005b). Prudence, precision, and politeness: Hedges in academic writing. *Quaderns de Filologia. Estudis Lingüístics*, X, 99-112.
- Hyland, K. (2005c). Stance and engagement: A model of interaction in academic discourse. *Discourse Studies*, 7(2), 173-192.
- Hyland, K., & Milton, J. (1997). Qualification and certainty in L1 and L2 students' writing. *Journal of Second Language Writing*, 6(2), 183-205.
- Hyland, K., & Tse, P. (2004). Metadiscourse in academic writing: A reappraisal. *Applied linguistics*, 25(2), 156-177.

- Hyland, K., & Tse, P., (2005). Hooking the reader: A corpus study of evaluative that in abstracts. *English for Specific Purposes*, 24(2), 123–139.
- Intaraprawat, P., & Steffensen, M. S. (1995). The use of metadiscourse in good and poor ESL essays. *Journal of Second Language Writing*, 4(3), 253-272.
- Ishikawa, S. (2013). The ICNALE and sophisticated contrastive interlanguage analysis of Asian Learners of English. In S. Ishikawa (Ed.), *Learner corpus studies in Asia and the world*, 1 (pp. 91-118). Kobe, Japan: Kobe University.
- Ishikawa, S. (2017). *The ICNALE Release Notes V2.0* [PDF document]. Retrieved from ICNALE Website: <http://language.sakura.ne.jp/icnale/download.html>
- Ishikawa, S. (2017). *The International Corpus Network of Asian Learners of English (Version 2.0)*, Kobe University. Retrieved from <http://language.sakura.ne.jp/icnale/download.html>
- Ivanič, R. (1998). *Writing and identity: The discursual construction of identity in academic writing*. Amsterdam: John Benjamins.
- Jacobson, S. (1964). *Adverbial positions in English*. Stockholm: Studentbok.
- Jacobson, S. (1975). *Factors influencing the placement of English adverbials in relation to auxiliaries*. Stockholm: Almqvist & Wiksell International.
- James, A. (1983) Compromisers in English: A cross-disciplinary approach to their interpersonal significance. *Journal of Pragmatics*, 7(2), 191-206.
- Johns, A. M. (1995). Teaching classroom and authentic genres: Initiating students into academic cultures and discourses. In D. Belcher & G. Braine (Eds.), *Academic writing in a second language: Essays on research and pedagogy* (pp. 277-293). Norwood, NJ: Ablex.
- Kaltenböck, G. (2005). Charting the boundaries of syntax: A taxonomy of spoken parenthetical

- clauses. *Vienna English Working Papers (VIEWS)*, 14(1), 21-53.
- Kärkkäinen, E. (2003). *Epistemic stance in English conversation. A description of its interactional functions, with a focus on I think*. Amsterdam. John Benjamins.
- Kim, C. H., & Suh, H. W. (2014). Epistemic rhetorical stance: Hedges and boosters in L1 and L2 students' English writing. *The Linguistic Association of Korea Journal*, 22(2), 61-93.
- Kim, H. S. (2011). Epistemic modality in computer-mediated communication. *The Journal of Studies in Language*, 27(1), 71-97.
- Kim, J. W. (1999). Rhetorical functions of metadiscourse in EFL writing. *English Teaching*, 54(4), 3-25.
- Klinge, A. (1993). The English modal auxiliaries: Form lexical semantics to utterance interpretation. *Journal of Linguistics*, 29(2), 315-357.
- Kuo, C. H. (1999). The use of personal pronouns: Role relationships in scientific journal articles. *English for Specific Purposes*, 18(2), 121- 138.
- Lakoff, G. (1972). Hedges: A study in meaning criteria and the logic of fuzzy concepts. *Chicago Linguistic Society Papers*, 8, 183-228.
- Lee, J. J., & Deakin, L. (2016). Interactions in L1 and L2 undergraduate student writing: Interactional metadiscourse in successful and less-successful argumentative essays. *Journal of Second Language Writing*, 33, 21–34.
- Leech, G., & Svartvik, J. (1983). *A communicative grammar of English*. London: Longman.
- Lindeberg, A. C. (2004). *Promotion and politeness: Conflicting scholarly rhetoric in three disciplines*. Åbo, Finland: Åbo Akademi University Press.
- Long, M., & Xu, J. (2010). A contrastive study on epistemic markers in university students' Chinese and English argumentative essays of the same topic. *Foreign Language and Foreign Language Teaching*, 252(3), 21-24.

- Lyons, J. (1977). *Semantics*. London, UK: Cambridge UP.
- Markkanen, R., & Schröder, H. (1989). Hedging as a translation problem in scientific texts. In C. Lauren & M. Nordman (Eds.), *Special language: From humans thinking to thinking machines* (pp. 171-79). Clevedon: Multilingual Matters.
- Markkanen, R., & Schröder, H. (1997). Hedging: A challenge for pragmatics and discourse analysis. In R. Markkanen & H. Schröder (Eds.), *Hedging and discourse: Approaches to the analysis of a pragmatic phenomenon in academic texts* (pp. 3-18). Berlin, Germany: Werner Hildebrand.
- Martin, J. R. (2000). Beyond exchange: Appraisal systems in English. In S. Hunston & G. Thompson (Eds.), *Evaluation in Text* (pp. 142-175). Oxford: Oxford UP.
- Martin, J. R., & Rose, D. (2003). *Working with discourse: Beyond the clause*. London: Continuum.
- Martin, J. R., & White, P. R. R. (2005). *The language of evaluation, appraisal in English*. London and New York: Palgrave Macmillan.
- Mauranen, A. (1993). Contrastive ESP rhetoric: Metatext in Finnish-English economics texts. *English for Specific Purposes*, 12(1), 3-22.
- McEnery, T., & Kifle, N. (2002). Epistemic modality in argumentative essays of second-language writers. In J. Flowerdew (Ed.), *Academic discourse* (pp. 182-195). London, UK: Longman.
- Millán, E. L. (2008). Epistemic and approximative meaning revisited: The use of hedges boosters and approximators when writing research in different disciplines. In S. Burgess & P. Martín-Martín (Eds.), *English as an Additional Language in Research Publication and Communication* (pp. 65–82). Bern, Germany: Peter Lang.
- Milton, J., & Hyland, K. (1999). Assertions in students' academic essays: A comparison of

- English NS and NNS student writers. In R. Berry, B. Asker, K. Hyland, & M. Lam (Eds.), *Language analysis, description, and pedagogy* (pp. 147-161). Hong Kong: Language Centre, Hong Kong University of Science and Technology.
- Myers, G. (1989). The pragmatics of politeness in scientific articles. *Applied Linguistics*, 10(1), 1-35.
- National Curriculum Information Center. (2017, December 5). Yeongeogwa gyoyookgwajeong. [Curriculum of English subject]. *Korean Ministry of Education*. Retrieved from <http://www.ncic.go.kr/mobile.dwn.ogf.inventoryList.do#>
- Nuyts, J. (2001). *Epistemic modality, language, and conceptualization: A cognitive pragmatic perspective*. Amsterdam: John Benjamins.
- Oh, S. Y. (2007). A corpus-based study of epistemic modality in Korean college students' writings in English. *English Teaching*, 62(2), 147-175.
- Oh, S. Y., & Kang, S. J. (2013). The effect of English proficiency on Korean undergraduates' expression of epistemic modality in English argumentative writing. *The Journal of Asia TEFL*, 10(4), 97-132.
- Palmer, F. (1986). *Mood and modality*. Cambridge: CUP.
- Palmer, F. (1990). *Modality and the English modals* (2nd Ed.) London: Longman.
- Perkins, M. (1983). *Modal expressions in English*. London, UK: Frances Pinter.
- Pic, E., & Furmaniak, G. (2012). A study of epistemic modality in academic and popularised discourse: The case of possibility adverbs perhaps, maybe and possibly. *Revista de Lenguas para Fines Específicos*, 18, 13-44.
- Portner, P. (2009). *Modality*. Oxford: Oxford UP.
- Prince, E., Frader, J., & Bosk, C. (1982). On hedging in physician-physician discourse. In R. J. Di Pietro (Ed.), *Linguistics and the professions: Proceedings of the second annual*

- Delaware symposium on language studies* (pp. 83–97). Norwood, NJ: Ablex.
- Quirk, R., Greenbaum, S., Leech, G., & Svartvik, J. (1972). *A grammar of contemporary English*. Harlow, Essex: Longman.
- Quirk, R., Greenbaum, S., Leech, G., & Svartvik, J. (1985). *A comprehensive grammar of the English language*. London: Longman.
- Rhee, S., & Jung, C. (2012). *Yonsei English Learner Corpus (YELC)*, Yonsei University.
- Rhee, S., & Jung, C. (2014). Compilation of the Yonsei English learner corpus (YELC) 2011 and its use for understanding current usage of English by Korean pre-university students. *The Journal of the Korea Contents Association*, 14(1), 1019-1029.
- Rizomilioti, V. (2006). Exploring epistemic modality in academic discourse using corpora. *Information Technology in Languages for Specific Purposes*, 7, 53-71.
- Rounds, P. (1982). *Hedging in written academic discourse: Precision and flexibility*. University of Michigan. Mimeo.
- Salager-Meyer, F. (1994). Hedges and textual communicative function in medical English written discourse. *English for Specific Purposes*, 13(2), 149-170.
- Salazar, D., & Verdaguer, I. (2009). Polysemous verbs and modality in native and non-native argumentative writing: A corpus-based study. *International Journal of English Studies: Special Issue*, 209-219.
- Scarcella, R., & Brunak, R. (1981). On speaking politely in a second language. *International Journal of the Sociology of Language*, 27, 59-75.
- Schneider, S. (2007). *Reduced parenthetical clauses as mitigators: A corpus study of spoken French, Italian and Spanish*. Amsterdam/Philadelphia: John Benjamins.
- Scott, M. (2017). WordSmith Tools (Version 7.0) [Software]. Available from <http://www.lexically.net/wordsmith/>

- Shaw, P., & Liu, E. (1998). What develops in the development of second-language writing? *Applied Linguistics*, 19(2), 225-254.
- Skelton, J. (1988). The care and maintenance of hedges. *ELT Journal*, 41(1), 37-43.
- Stubbs, M. (1986). A matter of prolonged fieldwork: Notes towards a modal grammar of English. *Applied Linguistics*, 7(1), 1 -25.
- Swales, J. M., Ahmad, U. K., Chang, Y. Y., Chavez, D., Dressen, D. F., & Seymour, R. (1998). Consider this: The role of imperatives in scholarly writing. *Applied Linguistics*, 19(1), 97-121.
- Tang, R., & John, S. (1999). The 'I' in identity: Exploring writer identity in student academic writing through the first person pronoun. *English for Specific Purposes*, 18, S23-S39.
- Uhm, C. J., Kim, J. A., Nam, H. E., & Oh, Y. N. (2009). A comparative analysis of metadiscourse use between native English writers (L1) and Korean English writers (L2) in academic writing. *Discourse and Cognition*. 16(2), 63-90.
- Vande Kopple, W. J. (1985). Some exploratory discourse on metadiscourse. *College, Composition and Communication*, 36(1), 82-93.
- Vassileva, I. (2001). Commitment and detachment in English and Bulgarian academic writing. *English for Specific Purposes*, 20(1), 83-102.
- Vold, E.T. (2006). The choice and use of epistemic modality markers in linguistics and medical research articles. In K. Hyland & M. Bondi (Eds.), *Academic discourse across disciplines* (pp. 225-249). Bern: Peter Lang.
- White, P. R. R. (2003). Beyond modality and hedging: A dialogic view of the language of intersubjective stance. *Text*, 23(2), 259-284.
- Wishnoff, J. R. (2000). Hedging your bets: L2 learners' acquisition of pragmatic device in academic writing and computer-mediated discourse. *Second Language Studies*, 19(1),

119-148.

Wu, S. M. (2006). Creating a contrastive rhetorical stance: Investigating the strategy of problematization in students' argumentation. *RELC Journal*, 37(3), 329–353.

Yang, Y. (2013). Exploring linguistic and cultural variations in the use of hedges in English and Chinese scientific discourse. *Journal of Pragmatics*, 50(1), 23-36.

Zuck, J. G., & Zuck, L. V. (1986). Hedging in news writing. In A. M. Cornu, J. Van Parjis, M. Delahaye, & L. Baten (Eds.), *Beads or bracelets? How do we approach LSP, Selected papers from the fifth European symposium on LSP* (pp. 172-180). Oxford: OUP.

## APPENDIX

### Epistemic Devices Investigated

Grammar Class	Epistemic Devices	Grammar Class	Epistemic Devices
<b>Modal Verbs</b>	could may might must should will would	<b>Adverbials</b>	a certain extent about actually almost always apparently approximately around certainly clearly commonly definitely essentially evidently fairly frequently from my perspective from our perspective from this perspective generally in fact in general in most cases in most instances in my opinion in my view in our opinion in our view in reality in theory in this view
<b>Lexical Verbs</b>	appear argue assume believe claim (v) consider doubt (v) estimate (v) expect feel guess hope imagine indicate know predict presume propose seem speculate suggest suppose tend think		

<b>Grammar Class</b>	<b>Epistemic Devices</b>	<b>Grammar Class</b>	<b>Epistemic Devices</b>
<b>Adverbials</b>	indeed inevitably likely maybe naturally (not) necessarily never normally (not) always obviously of course often perhaps plainly possibly presumably probably quite rarely rather X relatively roughly slightly sometimes somewhat surely undoubtedly usually largely	<b>Nouns</b>	certainty chance claim (n) danger doubt (n) estimate (n) evidence explanation fact hope (n) idea no doubt opinion possibility tendency theory view
		<b>Adjectives</b>	apparent certain clear doubtless evident inevitable likely obvious plain possible probable sure uncertain(not certain) unlikely
<b>Nouns</b>	assumption belief		

## 국 문 초 록

영어 글쓰기 연구의 초점이 언어적 범위에서 보다 화용론적 관점으로 확대됨에 따라, 작가가 자신의 논증에 대한 태도를 표현하는 방법이 주목을 받게 되었다. 인식 서법성(epistemic modality)을 언어적으로 구현하는 방법인 유보 표현(hedging, 留保 表現)은 주장의 강도를 완화시키고, 필자의 의견에 타협의 여지가 있음을 알림으로써 독자의 존재를 인지하는 기능을 한다. 이와 같이 문어 담화(written discourse) 내의 상호작용에 관여하는 중요한 기능으로 인해 유보 표현은 다양한 분야와 주제로 연구되어 왔다. 그러나, 유보 표현에 대한 연구는 주로 보다 높은 수준의 학술 글쓰기를 대상으로 이루어졌기 때문에 고등학교 졸업생(대학교 예비 입학생)들의 글쓰기에 나타난 유보 표현의 양상에 대한 연구는 그 수가 많지 않다. 이에, 본 연구는 한국 고등학교 졸업 영어 학습자들의 유보 표현 사용을 어휘 단위 유보어(lexical hedges)와 유보 표현의 전략으로서 사용되는, 작가의 존재를 드러내지 않는 문장 구조(impersonal sentences)의 사용이라는 두 측면에서 살펴보고자 했다.

이 연구에서의 유보 표현을 나타내는 장치의 조사는 인식 서법을 표현하는 장치(epistemic device)를 기반으로 했다. 어휘 단위 유보어를 조사하기 위해, 수준별 두 집단의 한국 학생들과 한 개의 원어민 집단의 총 세 집단에 의해 작성된 짧은 학술 논설문 말뭉치가 준비되었다. 콩코던스 프로그램(concordance program)을 사용하여 인식 서법을 표현하는 어휘들이 검색되었고, 수집된 자료는 각기 다섯개의 문법 범주와 인식 서법성에 관련된 다섯 가지 의미적 범주로 구분되었다. 먼저 이 장치들이 잠재적 유보 표현 장치라는 전제로, 세 집단에서의 사용 양상에 나타나는 차이를 알아보기 위해 전체 장치의 빈도와 분포, 문법 범주 별로 구분된 분포, 의미 범주 별로 구분된 분포를 비교하였다. 다

음으로 각 문법 범주에서 가장 사용 빈도가 높은 항목들을 조사하였다. 그 중 집단 별로 가장 큰 사용 양상에 있어서의 차이를 보인 항목들은 문맥 내에서 어떤 특징을 보이는지를 알아보았다. 마지막으로, 문장 단위에 나타난 유보 표현을 알아보기 위한 방법으로, 두 개 이상의 인식 서법을 표현하는 어휘 간 조화도의 지표가 될 수 있는 인식 서법 표현 장치 군(群, epistemic clusters)과 필자의 존재를 의도적으로 숨기는 비인칭 문장구조 (impersonal sentences)의 사용이 조사되었다.

본 연구의 결과는 전반적 언어 숙련도와 유보 표현에 관련된 화용적 능력이 상응한다는 사실과 더불어 한국 학생들의 글에 특징적으로 나타나는 유보 표현의 사용 양상을 보여주었다. 먼저, 영어 원어민들은 보다 완화된 정도의 확신을 표현하는 유보어를 썼을 뿐 아니라 이를 위해 사용하는 어휘의 범위가 넓고 다양했다. 반면, 한국인 학습자들은 강한 확신을 나타내는 표현을 사용했는데, 이는 언어 숙련도가 낮은 집단에서 더 두드러졌다.

한국인 학습자의 글에 나타난 위와 같은 경향은 몇 가지 다른 특징을 수반했다. 첫째, 특정 오사용(misuse)으로 인해, 완화된 표현 대신 더 강한 확신의 표현을 사용하게 되는 결과가 관찰되었다. 다음으로, 한국인 학습자들이 주로 쓰는 유보 표현에는 비격식적인 구어체와 필자의 존재를 명시적으로 나타내는 1인칭 대명사가 다수 동반되어 나타났다. 세번째, 유보 표현을 위한 구문(patterned expression)을 사용하는 과정에서 그 구문에 포함된 구체적 의미가 필자가 사용한 명제와 내용적으로 맞지 않는 경우가 많았다. 마지막으로, 필자의 주장이 아닌 반대편 의견에 유보 표현을 사용함으로써 유보 표현이 논증에 가져올 수 있는 장점을 활용하지 못하는 모습을 보였는데, 이를 통해 학습자들에게 상호작용적 측면에서의 유보 표현의 기능을 가르쳐야 할 필요성이 드러났다.

한국 학생들이 대학에 처음 입학할 하게 되면 필수 과정으로서 영어 수업과 영

어 글쓰기 과제에 직면하게 된다. 안타깝게도, 영어 글쓰기 경험의 부재와 유보 표현에 대한 이해 부족으로 인해, 많은 학생들은 자신의 논증을 의도하고자 하는 정도의 확신성으로 표현하는데 어려움을 겪게 된다. 이런 취지에서, 일찍이 중등 교육 단계에서 유보 표현과 관련된 화용론적 개념을 소개하고 그 기본적 기량을 가르침으로써 학생들이 본격적인 영어 글쓰기를 해야 하는 시점에 보다 준비될 수 있도록 현재의 교육 과정과 내용을 보충하는 것이 고려되어야 할 것이다.

주요어: 유보 표현, 유보어, 인식 서법성, 영어 글쓰기, 고등학교 졸업 영어 학습자

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