THE USE OF HEDGING DEVICES IN MALAYSIAN DOCTORAL CANDIDATURE DEFENSE SESSIONS

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ABSTRACT

The use of *hedging* in Malaysian spoken academic discourse works to mitigate the force of the argument made by the speaker in that context. *Hedging* can be generally focused on mitigating the specific content of the argument or the more interpersonal nature of communication in various contexts. The goal of the present research was to understand *hedging* specifically in the genre of doctorate oral defense in the Malaysian context. The study began by addressing the numerical incidence of *hedging* in Malaysian defense by comparing the incidence of *hedging* in the Malaysian context with data taken from oral defenses in the American context. Taking the frequency of *hedging* forms and functions in both contexts provides a foundation for understanding the nature of *hedging* use in Malaysian doctorate defense and also gives a platform for the rest of the study. The next portion of the present research took the observations seen about *hedging* in the Malaysian context and put them in terms of the culture surrounding the defense. Culture is a broad term and when it is applied to second language users of English, as in the Malaysian defense, it is generally boiled down to national linguistic culture. This goal of this study, however, was to look more holistically, and at a greater depth, regarding the various levels of culture that may influence and shape the numerical and qualitative observations made about *hedging* in Malaysian academic discourse. The study found that national culture and the dynamic between L1/L2 influenced the variety of hedges chosen in Malaysian PhD oral defense. It was also found that power distance in the educational culture surrounding the defense had an effect on the interpersonal *hedging* used by Malaysian speakers and also the gap in *hedging* use between panel members and candidates. The last finding of the study was that disciplinary culture was observed to influence *hedging* specifically in referencing other work and testing theory to build an argument.

ABSTRAK

Penggunaan *hedging* dalam wacana pertuturan akademik di Malaysia berfungsi untuk mengurangkan kekuatan hujah yang dibuat oleh penutur. *Hedging* secara amnya membantu kepada mengurangkan hujah kandungan tertentu atau komunikasi bersifat interpersonal dalam pelbagai konteks. Matlamat kajian ini adalah untuk memahami perlindungan nilai khususnya dalam genre pertahanan lisan di peringkat doktor falsafah di Malaysia. Kajian ini bermula dengan mendapatkan kekerapan penggunaan *hedging* dalam pertahanan lisan di peringkat doktor falsafah Malaysia dan membandingkan dengan kekerapan insiden hedging dalam konteks Amerika. Mengambil kekerapan penggunaan hedging dan fungsi dalam kedua-dua konteks ini dapat memberikan asas untuk memahami sifat *hedging* dalam pertahanan dalam pertahanan lisan peringkat doktor falsafah Malaysia dan juga memberikan platform bagi perjalanan kajian ini. Seterusnya, pemerhatian mengenai penggunaan hedging dalam konteks Malaysia ini dilihat dari segi budaya di sekitarnya. Budaya adalah satu istilah yang luas dan apabila ia digunakan untuk pengguna bahasa kedua bahasa Inggeris, secara umumnya dirujuk kepada budaya linguistik negara. Bagaimanapun, matlamat kajian ini, adalah lebih holistik di mana penggunaan hedging ini boleh dipengaruhi oleh pelbagai tahap budaya di sekeliling wacana akademik Malaysia. Kajian ini mendapati bahawa budaya kebangsaan dan dinamik di antara L1 / L2 mempengaruhi penggunaan hedging dipilih dalam pembelaan lisan PhD Malaysia. Ia juga mendapati bahawa jarak kuasa dalam budaya pendidikan di sekitar pembelaan mempunyai kesan ke atas penggunaan hedging yang digunakan oleh orang Malaysia dan juga jurang dalam lindung nilai digunakan antara ahli panel dan calon-calon. Penemuan terakhir kajian ini adalah bahawa disiplin juga mempengaruhi perlindungan nilai terutamanya apabila merujuk kepada kajian lain serta menguji teori untuk menguatkan hujah.

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MICASE = Michigan Corpus of Academic Spoken English

MCD = Corpus of Malaysian PhD Candidature Defense

Antconc = Corpus Analysis Tool used to find incidence of hedging

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CHAPTER ONE

INTRODUCTION

1.0 Introduction

The main aim of the present study is to build knowledge and understanding regarding the linguistic use of hedging by Malaysian speakers of English in academic spoken discourse and, more specifically, doctorate students presenting their thesis in candidature defense sessions. It looks not only to describe the specific nature of spoken academic hedging in Malaysia but to make inroads into identifying cultural factors that shape the way this hedging takes place. The present chapter will introduce the study by describing the research problem, objectives, and questions. It will also look to describe the scope and limitations of the study before concluding with the overall structure of the thesis.

1.1 Background of the Study

An understanding of how and why Malaysians hedge in the academic spoken arena must begin most basically with a picture of what hedging actually is. Lakoff (1972) drew a comprehensive connection between hedging and fuzzy logic. His work was to show how hedging can work to make things more ambiguous in order to protect the author or speaker when their claim may not be totally correct or reliable. In other cases, hedging may be used to make things less ambiguous when the author or speaker needs to specify and create room for their claims to be accepted. Others like Crompton (1997) also describe how difficult it can be to nail down the functions and forms of what hedges are. He points out that hedging can be difficult to mark out because the forms of hedging may not always act as hedges. For example, the word "may". When it is used in the context of casting a sense of doubt or questionability, it is a hedge. However, it might also be used to

provide acceptance or allowance (e.g. "you may leave from the table") in which case it is not a hedge. In that way the same lexical word can be a hedge or not a hedge depending on the context.

One of the most comprehensive works on hedging was conducted by Hyland (1996,1998) and more clearly breaks down what hedging is and the forms and functions that hedging takes on. His framework is used in the present study above other works on hedging for a few reasons. First, Hyland's work is most closely related to academic discourse. A lot of work on hedging has been done in the business context or in more casual interpersonal settings but Hyland was one of the first to look at hedging use more directly in the academic sphere. His framework also provides one of the most detailed and extensive outlines of the specific forms and functions that hedging can take. As the present study needed this specificity in order to conduct a corpus based case study, Hyland's work filled those gaps. So according to Hyland, hedging is the lexical or grammatical strategy employed by the author to withhold complete commitment to a statement or claim. This strategy employs multiple forms but all of these forms can only be considered hedges when they take on their epistemic function. There are two basic ways that hedging can accomplish the goal of separation. First, by directly addressing the claim itself regarding the specific nature of its attributes or its overall reliability. Secondly, hedging can withhold the author or speaker's full commitment in a more interpersonal way by either looking to directly involve the listener or reader or by diminishing the actual presence of the author or speaker regarding the claim.

Past studies have found that in other cultures the use of hedging in English is much less utilized than by native speakers of English (Dahl 2004; Hu & Cao 2011; Yang & Hinkel 2005; Vassileva 2001). Interestingly, there are several studies showing that the use of hedging in non-English speaking cultures is not only lower when individuals use English but also when they use their mother tongue (Vassileva, 2001; Hu & Cao, 2011). So it stands to reason that there are deeper,

more cultural factors influencing non-native speaker's use of hedging when they use the English language. As the present study was conducted in Malaysia, it looks to address this reality to see what those differences may be specifically for Malaysian users of English.

Hyland (1996,1998) makes the point that hedging never happens in a vacuum but that language is always used in a specific context and thus it is shaped to fit that context. So, to understand the use of hedging in Malaysia, it is imperative to understand the Malaysian context and how hedging fits into it. It is at this juncture where the notion of culture fits in. Atkinson (2004) points out that in the structuration model of culture, the activities by individuals within a context for example language use, are influenced by the social norms and values in the society around the individual. So in Malaysia, the use of hedging is influenced by the cultural values surrounding those individuals who hedge. The question becomes how is culture working on those individuals and how can we even begin to understand how it works. Holliday (1999) continues to help us think about culture differently- by showing that when we usually think of culture, we think of large culture or the national or ethnic level of culture. He argues that there are smaller cultural contexts at work in the lives of individuals within a society and so if we ignore how things like university culture, disciplinary culture, or faculty culture work, than we are taking too simplistic a view of hedging in Malaysian academic speech. So the present study looks to incorporate an understanding of these small cultures to inform what may be influencing the way that individuals hedge based on how those cultures inform them.

Within the idea of culture, exists the theory that within a culture or a discourse community lies a specific set of goals. This theory was proposed by Swales (1990) who argued that these communities needed to have a specialized way of using language in order to achieve the goals that they have set. This is where his theory about genre is pertinent to the present study. Swales calls

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genre a class of communicative events that have specific purposes that fit within the discourse community's constraints to reach their goals. So for the present study we need to look at candidature defense as a genre with specific goals and specifications. The use of language within the defense, and thus hedging in the defense, can only be fully understood when we understand how it fits into the bigger picture of why hedging is being employed.

1.2 Statement of the Problem

The present study attempts to answer a question about why Malaysians use language the way they do. One of the most interesting things about language is how individuals use it in the context of community and the larger society they are in. As a native of the western world, I use language specific to my culture that makes sense and communicates according to the norms and values within my society. However, what happens in other societies? How are norms and values in those cultures shaping the way they use language? Is it the same? Is it completely different? One such value that I have come to appreciate about living in Malaysia is the extremely strong group orientation that exists here. It was hard to miss coming from a very individualistic culture where community is important but not necessarily intrinsic to every aspect of life. As I continued to observe the power of community, I began to wonder how language is used in such a group oriented society. What characterizes language use here that makes it work in community especially in contexts where there are opportunities for conflicting ideas and claims?

Hedging entered the conversation here as it is a linguistic strategy used to diminish commitment to an idea or claim. A study on hedging seemed to provide an opportunity to look at interpersonal language and how it worked to maintain or develop relationships while at the same time

maintaining one's credibility. Several observations of strong community ties in Malaysian culture led me to come in asking if this group orientation would necessitate more hedging for the sake of relationships and identity within the group. As a student and prospective educator, the most suitable research environment would be the academic world. A more personal reason also contributed to the decision to choose the current research context for the study. As a Masters candidate myself, who, upon completion, gaining a deep knowledge of the structure of PhD theses is invaluable. This will allow me to explain with more confidence and knowledge what a thesis needs.

The issue of looking at culture is vast in that the word "culture" is so vague and has a plethora of connotations and meanings. However, Atkinson (2004) makes the point that often the term culture is boiled down to a national or national linguistic definition. He argues that an analysis based on this study of "big culture" is oversimplified and misses the smaller aspects of culture that play a role in how people act and think within a society. This means that an analysis of culture influencing language should not be based solely on the national language culture used by the individual but should also take into account the other cultural factors influencing the language used. The work done on hedging up to this point has largely focused on the how the individual's national language coincides with how they are using hedging but is starting to take into account some other factors that may influence hedging like discipline or discourse used (Yang (2013), Vassileva (2001), Varttala (1998), Farr and O'keefe (2002), Itakura (2013), Hu and Cao (2011), Biber (2006), Hyland (1996)) Most of these studies take into account one or maybe two levels of culture that may be influencing hedging. By doing this, there is not really a holistic picture of the relationship between the various cultural influences at work. The present study is looking to fill this gap by attempting to take a panoramic view of the multiple cultural influences at work in the use of

hedging in doctorate defense. This may lead to a greater theoretical understanding of how culture and language work together and perhaps a better picture of what cultural factors may be having a greater influence on the use of hedging in Malaysia. Another aim of the present study is to understand more about what is actually shaping the experience and performance of candidates in doctorate defense and this draws a line to postgraduate pedagogy. Some of the influences for these candidates, if understood, may be addressed in such a way as to support future candidates making them more successful in their oral defense of the research they have done.

1.3 Research Objectives

There are two main objectives of the present study. The first objective is to determine the specific nature of how Malaysians hedge in academic spoken discourse. To meet this objective, the study began by seeking how much they hedge. Then, incidence of hedging in the Malaysian context was looked at. In order to have a measuring line, the Malaysian data was compared with similar data taken from the US context. The forms and functions employed by Malaysians in hedging was then analysed. Again, this was done comparatively against data taken from the same context in the United States in order to get a more comprehensive picture. The second objective of the current study is to bring Malaysian use of hedging to light in view of the various cultural influences that exist surrounding the oral defense of a doctorate thesis.

1.4 Research Questions

To address these objectives, the following research questions were devised:

1. How can the use of hedging, specifically in Malaysian academic spoken discourse be described?

    a. What are the forms and functions of hedging used in Malaysian doctoral defense?

2. Can the functions and forms of hedging, be viewed from the multi-layered cultural perspective? If yes, how do these perspectives shape and influence the use of hedging?

1.5 Significance of the Study

The present study has great significance in that it fills a major gap in the current research surrounding hedging in academic discourse. It looks at hedging in spoken academic discourse versus other written registers within academic discourse such as abstracts or research articles. This study also brings the scope in to understand more about the institutional academic community in Malaysia and how it's commonly held values and expectations may be shaping the way that its members use language to present the ideas that they have. Theoretically speaking, the present study has implications for the connection between language and culture. Pedagogically, the present study provides a basis to think about how language is being shaped by the institutional education culture and how this may have implications on how its members interact and communicate with each other.

1.6 Scope of the Study

The present study lies within a certain scope of research. It looks at hedging in spoken academic discourse so does not include academic writing. More specifically, the present study is looking at spoken discourse in the context of doctorate candidature defense. The present research on hedging is looking specifically at defenses in the social sciences and sciences.

1.7 Limitations of the Study

Candidature defense is a more intense experience for both candidates and the panelists. As a result, some do not feel comfortable making their defense available for research. As the present study looked to take data from doctorate candidature defense presentations, it became difficult to achieve the consent needed from both faculties and candidates themselves to get a large amount of data. Because the data is not very extensive, the present study cannot claim to make any generalizable statements about the overall use of hedging in Malaysia. However, it is a good theoretical step to what can be done in this area of study. Another challenge for the study was getting interviews from faculty members in multiple faculties and disciplines. Because it was hard to get data from a wider variety of disciplines, the data does not reflect the whole spectrum of academic discourse. For instance, it was difficult to record an interview from a faculty member in the natural science. So, that perspective of the candidature defense and what I mean and should look like is not totally reflected in the study's analysis.

1.8 Organization of the thesis

Chapter One sets out various aspects of the research purpose of the study.

The introduction of this research in Chapter One is followed by a review of literature in Chapter Two. The literature review specifically discusses several issues pertaining to the study including the concept of hedging, a conceptualization of genre theory and the cultural paradigms surrounding hedging.

Chapter Three outlines the methodology of the present research and discuss how the study looks to accomplish the research goals. Besides the necessary explication of the overall research design, the instruments used and the ethical issues, descriptions of the nature of context as well as the

corpus selected will be presented. Next, the research procedure will be detailed step-by-step and explained.

Chapter Four presents the coding protocol and its criteria in more detail to provide greater transparency.

Chapter 5 reports the findings made in the research.

Chapter Six discusses the various sets of findings gathered via detailed analysis of the corpus of texts. The results are then viewed from the perspectives of the socio-cultural and academic contexts. The two analytical procedures that facilitated the examination of data will be discussed.

Chapter Seven concludes and summarises the thesis by first iterating the major findings of this study and then presenting its theoretical and pedagogical contributions. This chapter ends by providing some suggestions for further research and personal remarks on the use of hedging by NNES.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter will look to build a foundation for the study by establishing a link between previous research done in the field and the present study. The overall argument is that the use of hedging in Malaysian spoken academic discourse is unique and distinct due to the cultural influences that work to shape the language used specifically in doctorate candidature defense. This argument is going to be developed over multiple stages. The first of these stages is to discuss the notions of genre theory and how they are relevant to the present research. It must be considered that doctorate candidature defense has specific communicative goals and expectations. The expectations formed by these goals are applied to all involved, both the candidates and the panelists. So, in order to understand hedging use in candidature defense, there is a need to understand what it is trying to accomplish. Once the genre of candidature defense is ascertained, we need to establish what hedging actually is. It is important to know how and why hedging is used to understand the intricacies of how Malaysians employ it.

The discussion will continue with a look at the theoretical relevance of contrastive rhetoric to the present research. This perspective may show how the comparing of language use between different groups of language users builds our understanding and conceptualization of how each group thinks about and employs language. With the purpose to accomplish this goal, the present study compares hedging use in the Anglo- American context with that of Malaysian context to build our understanding of how Malaysians hedge in spoken academic discourse. The foundation building for the present study will continue with a look at the ideas and theory surrounding culture. It is of great importance to have a full understanding of what culture is, what culture does, and how culture effects language in appreciate how it shapes the use of hedging in Malaysia. This study will look not only at national linguistic culture but also at disciplinary culture and institutional culture to get a holistic look at how culture influences hedging in Malaysian spoken academic discourse. The final work on the foundation for the study will be to look at those studies that have gone before and paved the way for this research and what the present study can take from them to build a comprehensive work.

2.1   Theoretical and Research Perspectives

2.1.1   Genre Theory

In order to understand the language used in the doctorate oral defense, it is important to think of the defense as a genre. With the theory surrounding genre there are really three different schools of thought on the topic of genre. One school of thought is the ESP thinking of genre. The large proponent of this way of genre thinking is of Swales (1990; p.58) who defines genre to be "a class of communicative events" that have the same set of purposes and that those purposes are met

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within its own constraints. This perspective on genre has continued to develop and Swales (2004) has begun to describe genre in terms of metaphorical means that can be used to understand the nature of how genres work. For example, Fishelov (1993) describes metaphors like institutions such as those existing within a university to explain the concept of genre. This perspective urges us to continue to be willing to push the boundaries on new genres and to think about genre in a more nuanced and dynamic way. Martin (1984) represents a different school of thought in systemic functional linguistics. His perspective about genre is that it is a "staged, goal oriented, purposeful social activity" (25). Lastly we have the new rhetoric school of thought where genre is a situational event where motivation comes purely from the surrounding context (Miller 1984). From these different schools of thought there are a few takeaways that can be gleaned about genre across the board. First, it is important to realize that communicative events do not take place in a vacuum. They are not random but are effected by the outside sources that are around them and by the individuals that use them. It also must be understood that within that context language is working to meet that context's goals or expectations. Thus in order to really understand the language use, we must understand what it is trying to achieve. Part of this understanding comes from the realization that genre is socially motivated and oriented. If we desire to understand what language is trying to achieve, we must be attuned to the social dynamics at work that shape and form the norms and values of the context.

It is at this juncture that the notion of the discourse community becomes important. Swales (1990) argues that a discourse community is a set of individuals who share common goals and who maintain certain expectations to guide its members and the way that they use language for others inside and outside the community. Swales (1990, p. 24-27) lists six defining characteristics of a

discourse community, which is perhaps the best known attempt in describing and pinning down the concept of a discourse community. He suggests that a discourse community:

1)   has a broadly agreed set of common public goals;

2)   has mechanisms of intercommunications that its members employ;

3)   uses its participatory mechanisms primarily to provide information and feedback;

4)   utilises and hence possesses one or more genres in the communicative furtherance of its aim;

5)   has acquired some specific lexis; and

6)   has a threshold level of members with a suitable degree of relevant content and discoursal expertise.

The importance of the concept of discourse community is also shared by other writers such as Berkenkotter and Huckin (1993) and Lemke (1995) though their notion of community somewhat differs. Berkenkotter and Huckin (1993) argue that humans are social actors and so, as they engage with the culture of the community around them, their perception about language and how to use it is being shaped. Lemke (1995) would support this proposition because he maintained that the discursive habits of the larger community shape the ideas and discursive behaviors of the individuals within that community. The dynamic notion of discourse community that we see here is that the community shapes but is also shaped by the norms and values it promotes. This confirms the theory of the structuration model of culture described by Giddens (1979). He described a feedback loop within society where social actors are influenced and formed by the norms, values, and beliefs of the society around them. However, as they are in this shaping process, they interpret and respond to these norms in new ways thus influencing and modifying those norms that then become the shaping force for them and others within the society.

This idea is important for the present study because it shows us that discourse community is not a static immovable entity. Discourse communities are more like living organisms that are constantly changing and interpreting their goals and values and thus the language they use and what they want it to accomplish. This shows that there is always going to be need to learn and understand how and why a specific community thinks and acts the way it does because it is not the same as it was before and what it will be like in years to come will be different than what it is now. With this in mind, a formidable question appears. How are we able to see what values of a discourse community holds, if they are changing all the time? Bhatia (2007) brings direction to this discussion claiming that understanding the motives behind why specific groups use language in the way that they do comes from looking into the discourses and actions within and outside of the text produced by the group. He is arguing that if we want to know why people use language we need to gain a complete picture of how they use it.

One question about the discourse community that arises is how do we know who is actually part of the community and who is not. Swales (1990) suggests that the boundaries of the discourse community are formed around the specific communicative purposes of the genre. He proposes that genre is, in fact, the vehicle for achieving these community goals and communicative purposes. The discussion about communicative purpose is incredibly important for the present research. A major part of understanding how Malaysians hedge in spoken academic discourse is understanding why they are hedging. It makes sense that their language use is trying to accomplish certain goals established in their overall discourse community and so our aim is to discern what their communicative purposes are and how hedging fits in with those purposes.

2.1.2 CR to Intercultural Rhetoric

Traditionally, contrastive rhetoric made its focus on the native use of English in order to understand the thoughts and processes for L2 users of English in writing. With this view in mind any other cultural perspectives about organization and thought were seen as negative barriers to the full ability for composition. In this way the original theory of CR was seen to be too ethnocentric by elevating the position of the native English speaker. By focusing on L2 cultural norms as problems, there was little room to see that cultural ideas about organization and overall language use outside of the native English norms, had room in the use of English. As time has gone on people like Ulla Connor are taking the notions of contrastive rhetoric and moving them toward ideas about intercultural rhetoric. Connor (2004) talks about how increasing genres of work as well as a desire to understand the context of writing has pushed the field of intercultural rhetoric. There is a new desire to see how language creates meaning but also to see how L2 users use their new language in specific ways that are appropriate to the context within which they are using the language. The present research resonates with this aspect of intercultural rhetoric by looking to understand the cultural context of the L2 user in Malaysia to see how it explains the way they use English, specifically hedging, in the way that they do. This contextual understanding comes not only in looking at the national ethnic level of culture but also the disciplinary context, the context of candidature defense, and the institutional context. By looking at these multiple levels of culture, we will try to build our perspective on Malaysian use of English in academic spoken discourse.

2.1.3 Corpus Linguistics

Corpus linguistics describes a study of language using large collections of authentic and naturally occurring language data with the use of computer software to describe and understand linguistic phenomena. The collection of such data can be very wide and general such as the British National

Corpus which is an immense collection of English language data taken from a wide variety of sources to give a cross section of English (2007). Other collections are more specific such as the corpus used for the present study called the MICASE Corpus. MICASE stands for the Michigan Corpus of Academic Spoken English. Such a corpus is designed to provide language data for a very specific context, in this case, spoken academic discourse in English (Simpson, Briggs, Ovens, & Swales, 2002).

The MICASE corpus has been used by many linguistic researchers for a variety of topics. Simpson and Mendis (2003) used the corpus to study the teaching of idioms to non-native speakers of English and to see whether the corpus approach to language learning would be beneficial. They found that using a corpus like MICASE can be informative to help both teachers and students increase their knowledge base about idioms (2003). Mauranen et al. (2010) describe how the creation of the MIASE help set the stage for their study looking at English as the lingua franca for academic discourse. Biber and Barbieri, in their study on lexical bundling in university registers describe how the MICASE provided a great amount of data that has influenced the linguistic study of university registers (2007, pg. 264). Hyland (2005) also utilized the data from the MICASE in his study on metadiscourse specifically in spoken registers. As the present study looks to understand the use of hedging in Malaysian spoken academic discourse, the MICASE corpus will be an invaluable resource as well.

2.2 Hedging defined

Much work has been done regarding hedging and its use in the language of many different fields and contexts (Hyland, 1996, 1998; Aijmer, 1986; Crompton, 1997; Biber, 2006; Varttala, 1999).

The basic definition of hedging is that it is a meta-discursive element that works to achieve the distance between an author and what is being claimed in their work. It thus can create conviviality, build more robust discussion, or maintain politeness (Hyland, 1996). So basically, hedging is a strategy that an author or speaker uses to distance themselves from the claim they are making. Aijmer (1986) gives further insight as she makes the point that the hedge gives the speaker a greater sense of freedom from the responsibility of the specific words they use. Crompton (1997) adds to the concept of hedging by describing its production by the social norms of the context it is in. He points out that specifically in the context of academic text, writers must use the linguistic forms of hedging to fall in line with the social constraints and expectations that exist within their context.

Before continuing on with the specifics of hedging, it is imperative to understand the theoretical foundation of hedging as device of metadiscourse. Hyland defines metadiscourse as "the interpersonal resources used to organize a discourse or the writer's stance toward either its content or the reader" (Hyland, 2005). However, it must be stated that there are different views as to what metadiscourse can actually be defined as. Adel and Mauranen describe how there are two main traditions or schools of thought when it comes to metadiscourse. One tradition has a more broad perspective of what is all included in metadiscourse and maintains that textual interaction is critical to metadiscourse. This tradition is called the interactive model and is different than the other school of thought coined the reflexive model that promotes a narrower perspective of metadiscourse. In this view, reflexivity is the critical component to metadiscourse (Adel & Mauranen, 2010). In this more narrow view of metadiscourse hedging would actually be considered outside of the term because it deals mostly with how the writer or speaker is approaching the claim and the audience (Adel, 2010). However, the present study comes under the interactive tradition of metadiscourse where hedging is included as a device of metadiscourse. This harkens back to the Systemic

Functional Theory of Halliday that says that language is not carried out in a vacuum but is used in the context of society. He says language is used "to construct and maintain our interpersonal relations and the social order that lies behind them; and in doing so we interpret and represent the world for one another and for ourselves" (Matthiesen & Halliday, 2009, pg.3).

There are multiple forms that hedging can take in spoken and written discourse. Probably the most pervasive form that hedging takes is that of modality and modal verbs. Biber (2006) found that in university registers of academic discourse, modal verbs were the most frequently the form that was taken by authors and speakers to mark their stance toward something. However, as Varttala (1999) points out, the forms of hedging could really be inexhaustible as there are so many different ways to hedge. In her study she chose to take a representative sample of lexical items from five major word classes that could be used as hedging in the scientific context. It is important to note that this distinction was made based on the lexical items that would occur in the discourse of native speakers of English and so this may not be overly representative of hedging lexical items in another context.

Since the forms of hedging can be so numerous and since so many words can perform hedging and non-hedging functions, the question arises as to how one can decide when hedging is actually occurring. Crompton (1997) proposes that one way to test a claim to see if it is hedged is to try and reword the claim in such a way that the claim itself does not change yet the author's commitment to it is increased. If this is possible then the claim is, in fact, hedged. It is important to make this distinction because the presence of something like a modal verb does not automatically assume the presence of hedging. Hedging must be determined based on the context surrounding that verb and how it is being used.

In the same way that the forms of hedging are numerous and varied, so are the functions and uses for hedging. One of the most comprehensive works on the various functions of hedging was carried out by Hyland (1998). Figure 2.1 gives a picture of the multiple functions of hedging laid out by Hyland (1998).
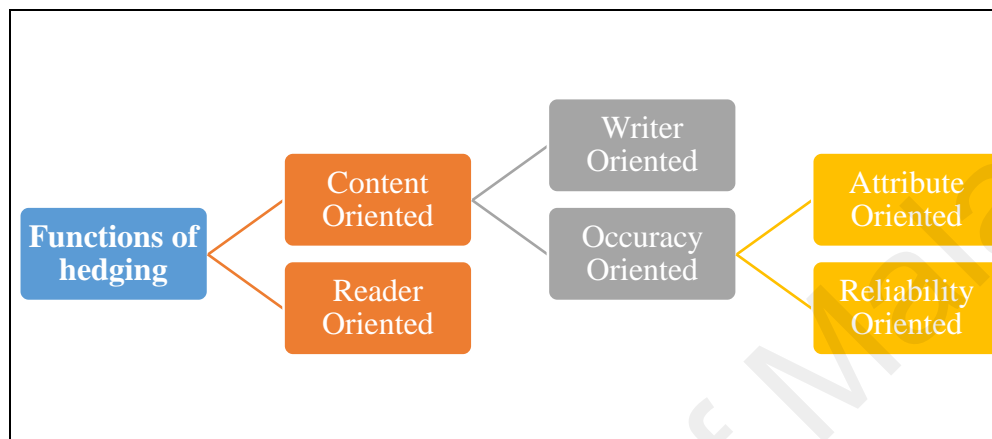
Figure 2.1 Hedging Functions
Source: Hyland (1996, 1998)

Figure 2.1 presents Hyland's (1996, 1998) complex breakdown of hedging boils down to four basic functions of hedging. First, is his discussion about "reader oriented hedging" where he describes how it is important for scientific writers to understand how their claims will be perceived and will affect the reader of their article. This function of hedging is thus looking to maintain relationship with the reader by deferring to colleagues and by asking direct questions of the reader as if they were being invited to give input into the research. Hedging designed for the audience, in Hyland's case reader oriented hedging, is employed to maintain relationships between colleagues that is considered appropriate and that maintains the "face" of everyone involved. Looking at hedging used in this manner falls in line with the work done by Miriam Locher (2004) who conducted a series of studies looking at the interpersonal aspects and the important function of hedging in multiple contexts to save face and maintain relationships by softening arguments.

Schneider (2010) refers to this audience oriented hedging as a device that works to make the utterance of the speaker more acceptable to the listener while at the same time not forcing the speaker to give up their stance.

Hedging as shown in Figure 2.1 also works in what Hyland (1998) called an accuracy orientation. In this way, hedging is used to bridge the gap between the reality of how things really are and the perceived ideal of how things should be. One way this occurs is in the function of attribute hedging. This function of hedging allows the individual to soften their commitment to a claim or their results when that claim seems to be different from what is expected. Attribute hedging thus looks to describe variability and downplay the role of the individual. This is done by negating the force of the claim maybe by using adjuncts like "generally" or "usually". It is also common in this type of hedging for the author or speaker to try and establish the footing from where the listener or reader should view the claim being made. For instance, the phrase "from a practical point of view" is asking the listener to look at this claim using a practical lens and thus brings them more in line with the viewpoint of the speaker.

Another common function of hedging is to show the author's level of uncertainty regarding the reliability of a claim. Hyland (1998) calls this reliability hedging and argues that in many situations the author chooses to use a hedge in order to show that the claim they are making is not necessarily going to be accurate in any and every situation. This makes it possible for the author to protect themselves if their claim is later proven to be partially inaccurate. There are many ways for a speaker or author to show this level of uncertainty but the most common choice in this function of hedging is using a modal or lexical verb of uncertainty to show that the claim is being made understanding that there is a limit to the knowledge of that author or speaker. This means that they are hedging against inaccuracy or factual uncertainty.

Where the previous two functions of hedging are used to speak directly about the precision of the claims being made, the last function of hedging looks to intentionally make the author or speakers role in the claim smaller (Hyland 1998). In this function of hedging the writer or author will mostly be absent when referring to what they are proposing in order to make themselves less conspicuous. This happens commonly when an individual wants to argue something but they may not feel like they have sufficient backing for their claim. One example of this is "it may be too early to answer this, but it could be supposed that…." In this example the author points out that their claim may be premature while also making sure that they themselves are not directly involved even when the reality is that it is they themselves who are doing the "supposing". This function of hedging is also supported, though a bit differently, by Prince et.al (1982). They refer to hedges acting in this manner as attribution shields that the speaker can use to attribute the claim being made to someone else or by leaving the originator ambiguous (p.89).

These functions of hedging can take various forms. Hedging can be expressed using lexical verbs, modal verbs, modal adjectives, style disjuncts, and many more. These lexical items can be utilized by the speaker or author to soften their commitment to a claim or do face work with their audience. However, just because one of these lexical items appears, does not mean that hedging has occurred. For instance, the word "think". "Think" can be used as a hedge when it is used by the author or speaker to show that there is a relative amount of uncertainty in their claim by saying that "they think" their claim is correct versus saying directly that their claim is correct. This also allows the producer to present humility in laying out their claims. This can also influence interpersonal relationships. However, when the word "think" is used to describe the actual action of thinking it is more descriptive and thus it is not a hedge. For example, "I think more now, than I did before." There is a reality that the amount of lexical items that can be used to hedge are incredibly

numerous. This necessitates the narrowing down of the scope on which forms of hedging to analyze. For the present study, this process was done regarding the specifics of the hedging that appears more often in spoken discourse. The process of narrowing down this scope will be outlined more thoroughly in following chapters.

2.3 Culture and Language

2.3.1 Culture

The connection between language and culture become eminent when a linguist Edward Sapir and his student Benjamin Whorf championed a theory called the Sapir-Whorf Hypothesis. They present the idea of linguistic relativity proposing that the way people use and think about language influences their overall thought and can even play a role in the things that they choose to do.

In order to really understand how language and culture work together, it is critical to understand what exactly culture is. In many ways the word "culture" is used in an amorphous way that can be used to talk about national, ethnic, or linguistic identity. Atkinson (2004) points out three basic ideas about how to look or understand what culture actually is. One of the ideas about culture that he discusses is the received culture view of culture that sees that there exist many differences across the world as far as human thought, action, and belief is concerned. These differences are concrete barriers that are not overly permeable from one society to another. Gupta and Ferguson (1997) speak about this diversity that exists around the globe and argue that it is distinct and different within each society structure. This view of society is very different from the postmodern view of what culture is. This view of culture sees culture as an extensive mixing and invasion of western popular thought and values into the rest of the world taking place due to the process of

globalization in the 21st century (Atkinson, 2004). The culture studies view of culture looks at culture as an ever-changing force of ideas that are influenced by the power dynamics of time (During, 1992). This view of culture looks at culture as the product of the ideas and values of those in power and thus those who set what popular culture is. This view of culture was introduced by Marx (1992) and his theories about power.

As it can be overwhelming to try and take into account everything that makes cultures what it is, there is a need to try and think about how one should look at or view culture. At this juncture, it must be determined which is the best orientation to get the best picture of how culture is influencing the world and those who live in it. One perspective is that the best way to look at culture is to look at what that culture produces. This makes it important to analyze the artifacts or things left behind by a culture in order to understand more about the thoughts, beliefs and values of that culture (Atkinson, 2004). However, this view of culture really tells us how things may have been previously but not necessarily about things are right now or where things are going. Atkinson (2004) points out that this view of culture does not take into account the reality that culture is always changing and be changed. This view of culture is thus very small and does not provide information about how culture is changing and being changed by those in society. This is where the process theory comes in that looks at how culture is constantly in this process of defining society but also being redefined by those within it. Giddens (1979) proposed a structuration theory of culture that says that actors within society are abiding by the rules and resources of the society around them as they live their lives. However, as they live their lives they are agents of change by working within those rules and resources to change them.

Generally, as we think about culture and this process of how culture is produced, we tend to think of it in the lens of national or ethnic culture. Some have described this using the term "large

culture." Holliday (1994) argues that to look at this big culture only gives an incredibly overgeneralized picture of how culture is being influenced by individuals and it influences them. He urges a narrowing of scope; looking at the diverse and interconnected cultural influences that do not fall in line with big picture and are what he calls "small culture" (Holliday (1999, p. 240) Atkinson (2004, p. 86) makes the point that an analysis of these smaller cultural factors provides a more complex understanding of how they work together to influence the individuals within a group. The idea is that understanding small culture provides a more grassroots analysis of what is actually playing a role in how people act and think and even the things they say and how they choose to say them. Whether this process is conscious or subconscious is of less importance because the influences on the individual is the same.

For the present study, this viewpoint of culture will be important as it provides a greater understanding of the rules and expectations that guide oral defense. It will point out where those are established and how they are passed down. This view of culture also will point out how the actors within the culture approach and work to either support those rules and values or undermine them. This can tell us more about how language and culture work together in the Malaysian context. This will be even more clearly established as hedging and mitigation is a way to stay within the norms, values, and expectations of the society around the individual.

2.3.2 Disciplinary context

One aspect of culture that plays a big role in how language is used, especially in the academic arena is the disciplinary context of that language. It is expected that someone writing or speaking in the natural sciences addresses their topic differently and has different goals than an individual

using language in the humanities. This refers to the previous discussion concerning the reality that different discourse communities have different goals and also have different methods as to how to achieve those goals. Becher (1987) supports this notion that the language between disciplinary cultures will be different and will reflect the norms, values, and expectations of that discipline. He found the norms between disciplinary contexts to be quite different and showed that the language used in those disciplinary contexts to achieve disciplinary goals also reflects these differences. Bazerman (1981) continued to enhance this idea by conducting a study contrasting the use of language in research articles from different disciplines. He outlines how the language used differs between disciplines as it relates to approaching knowledge, argumentation, analyzing relevant research, terminology, etc. This research continues to establish the idea that different disciplines use language differently according to goals and norms that are discipline specific.

Similarly, Parry (1998) noted that various disciplines carry their own values that influence the discourse. Parry (1998) adds valuable insight by providing a comprehensive picture of the kind of discursive practice that characterize different disciplines and their use of language in doctorate theses. She pointed out the underlying epistemological and cultural influences which shape the writing of theses from three different disciplines: science, humanities, and social sciences. She indicated that the science theses used language in a concrete, impersonal, and value free way to give an objective viewpoint of the facts. The stance in these theses tended to be non-committal and used a plethora of technical terms to bring out the points being made. This contrasted with much of the data Parry (1998) found in the humanities. The language used in this discipline tended to have a strong orientation to making and supporting a cohesive, intelligible argument. This made the use of language more personal and subjective in nature. Humanities and social sciences also

differed from the natural sciences in that they had a stronger bend toward metaphorical language to present ideas.

2.3.3 Situational Context

As disciplinary context is important to understanding the use of language, it does not give the holistic picture of the way that individuals work in a specific situational context. For instance, different departments of the same disciplinary context may have specific expectations about language use that differ from one another. Li and Wharton (2012) provide an analysis of how this could happen by looking at meta- discourse in writing from mandarin speaking students using English for the same discipline but in two different contexts (one in the UK and one in PRC). Their study found there were differences between the two groups of students even though share the same Chinese language and cultural background. This shows that the specific context has an influence on the students' use of meta-discourse. Lea and Street (2006) provide a theoretical understanding of this phenomenon by discussing the theory of the academic literacies model that takes into account the fact that language is appropriated by context on the discourse level but also that is involves the dynamics of interaction within specific institutions and with certain social identities. For the present study, the understanding that the specific aspects within an institution or social "situation" influence the way its actors use language is important. The use of hedging is not only influenced by large culture or by discipline but also by the social nuances within that specific context.

2.3.4   Context of task

Samraj (2002a) says that the context of the task has perhaps the most obvious influence on the texts produced, at least for the texts that she analyzed. She examined papers from Wildlife Behavior which are designated review papers. Writing such a paper does not require the writers to report on original research. The basic task for writing this paper is to include "a report of previous research as well as discussion of computing hypotheses and suggestions for future research" (Samraj, 2002a, p. 176). Therefore, the report is organized either chronologically or non-chronologically. The candidature defense for doctoral candidates in Malaysia also has a specific context to it. The candidate must report the research that they have done and show that their research is worthy to continue. This decision is made by a panel of faculty members who are operating in a similar field and are invited to probe the various aspects of the research presented by the candidate. Implicit in this process are claims made by the candidate and by the panelists regarding the specific nature of the research and its merit and value to the academy. These claims must be interpreted and mitigated when necessary by both parties and so this a rich ground for understanding the way this mitigation happens and what cultural realities are influencing the whole process.

2.4   English in Malaysia

Language learners of English are referred to as ESL users of English. This is because English is the second national language in Malaysia and thus it is not viewed as a foreign language. However, this understanding of English in Malaysia can be problematic for a variety of reasons. In some cases, English may be the third or fourth language learned depending on the individual. Inversely, some Malaysians learn English in the home and only speak English making it their mother tongue. This makes it harder to characterize all Malaysians as ESL users of English and therefore, making

generalizations about an entire population has to be done carefully. It must also be considered that even for those who use English as a second or third language the assumption must not automatically be adopted that somehow their use of English will always be inherently of lower status than that of native speakers. In their discussion about world Englishes, Bhatt and Mesthrie (2008) stress that there is much diversity in English use all around the world. They argue that there are obvious differences between native users of English and other users of English but that these differences must not be directly equated with deficiency.

2.5 Genre-Contrastive Rhetoric Theory – Implications for the Study

The theoretical framework for this study will need to provide structure in two ways. First, it will need to be the basis for the conceptualization of hedging and how it works. This aspect of the framework will be mainly based on Hyland (1996, 1998) for the functions and forms of hedging. There are many ideas about what hedging is, how it is used, and the forms that it can take. Hyland's theory is that hedging is the way that an individual approaches a claim that they are making in order to create distance between themselves and that claim for a host of different reasons. This theory was the foundation for Hyland's schematic for the functions and corresponding forms that hedging takes. This schematic will be used in the present study to mark out the forms and functions of hedging used in the Malaysian context. This was chosen based on the nature of his work being specifically established in the academic field and especially in scientific discourse. This will be useful as this is a large portion of the corpora used in the study. Tan and Chan (2008) also were originally planned to be utilized to narrow down Hyland's framework and contextualize the forms of hedging in the Malaysian context. This was because of their analysis done specifically in the Malaysian contexts and their results that showed certain functions and forms of hedging to be more

pervasive. However, as the study proceeded, the application of their findings proved to narrow the scope of the study too much. Secondly, the framework will need to allow for a basis to define and analyze culture and its relationship to the use of hedging. This is critical for the study as the goal is to analyze the hedging used and draw connections to culture in order to understand more clearly the nature of that hedging language.

2.5.1 Contrastive Rhetoric

With this robust discussion about culture and how it effects the use of language, the question arises as to why the present study looks to contrast Malaysian hedging with American hedging. The theory of contrastive rhetoric sheds light on this question by showing the need for comparison in order for a greater level of understanding. Contrastive Rhetoric proposes that language and writing are both culturally informed and influenced. This means that ultimately every language has aspects of rhetoric that are unique and specific to it (Kaplan 1966). This theory makes the point that understanding the specific rhetorical structures and strategies of a language is aided but contrasting those strategies with another language. This is supported by Marie-Paule Pery-Woodley (1990) who argues that the contrasting of languages forces the relativizing of specific rhetorical strategies with language. This means that contrastive rhetoric shows a particular practice as specific to certain language and its users. For the present study this means that the use of hedging is specific to Malaysian users of English as well as to American users of English. Thus, by comparing hedging use between the two, we are able apprehend the way Malaysians hedge in doctorate oral defense.

Ulla Connor (1996) draws a comprehensive picture of contrastive rhetoric and all that has been done in the field. She points out how a key aspect of contrastive rhetoric is its influence on

pedagogy. The contrast allows students to develop a complete understanding about the nature of the target language and use this information to improve their language use. Connor also connects contrastive rhetoric to genre theory proposing that contrasts should not be drawn merely between the forms of different languages but also between the genres that students or users will encounter within those languages. Her point is that genre is socially constructed and so contrastive rhetoric needs to take into account those cultural influences that influence genre. This supports the goal of the present study maintaining that culture effects genre thus making it critical to understand those cultural influences. An important marker of this specific study is that it does not completely fall in line with a pure comparative study. Specific cultural realties of native speakers in the American context will be minimal and will only work to supplement the larger focus of understanding hedging in the Malaysian context.

Holliday (1994) will be used as a framework for an analysis of culture in the use of hedges. His theory about the importance and influence of small cultures is critical in the present study. He argues that outside and alongside national "big culture" exist other, smaller cultures that play a critical role in the way that people think and act. The present study contends that this theory also includes the use of language because the social norms, values, and expectations are tied to the way language is used. Holliday points out the different small cultures that will influence a learner of English language learning and teaching.

Holliday takes into account that culture is not only described by large, overarching social identities at the national, racial, class, etc. level. Culture also describes the smaller social institutions and systems that surround the individual like the place of occupation or host institution. This notion of culture is also supported by Atkinson (2004) who continues to point out that these small cultures

are not just operating independently in the experience of the individual but are overlapping and interacting with each other in that individual's experience. Looking at these small cultures allows for the observed forms and functions of hedging to be shown not only in the specific context of use but to make connections between other cultural influences that may relate.
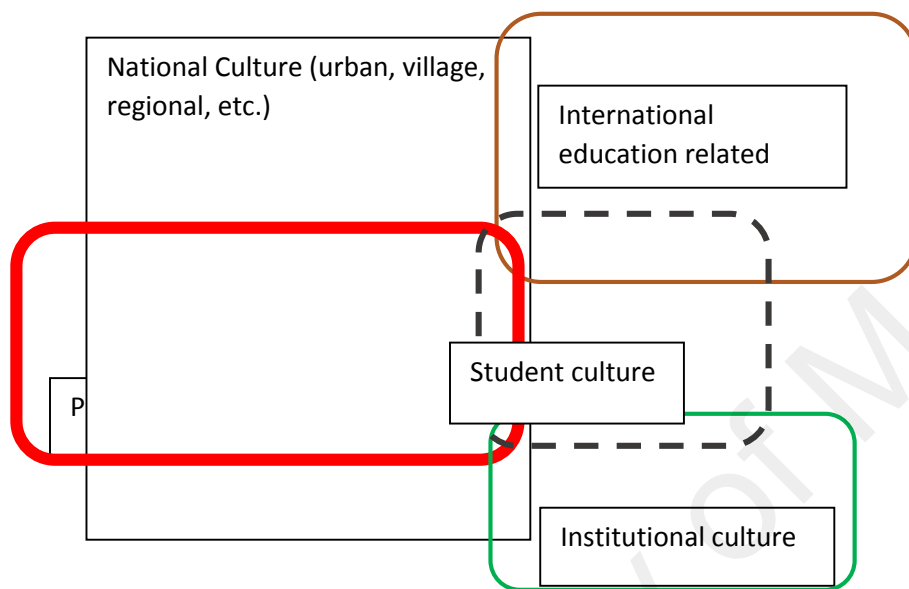
Figure 1- Culture Diversity and Interconnection

Source: Holliday, A. (1999). "Small Cultures." *Applied Linguistics*, 20 (2), 237-264, p. 29.

2.6 Related Studies

Hedging is a linguistic phenomenon that has been researched extensively across multiple linguistic fields. This also true for studies looking to conduct comparative research looking at hedging in multiple arenas. Some studies have looked to compare the use of hedging between two or more national linguistic cultures. Others have compared the use of hedging across multiple disciplinary contexts within the academic world. Some studies have looked to address both of these comparisons at the same time. Still other research is just starting to be done on hedging in Malaysia.

2.6.1 Hedging in National Linguistic Culture

One of the most comprehensive areas of previous research in hedging has been done comparing hedging between different languages or to compare the use of English by different users of the language who are both first and second or third language users of English (Yang, 2013; Vassileva, 2001; Itakura, 2013). These studies are looking to see how hedging is shaped or approached differently or similarly between these groups. Yang (2013) conducted a study looking at the hedging differences that may exist between Chinese and English writers of research articles. His research found that the employment of hedging was less common in Chinese research articles than it was in English ones. Vassileva (2001) followed a similar methodology by building three corpora of English authored articles, Bulgarian authored articles written in English, and Bulgarian authored articles written in Bulgarian. This methodology allows for an understanding of the native use of hedging but also how this may be affected when one uses a second language. This study found similar results as well maintain that Bulgarian authors used hedging less frequently than English authors both in their native language and also in their second language.

Itakura (2013) pursued research in the comparative vein by looking at hedging between Japanese and English authors. However, this study brought originality in that it compared hedging in book reviews which may be denser with hedging and also that it looks to analyze hedging at a different level by bringing it to the syntactic level. It was shown in this research that hedging in book reviews was used in a similar manner between English and Japanese authors. Itakura (2013) also found hedging in book reviews to be done much more extensively on the lexical level than in the syntactic one.

2.6.2 Hedging Across Multiple Levels of Analysis

Previous research has also been done to bridge research on hedging across multiple levels of analysis and this has been done across various levels and national linguistic culture. Hu and Cao (2011) studied hedging in the context of abstracts in research articles. Their study looked to analyze the differences in the use of hedging between Chinese and English abstracts but also between abstracts that were empirical in nature and those that were less empirical. This research was quite robust, using corpora based techniques as well as statistical analysis to measure differences in hedging. Hu and Cao found that English authors writing in English journals employed hedging more than Chinese authors in Chinese journals and that empirical abstracts used far more "boosters" to make their claim stronger. Dahl (2004) saw the two streams of research in metadiscourse being solidified, in terms of both national linguistic culture and disciplinary context, and looked to evaluate which context may have a larger role to play in the use of meta-discourse. The study compared three different languages (French, English, and Norwegian) and three disciplines (medicine, linguistics, and economics) and took the frequency of the use of meta-discourse finding that overall there is a larger role of national linguistic culture on meta-discourse for linguistics and economics. This study casts a wide brush stoke by analyzing meta-discourse as a whole over such a large scope. It provides a good base to look at context and language use. It also provides useful information by showing that the influence on language by the specific context is not equal. Some contextual aspects hold a greater sway on the use of hedging than others do. This informs future studies by allowing them greater levels of insight as to where they should allocate their focus to.

Poos and Simpson (2002) conducted a study in an almost opposite strategy by narrowing their scope to a single form of hedging and looking to see how it was utilized differently based on disciplinary context and gender. Their study also brought the use of hedging into spoken discourse

by using data from the Michigan Corpus of Academic Spoken English or MICASE. Their bold step to see how gender effects hedging showed that there is little significant gender effect on hedging use. The study also found that physical science had the lowest frequency of hedges while humanities saw the highest. Biber (2006) further delves into the difference between written and spoken hedging by analyzing stance and how it is expressed differently between spoken discourses in universities and the textbooks that students in those universities use. This analysis of stance directly ties to hedging by looking at how claims being made can be grammatically marked and come out in how that grammar is used. The study found that, generally, spoken discourse had a higher prevalence of marked stance (including hedging) and that, overall, modal verbs were the preferred way to mark stance.

2.6.3 Hedging in Malaysia

This previous research has shown that there really is a need to gain a contextual understanding of language and this is true for hedging as well. In Malaysia the discussion of hedging has started to happen and more are looking to understand this phenomenon in the Malaysian context. Siti and Azirah (UM) wrote an unpublished paper looking at hedging in non-academic discourse by analyzing how hedging was used to preface disagreement in spoken interactions on radio in Malaysia. In their study they found that a common strategy for Malaysians to mitigate face threatening speech was to use hedging. Tan and Chan (2008) bring the discussion back into the academic sphere by comparing the use of hedging between non-native writers and native writers of English in Malaysian research articles. Hedging was used less frequently and had less variety in the writing of Malaysian users of English versus native writers of English. They also found that reliability hedging was the most common function of hedging for Malaysians.

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These previous studies relate to the present study in a few ways. First, they show us the nature of the work that has already been done. There are some studies on spoken discourse but there is still a lot of room for research on spoken discourse in the academic arena. We also see that there is a strong precedent for the connection between hedging and culture. Some studies looked at national culture while others looked at disciplinary culture. The present study looks to continue in this vein of research by looking at how hedging can connect to multiple levels of culture and how this happens specifically in the Malaysian academic context.

2.7 Conclusion

This chapter has presented the literature and research that serves as the foundation for the present research. Genre theory and contrastive rhetoric are theories that relate to the nature of language and how it is used and this is critical when we think about the Malaysian context and the specifics that arise in the genre of oral defense. The discussion about hedging has laid out what hedging is, how it is used, and how it may be analyzed. Outlining the work that has been done on hedging in the academic arena and even in Malaysia has laid groundwork for where the current study is coming from and where it is looking to fill the gaps. The next aspect of our discussion will move into the methodology that will be employed to do all this.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

The purpose of the present chapter is to outline the specific methodology employed to carry out research on hedging in Malaysian spoken academic discourse and its justification. It begins by the research approach for the current study and discussing how the specific instruments used would triangulate the data to accomplish the research goals. The chapter continues with an in depth look at the context and nature of the corpora used. This leads to a more specific look at how the corpora will be processed using Antconc software and how reliability of the methodology will be addressed. The present chapter will then conclude with a discussion about the ethical considerations that were required to conduct the study.

3.1 Research Approach

This is a corpus based investigative case study that used both quantitative and qualitative methods. The process of data collection included qualitative and quantitative methods as the data will be collected in a corpus using transcriptions from doctoral oral defense. This means that the basic format of the present study is one of mixed methodology. As both qualitative and quantitative data was collected, this study can be regarded as taking a mixed method approach. Creswell (2008) defines mixed method as

> a procedure for collecting, analysing, and mixing quantitative and qualitative data at some stage of the research process within a single study in order to understand a research problem more completely. (p. 535)

Creswell (2002) presents a comprehensive look at the multiple variations of mix method studies and his work brings more clarity to how the present study is looking to bring together both qualitative and quantitative methods. Based on his typology, the present study would be categorized as an embedded mix method design. In the embedded design, overall priority is given to one type of method and, in this study, the qualitative method for collection and analysis makes up the bulk of the design. For this study of hedging in Malaysia, data collection and analysis took place at the same time. This is consistent with embedded mixed method design. The last aspect of the study that correlates with the embedded category of design is the fact that both kinds of data sets were used to answer different research questions. The answers to those research questions were then used to bring an overall interpretation about the nature of cultural influence on hedging use in Malaysia.

The collection, analysis and mixing of qualitative and quantitative data in this study are defined by three main characteristics of the mixed method approach: timing, weighting and mixing. Using

Creswell's (2008) notation (based on Morse, 1991, and Tashakkori & Teddlie, 1998), the conceptual framework of the study can be visualized in Figure 3.1.

Data Collection   Data Analysis   Interpretation

| QUAL + quan+ QUAL | → | quan + QUAL | → | QUAL |
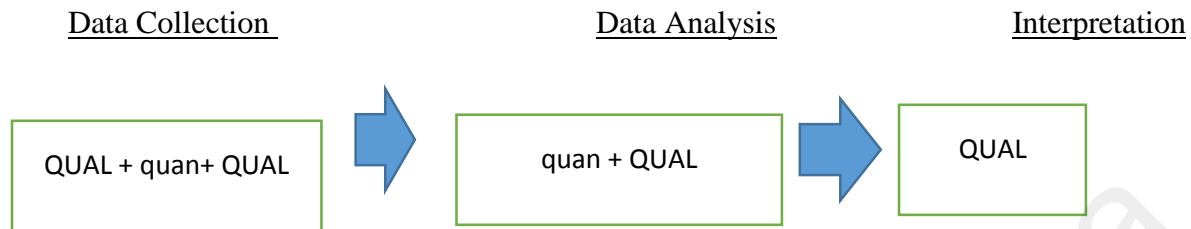
Figure 3.1 Research Design Visualized

Figure 3.1 explains the flow of the research design. The weight of the analysis differs from one point to another. Upper case letters (e.g. QUAL) signify the supremacy of that method in that stage of the research. Inversely, lower case letters (e.g. qual) show that this method was a part of the research stage but took a lesser role. It is also important to note the timing for the different methods in the design. Notice, for example, in the data collection phase, "QUAL" comes before "quan" and then is followed by "QUAL" again. This means that the qualitative aspects of data collection were carried out, chronologically, before the quantitative ones and then once again before analysis began.

At this juncture, it must be explained what is exactly meant by qualitative and quantitative methods specifically in the present study. The data collection phase began with taking transcriptions of candidature defenses and this was followed by taking a naturalized frequency of the hedges found in those defenses using a lexical software called Antconc. Another level of the data collection phase was the collection of handbooks and information regarding university and departmental policies and expectations regarding the doctoral oral defense. Data collection concluded with the conducting and transcription of semi structured interviews regarding the nature of doctoral candidature defense.

The recording and transcription process make up the bulk of the data collection phase. In the data analysis phase, those frequencies of hedging are used to put together diagrams and make general observations about the amount of hedging used in different contexts. Stemming from this analysis, the phase continues with an analysis of the interviews and documents collected regarding the nature of candidature defense and how the cultures surrounding it could influence the use of hedging. This leads to a level of interpreting how the amount of hedging and the culture surrounding hedging build an overall understanding of how Malaysians use hedging in academic oral discourse.

3.2 Instruments

Various instruments were required to conduct the multiple strands of the present study. First, an audio recording device was used to take a transcription of the doctoral oral defenses. Another device needed was a lexical software to analyze the transcriptions taken. The specific software selected for the present study is Antconc corpus software. Antconc was used to compile a word list of hedging forms from the transcripts and then generate the frequency of hedging instances from that word list. At an even deeper level of analysis, the analytical framework on hedging by Hyland (1996, 1998) was employed to code the data for analysis. Hyland's framework on hedging was chosen because of several reasons: first of all the lexical approach of Hyland lended itself to the corpus based approach for the current study. Hyland's work was also among the most referenced in all the work that was done in the field. Hyland also worked mostly in academic discourse specifically and so the lexical items he saw work out in academic discourse were more likely to be seen in the present study than some of the other well-known works on hedging. A set of interview prompts was then designed to draw out the multiple layers of culture surrounding the oral defense from the viewpoint of faculty members. This semi structured interview is another

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instrument employed in the present study. Other instruments would also include the policies, guidelines, and expectations about the oral defense given candidates from both the University and the specific faculty or department within the university. These come in the form of the handbooks provided to students from the university and faculty in both soft and hard copies.

As the present study is looking to analyze how cultural influences surrounding doctoral oral defense influence how hedging is used, it is important to conceptualize culture and how to clearly study this rather abstract term. In order to get a handle on culture surrounding oral defense, a triangulation method will be used. First, a document analysis was done on the rules and regulations of the oral defense and on University documents that have bearing on the defense itself and on the general culture of the University. Then semi structured interviews were conducted to get an inside perspective regarding candidature defense from faculty members involved in the process (the interview prompts for the semi structured interviews and the explanations of the prompts can be seen in Appendix D).

3.3   Corpus of the Study

A sub corpora of doctoral defenses of native English speakers and Malaysian second language users of English was used to conduct a comparative analysis. The sub corpora were chosen based on a few different criteria. First, the data for the corpus needed to be taken from postgraduate level candidature defenses and specifically doctoral candidature defenses. For the means of comparison, it was important to make sure each of the corpora represented native or L2 users of English. It was also critical to ensure that the context of the data was similar in both of the corpora.

Overall, three defenses from native English speaking candidates were chosen alongside two defenses from Malaysian candidates. The ideal would have been to take data from an equivalent

number of defenses from both sides of the data. However, due to concerns about the protection of research done by Malaysian candidates, it became extremely challenging to gain consent to take recordings of PhD oral defenses in the Malaysian context. This meant that collecting enough data using a generalizable sampling method to make the study generalizable across the Malaysian context was not going to be possible in a reasonable amount of time. However, the present study was designed to be exploratory in nature and with the other sources of data collected, it was decided that the five defenses would yield enough workable data to make some inroads of understanding. The normalization of all frequencies was also done to ensure that the two sides of the data could correctly be compared to each other.

3.4.1 PhD Defense

The choice to analyze the candidature defense for doctoral students was motivated by a few different things. The first reason is that doctoral students, by nature of their work, are required to make more personal and original contributions to the academic community. They must persuade the examiners that their work and contribution is worth to allow them to enter the academy. This creates a situation where there is more to be lost and gained in their defense. In this situation, the need to hedge commitment and mitigate responsibility is more likely to be expressed than in other academic contexts. Another reason for selecting doctoral candidature defense came in the consideration of the command of English. One of the aims of the present study is to determine small culture effects on candidature defense as well as large culture differences in country and national language. This necessitated taking data from a context where the observed differences in hedging use could not just be boiled down to a lack of proficiency in English. If the data taken in Malaysia was drawn from sources where the command of English is quite low, then there is less

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room to analyze other cultural factors influencing hedging. So the doctoral defense provided candidates who were more likely to have generally a higher command of English and thus could show culture on a wider spectrum than just as second language users of English.

3.4.1 Context of the Corpus

The sub corpora that make up this corpus come from two different contexts and these contexts are part of the difference that the present study is looking to understand and analyze. The data from MICASE is done mostly in an open forum where the public are allowed to view the defense of the candidate. This means that as the candidate prepares their oral defense they must also take in mind that there may be a wide range in the audience that they present to. As the postgraduate system in Malaysia is somewhat different than in the US, some issues arose as to finding comparable data in the Malaysian context. In Malaysia, generally, the British system of education predominates which means that a decision candidate's acceptance is done in a closed viva voice. There was thus a need to find a Malaysian context that is similar to the US data taken from MICASE. If one of the previous contexts of Malaysian data was chosen, the reliability of the study would be in question because the comparison would be made on two different contexts. This is where the candidature defense becomes the closest Malaysian defense to the oral defense presented in the US. There are other oral presentations of research in the Malaysian context such as the seminar presentation. However, these other contexts don't have the same evaluative function as the candidature defense and thus are less comparable to defense in the US context.

3.4.2 MICASE Corpus

The sub corpora of native speakers will be taken from the Michigan Corpus of Academic Spoken English (MICASE). This is a corpus developed by the University of Michigan and is a compilation

of spoken data taken from a variety of places and people in the academic context. The MICASE was chosen because it provides transcriptions of doctoral defenses in spoken English that is distinctively in the American context. For this sub corpora a filter was applied to take data from native speakers of English defending their candidacy for a PhD. From this filter, four doctoral defenses in the MICASE came up including data from multiple disciplines (social psychology, artificial intelligence, geology, and music). From this data, three of the defenses were chosen for the present study excluding the defense in music as it would not be possible to collect comparable Malaysian data for that discipline. So the two defenses from the sciences and the defense from social science were chosen for the current study because they fit the stipulations of being doctorate oral defense from native speakers of English and because it was possible to find comparable data to them from the Malaysian side of the corpus. This brought the total number of tokens in the MICASE corpus to 43,150 words. So the MICASE sub corpora is made up of three different doctoral defenses of native speakers of American English in the disciplines of natural science and social science. These were taken from the MICASE archive and the search tabs are shown in Figure 3.2.
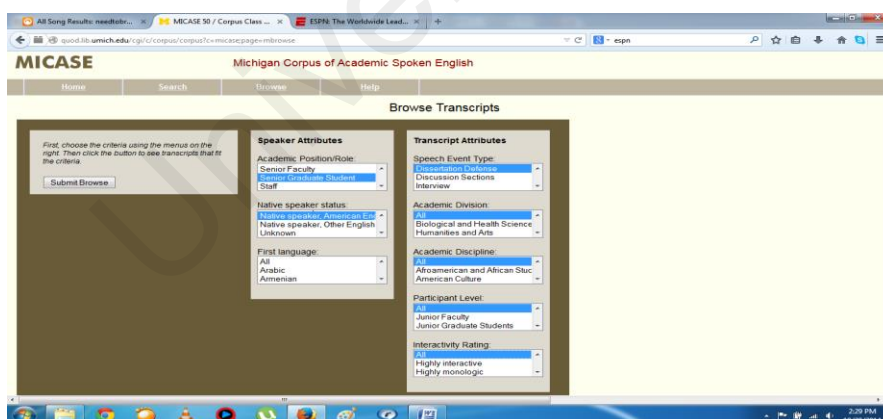

Figure 3.2 Screenshot of MICASE Search Selection

The screen shot of the transcriptions taken from this search is shown in Figure 3.3.

Figure 3.3

MICASE Transcription

3.4.3 Malaysian corpus

The sub corpora of Malaysian non-native English speakers was more difficult to obtain than the MICASE corpus. For MICASE, the data had already been collected and processed by the University of Michigan. However, the Malaysian corpus was one that needed to be developed out of the audio recordings taken from doctoral candidature defenses at the University of Malaya, Kuala Lumpur. It has been discussed by researchers like Thompson (2004) that spoken data in a corpus is far more problematic than written discourse. Spoken discourse taken by audio does not show the visual cues and communication techniques that are a part of verbal communication. It can be hard to capture those things along with tone within a corpus. These issues surrounding the development of a corpus of spoken academic discourse were considered for the present study. However, the present corpus was developed for the sake of drawing out the actual lexical items that are considered pervasive forms of hedging in spoken discourse. In this sense, those other linguistic realities lie outside the scope of the present study.

The process of developing the Malaysian corpus generally follows a pattern described by Leech, Meyers, and Thomas (1995). First, two doctoral defenses were recorded at the University of

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Malaya in Kuala Lumpur, Malaysia. They were taken from both the natural sciences as well as social sciences in order to be comparable in these general fields with the MICASE data. These two defenses were also chosen because they fit the stipulation for being doctoral oral defense. The candidates for the oral defenses were all ethnically Malay in order to maintain similar ethnic identities and reduce large culture variables. For instance, the first language and cultural background of Chinese Malaysians is quite different than the language and culture of Malay even though they live in the same country. This aspect of large culture can have an effect on how these two groups of speakers operate. In order to mitigate the variability that could arise from these cultural differences that come from ethnic background, one group of Malaysian, namely ethnic Malay, speakers was chosen. Recordings were done using a digital tape recorder and included both the presentation portion of the defense as well as the response portion by the panelists. These recordings were then transcribed word for word. These transcriptions were then marked and prepared to be processed by a lexical software, specifically Antconc. Once the data was processed by Antconc, the data needed to be coded to mark out the actual instances of hedging from all the marked lexical items taken from Antconc. This would need to be done with an interrater to maintain reliability. The total number of tokens for the MCD corpus totaled in 13,381 words. The large discrepancy in the number of words between MICASE and MCD necessitated any analysis on results to be done using normalized frequencies per 1,000 words. This would allow an analysis to be done on hedging expressed per 1,000 words rather than just comparing the overall frequency which was critical to maintain the validity of the comparison.

	MICASE	MCD
Number of defenses included	3 defenses	2 Defenses

Disciplines of oral defenses	Science and Social Science	Science and Social Science
Specific defenses included	Artificial Intelligence, Social Psychology, Fossil Plants	Mechanical Engineering, Linguistics
Number of panel members per defense	Art. Intelligence 5 members Soc. Psych 4 members Fossil Plants 6 members	Engineering 2 members Linguistics 4 members
Number of Tokens	<u>43,150 Tokens</u> Art. Intelligence 21,255 tokens Soc. Psych. 12,223 tokens Fossil Plants 9,662 Tokens	<u>13,381 Tokens</u> Engineering 6,997 Tokens Linguistics 6,384 Tokens

Table 3.1- Corpora Compared

3.4.4 Discipline

An analysis on hedging use specifically in sciences and social sciences respectively required a process of adding up the frequencies of hedging in each defense for both sides of the corpora. Once these frequencies were collected, the frequencies for the corpora in the sciences were added together and this same process took place for the corpora in the social sciences. At the end of the process the total frequencies for sciences and social sciences were normalized per 1,000 words in order to make room for comparison.

3.4.5 L1/L2

To make a comparison between L1 and L2 speakers of English a similar process was followed to try and analyze the nature of Malaysian hedging. The frequencies of both the forms and functions of hedging were taken in each defense in both the MICASE and MCD corpora. Those frequencies were then added together to get a composite frequency for each group of speakers. The last step was then to normalize those composite frequencies in order to make a fair comparison.

3.4.5 Candidate/Panel

It became clear that the data collected and analyzed at that point was representative of different speakers and disciplines but was taking into account the genre of doctoral oral defense as a whole by including both the hedging of the candidates and the panel members in the defense. So to try and bring more depth to the analysis, it was decided to split up the frequencies of hedging use between candidates and panel members for both forms and functions of hedging. This was done for each defense in the corpus by splitting up the data between panel members and candidates and coding each one for the instances of hedging that existed for that group of speakers in that defense. Once they were split up, the instances of hedging that had been worked out with the interrater were coded and applied for each group so that each group of speakers for every defense had a frequency of hedging marked out. At this juncture, the frequencies of panel members in MICASE were added together and then the frequencies of panel members in MCD together. This was repeated for the candidates in MICASE and MCD as well. Once composite frequencies for the candidates and panel member in each corpus were acquired, for both the forms and functions of hedging, they were normalized them per 1,000 words so that they could be analyzed them together. Figure 3.4 visualizes how the sub corpora work together to build the entire corpus for the present study.

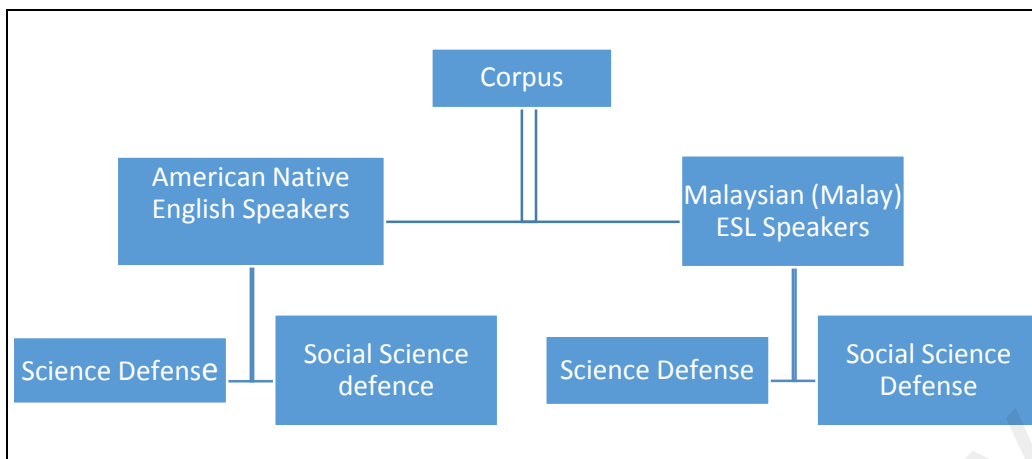Figure 3.4

Nature of the Corpus

3.5 Data Analysis Procedures

3.5.1 Antconc

In order to pull out the instances of hedging that exist within the transcripts of the oral defenses *Antconc 3.4* concordance software will be used. This software makes it possible to pull out every sentence where the chosen forms of hedging occur. Figure 3.5 is an example of the results taken from *Antconc 3.4*.
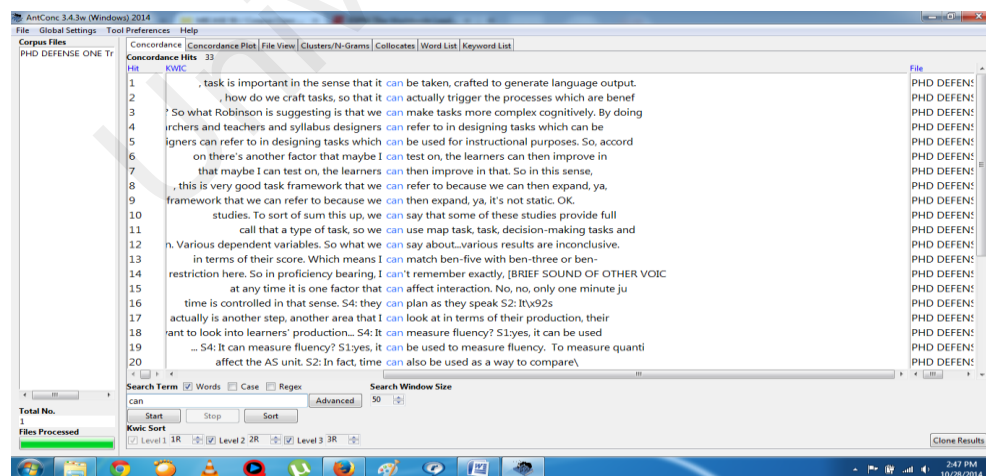
Figure 3.5 Antconc Concordance

At this juncture, the corpus results were saved and compiled into text documents. The forms were then processed line by line to mark out which forms are actually functioning as a hedge. The text documents can be represented by the screen shot in Figure 3.6.
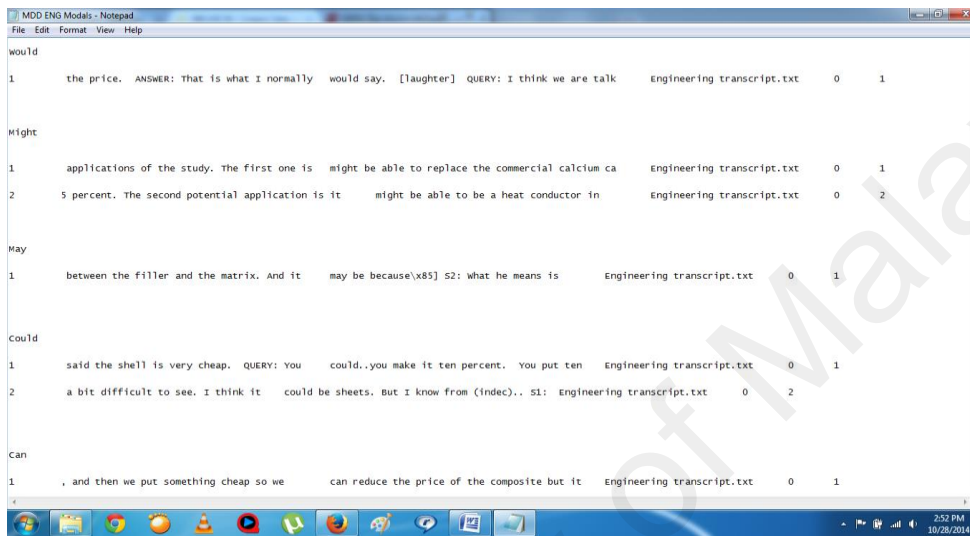
Figure 3.6 Text Documents from Antconc

This piece is critical because of the nature of hedging. A frequency count cannot just be taken straight from the concordance because the lexical items used in hedging are not always used to hedge. Once the forms were marked out as hedges they were processed once more using Hyland (1996, 1998) as a guide to mark out what function of hedging corresponded to each one.

To mark out which instances means that a choice must be made as to what is hedging and what is not. This can be very subjective and so one person making these choices does not provide a reliable option. One practical solution to the problem of achieving accuracy of analysis is the use of the inter-rater reliability technique, using field specialists as independent raters. According to Bhatia (1993), since field specialists are active members of a particular discourse community, they are more aware of the generic features in a particular discipline than people outside the community.

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In this study, another co-rater was used to identify the validity of coding. The co-rater was another native English speaker to maintain the same level of cultural influence in analysis. He was also chosen outside of the linguistic paradigm to ensure that he approached the data without any preconceived ideas about hedging. After that, the results should be confirmed with a sufficiently high level of agreement. The level of agreement with the co-rater was 97%. He operated from the forms and functions chosen by the first interrater that were adapted from Hyland (1996) Agreement was calculated using the following formula:

No. of agreements / (No. of agreements + no. of differences) x 100 = percentage of agreements

There were several problems occurred in the initial coding in classifying certain hedging. One of the problematic codings occurred when classifying the various forms and functions of hedging. Specific words like "can" were problematic in that there were instances when they were not used as hedges. This grey area made it challenging to agree on when the word was actually being used as a hedge. An even more challenging aspect of coding came in determining the functions of hedging. The boundaries between how hedges were used could be quite ambiguous and so it required a lot of discussion as to what the actual function of the hedge was. These issues are things that must be expected when dealing with hedging because its definitions and markers are so fluid.

So during the process of analysis, the selected co-rater analyzed the data as well and the results were compared to the point where agreement of more than ninety-seven percent was reached to ensure inter-rater reliability. This co rater operated from the list of forms and functions that were taken from Hyland (1996) and adapted for the specifics for spoken academic discourse.

3.6 Ethical Issues

Conducting the present study led to a consideration of specific ethical issues that needed to be addressed. Firstly, it was important to get consent for all the data that was collected. For the MICASE corpus consent was already given and the corpus is in a public domain. However, for the Malaysian corpus, both the candidates and the panel members were approached to give consent for the recording of their defense. This consent was given with the understanding that the data would only be used for the present study and that the anonymity of the respondents would be maintained. They were also given a form to withdraw their consent from the project. This same manner of receiving consent also applied for faculty members who were interviewed for the present study since those faculty members were not those already included in the panels.

3.7 Conclusion

The present chapter looked to outline the methods used to carry out the aims of this study. It discussed the overall research strategy and how the instruments would be used to collect data suitable for an in depth analysis. What follows in the presentation of my coding criteria in the next chapter represents the development of an approach that is more detailed, more rigorous and, hopefully, more context- and purpose-sensitive. The coding criteria are derived mainly from Hyland's (1996). Evidence will be provided, that is, examples from the text samples, as a method of argument in building the coding criteria. The hope is that the quality of the approach will provide better analyses and a standard that will facilitate comparability across cultures and areas and possibly disciplines.

CHAPTER FOUR

CODING

4.0 Introduction

The purpose of the present chapter is to mark out the specifics of the coding in order to clearly show how the data collected will be analyzed. This will begin with an introduction into the larger

framework that informed the system of coding taken from the work of Hyland (1996, 1998). This will flow into a discussion about how that framework will be adapted to fit the specific nature of spoken discourse. The chapter will conclude by marking out the specific hedging forms that will be drawn out from the raw data and will give examples of how those forms of hedging actually work to hedge.

4.1 Building a coding framework and parameters

In order to mark out the various functions of hedging in the Malaysian context, it is important to establish certain parameters that the current study will work within. Hedging, as previously established, can be ambiguous and subjective. This means that it is critical to establish the way that this study will approach an analysis of hedging. The specific forms of hedging chosen for this study will be clearly marked out and those choices will then be justified considering the contextual parameters of the study. The choices of which forms of hedging will be coded in the present study leads directly to the kind of observable functions of hedging in the corpus and so this must be spelled out.

4.2 The foundation

The foundation for the analytical strategy of this study is set on Hyland (1996, 1998) and his comprehensive work on the pragmatic analysis of hedging. He lays out a set of the possible forms of hedging and how they correspond to certain functions of hedging. A complete chart summarizing the forms of hedging and their corresponding functions can be seen in Figure 4.1.

<table>
<tr><td>

Accuracy Oriented Hedging

Attribute Type

Verbs

1) Precision Adverbs:

    a. content disjuncts

    b. style disjuncts

    c. downtoners

Reliability Type

1) Epistemic Lexical Verbs

2) Modal Verbs

3) Epistemic Adjectives

4) Epistemic Nouns

5) Content disjuncts

6) Limited knowledge

</td><td>

Writer Oriented Hedging

1) Epistemic Lexical Verbs

    a. judgmental

    b. evidential

2) Impersonal expressions

    a. passive voice

    b. abstract rhetors

    c. empty subjects

3) Modal Verbs

    a. thematic epistemic device

    b. attribution to literature

4) Impersonal Reference to..

    a. method

    b. model

    c. experimental

</td><td>

Reader Oriented Hedging

1) Epistemic Lexical Verbs

    a. judgemental

    b. deductive

2) Personal Attribution

3) Personal reference

    a. methods

    b. model

4) Assumed shared goals

5) Hypothetical

    a. conditionals

6) Involve the Reader

    a. direct questions

    b. refer to testability

</td></tr>
</table>

Figure 4.1 List of Hedging Forms

Source: Hyland (1996, 1998)

Figure 4.1 shows the entirety of Hyland (1996, 1998)

framework regarding hedging. A few considerations must be taken into account regarding this chart. First, it is taken specifically from a work on hedging in academic scientific writing. Since the present study is looking at spoken hedging, only a selection of the forms in this framework were chosen as they are most representative of spoken hedging. A discussion of how the selected forms work as hedges will come later in the present chapter.

This chart serves as the framework for the analysis of the present study. It shows the various forms that hedging can take and what functions they have in that sense. This chart has been used by many others in their conceptualization of hedging including Tan and Chan (2008) and their analysis of hedging in Malaysian research articles.

The present study is looking to both identify and understand the nature of hedging in Malaysian doctorate defense. This means that the present study should go beyond just identifying hedges and finding how often they are used. When hedges are found and the incidence of their use is tallied, the next step is to understand how those hedges are used and what the defendants are looking to accomplish by using them. This is where it becomes necessary to understand the various ways that speakers use hedges. Again, Hyland (1996, 1998) provides the basis to establish what functions hedges actually accomplish as the speaker approaches a proposition being made. This can be seen here in Figure 4.2.

Type	Function
Reader Oriented	Hedges expression to gain reader acceptance of the proposition
Reliability Hedging	Hedges the extent to which the proposition accounts for the phenomenon
Attribute Hedging	Hedges correspondence of the proposition to reality
Writer Oriented	Hedges writer commitment to the proposition

Figure 4.2. Functions of Hedging
Source: Hyland, (1998)

The figure above fits into the present discussion about the framework of the forms and functions of hedging as laid out by Hyland (1996, 1998). This works to provide a good overall baseline for what hedging does and what it actually looks like. However, since the context for the present study is specific and different than other contexts, the framework must be adapted to analyze hedging specifically in Malaysian spoken academic discourse.

There are a few different aspects that needed to be modified to see this framework apply to the hedging functions in the genre of PhD oral defense. In the original framework, writer oriented hedging referred to the author or producer of the work and how they mitigated their connection to a specific claim being made. For the present study it must be understood that there is still an author

or producer of language but in the context of oral defense, the author is a speaker and not a writer, So in the present study, writer oriented hedging is adapted to speaker oriented hedging but it fulfills the same function of hedging. Similarly, the function of reader oriented hedging must be adapted to listener oriented hedging for this study. The function itself remains the same where the hedge is looking to maintain the personal relationship with the audience by hedging the claim. However, in the context of oral defense, the audience are not readers but rather listeners and so reader oriented hedges are adapted to listener oriented hedges.

4.3 Parameters Explained

Having discussed all the forms and functions that exist, it is important to clearly mark out what forms and functions will be chosen for the present study. The goal at the end is to develop a greater understanding of how and why Malaysian speakers hedge the way they do in PhD oral defense. Because this is the goal, the functions of hedging become extremely important because they show what the speaker is looking to accomplish by hedging. This leads the present study to look for all the functions of hedging in Malaysian PhD oral defense. So attribute hedging, reliability oriented hedging, speaker oriented hedging, and listener oriented hedging are all going to be addressed in the study. In order to see the functions of hedging, we must identify the hedges themselves by marking out the forms of hedging that exist. These forms, as previously mentioned, correspond to different functions of hedging and can point us to see how hedges are used in the defense.

For the present study, the following forms were chosen to mark out hedging seen in Malaysian and American hedging in doctorate oral defense: modal verbs, epistemic lexical verbs (personal attribution comes alongside these), epistemic likelihood adverbs, and epistemic adjectives. These

forms were taken from Hyland (1996.1998) and were chosen because they are the most pervasive in spoken discourse or specifically in oral defense. Once the forms are identified in the corpora they can be matched with the corresponding function of hedging. This must be done with an interrater to keep ensure reliability.

If a modal verb is identified to be a hedge, there are two functions of hedging that it can perform. A modal verb can operate to mitigate the reliability of a claim and thus be a reliability hedge or it can work to downplay the speaker's connection to a claim and be a speaker oriented hedge. Epistemic lexical verbs can point to three out of the four different functions of hedging. Epistemic lexical verbs can be reliability hedges if they look to address how reliable the claim is, speaker oriented hedges if they look to diminish the connection of the speaker to the claim, or listener oriented hedges if they are looking to give ground to the audience to build interpersonal rapport. Again, this makes an interrater necessary as the decision must be made as far as what that verb/hedge is looking to accomplish. Epistemic likelihood adverbs are mostly corresponding to attribute hedges where they are used to describe the specifics of a claim made to hedge against inaccuracy. Epistemic adjectives are connected to reliability hedges which hedge by discussing how reliable a claim may be.

Once these forms of hedging are identified in the corpus and are decided to actually be hedges, then the decision must be made as to what function of hedging they are actually looking to accomplish. The end goal of this process is to identify what words Malaysians choose to hedge and thus what they are looking to accomplish by hedging in the genre of PhD oral defense.

4.4 Parameters in view of Context

The context of this study is not the same as that of Hyland (1996, 1998) whose work looked mostly at academic written discourse. This means that some work has to be done to apply his holistic framework to the specifics of the present analysis. This study is looking at spoken oral defense and thus spoken discourse versus written discourse. The difference between speaking and writing is fundamental to the use of language and thus it must be considered in this analysis of hedging. The hedging seen in writing takes place in a different context than in spoken discourse. There are different realities facing a speaker as they are relating their topic to individuals who are actually present and this must be accounted for. The interpersonal aspect of speech acts changes the dynamic of how language is employed because the audience is able to directly and immediately respond versus a reader who cannot. The speech act can also be employed to meet the need of a specific situation. In written language, the author must consider the diverse group of readers who will see their work. This can change the use of hedging because it means that the author has to address the whole spectrum of how the reader will respond to the claim they are making. However, in the speech act, the speaker may have more of an ability to specify their claims as they are related to the individuals they are speaking with (Hyland 1996). Biber and Barbieri (2007) continue to outline the difference between written and spoken registers in their work on lexical bundles in university discourse. They argue that the communicative purposes of spoken and written discourse is, in fact, different and thus the specific lexical bundles are markedly different between the two registers.

So for the present study, the lexical forms of hedging that were chosen for analysis were narrowed down to those that appear commonly in spoken data. These were drawn out to ensure that the analysis would take into account the specific nature of spoken academic discourse.

4.4.1 Modals

Modals have been identified as a major marker of hedging and so it will be extremely important to bring modal auxiliaries into the framework of the study. As Hyland (1998), Biber (2006), and Recski (2005) proposed, the use of modal auxiliaries is more common in spoken discourse than it is in written discourse. For instance, a candidate could say,

*"We believe that this variable **could** be playing a role in the results we see."*

In this example, the modal verb "could" is being used to downplay their certainty in the effect of the variable rather than committing completely to that hypothesis. Biber (2006) includes another example of modal verb usage in hedging:

"It **may** therefore be in the interest of a politician to adopt positions that are against the interest of the typical voter..."

In this example, the modal verb "may" is being used to express the possibility that the best interest of the politician is to choose a stance other than the typical voter.

4.4.2 Epistemic Lexical Verbs

Epistemic lexical verbs are hedges that will also be included in this study and are typically the most common form of hedging. An example of an epistemic lexical verb used to hedge is,

*"We **believe** that our data supports the conclusion that…".*

Here the lexical verb **believe** is epistemic in nature in that it looks to soften commitment by showing that the support provided by the data of the conclusion is in the belief and estimation of the researcher and may not reflect the unquestioned truth. Another example of an epistemic lexical

verb being used to hedge is the lexical item "think." Recski (2005) in his research on stance in oral defense found that this word was the most common lexical verb employed to diminish commitment. An example of this type of hedging could be:

*"I **think** the literature shows that hedging is common in spoken academic discourse."*

4.4.3 Precision Adverbs

In his discussion on University language, Biber (2006) shows that stance adverbs are common in spoken discourse. However, he shows that style disjuncts for example *generally*, *typically* and attitude disjuncts like *hopefully* and *sadly* are not common in spoken discourse. This means that the present study will look at likelihood adverbs (i.e. possibly, probably) that are both epistemic in nature and also common in spoken discourse. There are various terms connected with these forms but for the present study they will be called epistemic likelihood adverbs. An example of how an epistemic likelihood adverb can be used to hedge is,

*"these results show that our data **probably** was effected by…".*

In this example, the adverb is being used to describe the results and what likely had an effect on them instead of making a guaranteed conclusion. Biber (2006) gives greater depth by adding examples of likelihood adverbs being used to mark stance. One such example is,

*"Now these schools might **possibly** be able to afford this special fund."*

Here, the adverb "possibly" is hedging the assumption that the schools will be able to afford the fund. In this way it works to communicate that there may be some doubt as to whether the claim is likely to ring true.

4.4.4 Epistemic Adjectives

Stance adjectives will also be narrowed down using this same criteria excluding style adjectives and attitude adjectives. So this narrows down the scope to epistemic likelihood adjectives. An example of an epistemic likelihood adjective would be

> *"it is **probable** that these results will be observed".*

Here the adjective is being used to show that a certain outcome is expected but not guaranteed. Biber also conducted a study alongside Barbieri (2007) looking at lexical bundling in spoken and written registers. They found that complex noun phrase features were not common in spoken registers and so because of this, the present study will exclude epistemic nouns from the analysis. They also found that in university spoken registers there was a marked absence of impersonal styles and so impersonal expressions and impersonal references will also lie outside the scope of the present study.

4.4.5 Exclusions form Corpus

Direct questions are salient aspect of oral defense and they will also be included in the study. However, not every question works to hedge. Hyland (1996) points out that in research articles direct questions are used by the author to establish the credibility of the reader as a member of the academic community and thus someone who is able to provide insight into the question asked. For oral defense, questions are used most often by the panelists to clarify the nature of the research or to assess the candidate's knowledge about the topic. These questions are not really used to hedge.

However, in some instances the candidates ask questions of the panel to gain greater understanding about research and in many cases this works to promote the authority of the panel as well as creating acceptable research. An example of this can be seen here form the Malaysian corpus from a defense on mechanical engineering

"The part here is normally exposed to the compression only. And between them is shear loading. So maybe because it is the combination of those loadings so it is leading to failure. I think so... Is it logic?"

The candidate is discussion technical aspects of her research but she follows it up with a question as to whether her position makes sense. She may be trying to make sure that she is on the right track but she is also deferring to the panel members to make that decision.

Hyland (1996) found questions to be quite pervasive in written research articles. However, in his study on university language, Biber (2006) did not find direct questions to be salient in the marking of stance in the university spoken register. This leads the present study to exclude direct questions from this research on spoken academic research.

4.5 Conclusion

The present chapter looks to clarify the framework of coding that was used to process and analyze the data taken from doctorate oral defense in both the Malaysian and American context. It looked to spell out the ways that the corpora will be broken down and what specific lexical items will be drawn out from the data in order to look specifically at lexical hedging. As stated in the previous chapter, once these coding parameters are applied to draw out specific lexical items associated with hedging, the analysis will follow up by looking at each individual lexical item to determine

whether it is in fact a hedge. This will be done using Hyland's (1996,1998) framework of the functions of hedging that were spelled out in the present chapter. This chapter on clarification of coding will be followed by spelling out the findings of the analysis and a discussion about how culture may be influencing the use of hedging observed in the study.

CHAPTER FIVE

Findings and Discussion

5.0 Introduction

The present chapter has been formulated to present the findings for the current research. It begins by mapping the overall picture of the use of hedging in both the MICASE and the MCD corpora. The first step is to show the frequency of the various forms of hedging seen in both corpora. This flows into the findings for the normalized frequencies of the various functions of hedging seen in each of the corpora. Next, this chapter also presents how the frequencies of the forms and functions of hedging are different not only between the MICASE and MCD groups but also between different disciplinary groups as well as between the candidates and panel members in the defenses.

5.1 Overall Frequency Analysis of Hedging in MICASE and MCD

5.1.1 Frequencies of Corpora Overall

The first aim of the study was to understand the nature of hedging in Malaysian academic spoken discourse and specifically the genre of PhD candidature defense. This endeavor began by way of comparison with American spoken academic discourse. Looking into the overall frequency of hedging in MICASE and MCD corpora as the initial step of the analysis is important as it informs us about general patterns in the words chosen by Malaysians to hedge and what functions of hedging those words are carrying out. The study found that, overall, the incidence of hedging was larger in the American doctorate defense than in Malaysian candidature defense. The amount of hedging in the MICASE data yielded a normalized hedging frequency of 24.7 hedges per 1,000 words. The Malaysian candidature defense data contained 18.3 hedges per 1,000 words. The difference in hedging frequency between the two corpora can be seen in Figure 5.1.
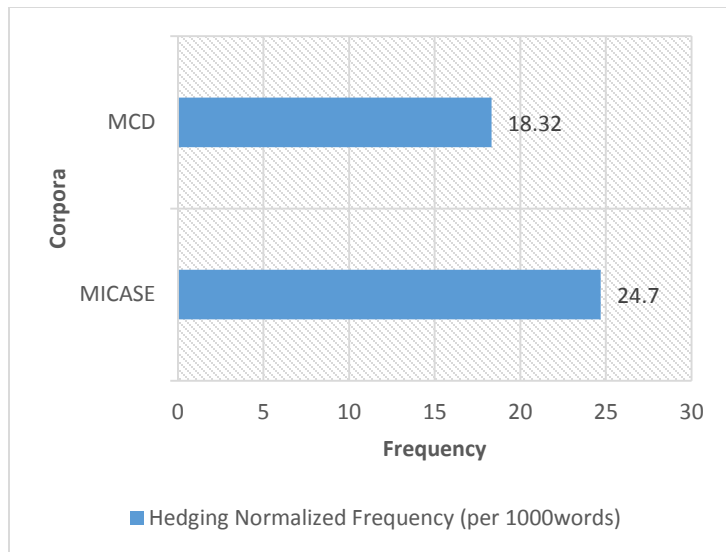
Figure 5.1: Overall Hedging Frequency in MICASE and MCD

5.1.2 Hedging Frequencies by Discipline in MICASE and MCD Corpora

In order to understand the different cultural forces at work in the corpora, it is important to draw out comparisons in hedging use between the two corpora by pointing out the amount of hedging used per discipline in each corpus. Figure 5.2 shows the comparison between disciplines in terms of the normalized frequency of hedges per 1000 words.

Figure 5.2 Hedging Frequencies by Discipline

Figure 5.2 shows that hedging is employed most in the social sciences in both MICASE and MCD corpora. However, in the Malaysian candidature defense, one can see that the difference in hedging use between the disciplines is not nearly as great as it is in the MICASE corpora. In MICASE the difference between sciences and social sciences is 18.2 hedges per 1,000 words while in the MCD corpora the difference between hedging occurrences in sciences and social sciences is 1.2 hedges per 1,000 words.
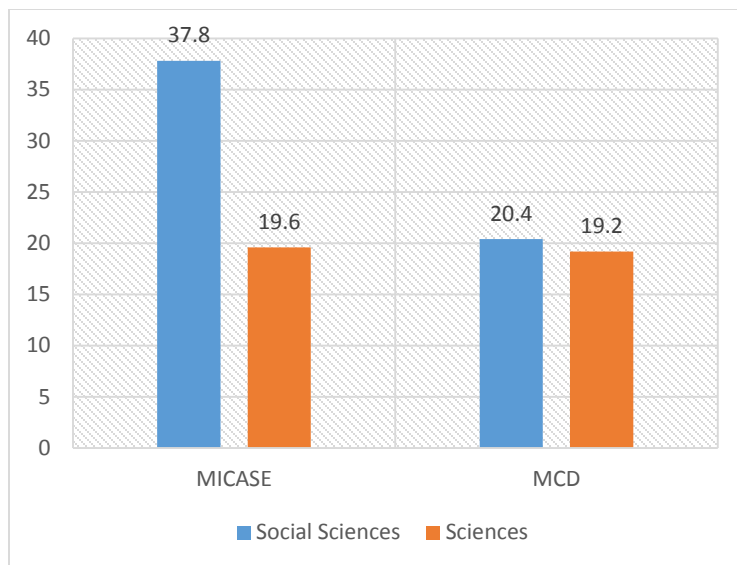
5.1.3 Frequencies of hedging by Candidates and Panels in MICASE and MCD Corpora

At this point, both the MICASE and MCD corpora have been addressed as single units. However, it is important to understand that in each corpus there are two groups of speakers present (See Table 3.1, pg.43). There are the candidates themselves and the panel that is responsible for evaluating their research. In order to expand the understanding of hedging use in the genre of PhD oral defense the decision was made to address the functions and forms of both the PhD candidates

but also the panelists. Doing this allows us to see not only the general patterns in hedging for the whole genre of PhD oral defense but to see it at a more in depth level for each speaker. Since the current study is looking to see cultural realities that influence hedging in Malaysian PhD oral defense, there is a need to see if there are differences in the ways that different speakers in that context hedge.   The overall difference in the amount of hedging employed between the candidates and the panel members can be seen in Figure 5.3.
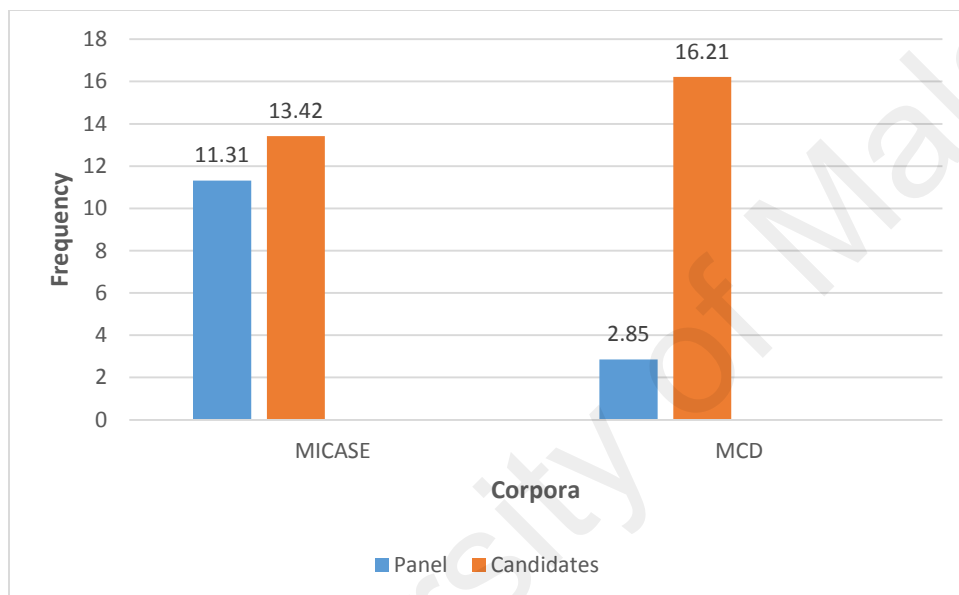
Figure 5.3 Overall frequency of hedging by Candidates and Panel

One apparent finding from Figure 5.3 is that Malaysian candidates hedged the most out of all the groups with 16.21 hedges per 1,000 words whereas the Malaysian panel hedged the least in the defense with only 2.85 hedges per 1,000 words. In the MICASE data the difference in hedging use between the panel and the candidates (2.11 hedges per 1,000 words) was not nearly as great as it was between the two Malaysian groups which is 13.36 hedges per 1,000 words). Another obvious finding from Figure 5.3 is that in both corpora, the candidates used hedging forms more than the panel members.

The next step in developing a grasp on Malaysian hedging was to understand the specific discursive aspects that characterized Malaysian hedging versus those found in the American context i.e. the forms and functions of hedging.

5.2 Frequency and Analysis of Hedging Forms in MICASE and MCD

The present study looked to take a frequency of the incidence of hedging devices used in both the MICASE and MCD corpora in order to see the extent of how hedging forms are used in MICASE and MCD. The section will show, in depth, the findings taken from the MICASE corpus then from the MCD corpus about which forms the speakers chose to use to hedge.

5.2.1 Hedging Forms in MICASE

Table 5.1 shows the multiple forms of hedging that were seen in the MICASE data as well as the overall word count of the MICASE corpus and the overall amount of hedging seen in the data.

Table 5.1: Frequency occurrence of hedging forms in MICASE (normalized frequencies per 1,000 words)

Hedging Forms/	Modal Verbs	Epistemic Lexical Verbs	Epistemic Adjectives	Epistemic Likelihood Adverbs
	Would = 3.98 Could = 1.7 should = .4 Might = 1.0 May = .99 Can = 3.64	Think = 2.25 Thought = .44 Expect = .23 Mean = 4.94 Believe = .07 Predict = .23 Estimate = .21 Assume =.16 Suggest = .21 Calculate = 0 Felt = .02	Possible =.23 Probable = .02 Unlikely = .16 Likely = .21 Approximate = 0 Potential = 0	Probably = .51 Possibly = .14 Potentially =0 Apparently = .05 Quite = .42 Normally =.07 Slightly = .02 Rarely =.02 Occasionally = .05 Almost = .32 Virtually = .07 Relatively =.14 Generally = .02 Actually =1.8
Total	**11.7**	**8.76**	**0.6**	**3.62**
Total Normalized Frequency 24.7	*MICASE Overall Word Count 43,150 words*			

It can be seen from Table 5.1 that there were about 23.2 hedges per 1,000 words in the corpora.

The highest frequency of hedging forms in the MICASE corpus is seen in modal verbs that were utilized 11.7 times per 1,000 words. The lowest used form of hedging in MICASE are epistemic adjectives used only .6 times per 1,000 words. In the MICASE corpus, the epistemic lexical verb "mean" following personal attribution is the most common form of hedging seen 4.9 times per 1,000 words followed by "can" used 3.64 per 1,000 words and "would" used 3.98 times per 1,000 words. "Generally" and "probably" were used the least only one time. In the expression of modal verbs to hedge, "would" is employed 3.98 times per 1,000 words and is the most commonly utilized form of modal verbs. Here "mean" is the most common expression of epistemic lexical verbs seen 4.9 times per 1,000 words. The word "possible" is seen .23 times per 1,000 words

and is the most common adjective in the corpora while "probably" is the most common adverb used employed .51 times per 1,000 words.

5.2.2 Hedging Forms in MCD

In order to compare hedging use between the American context and the Malaysian one, this study also attempted to find the overall use of hedging in the Malaysian context. It was important to see the different forms that Malaysians chose as hedging devices in their doctorate candidature defense. Table 5.2 shows the frequencies for the various forms of hedging in the Malaysian corpus as well as the overall word count and the overall frequencies of hedging observed in the data.

Table 5.2: Frequency of Hedging Forms in MCD

Modal Verbs = 8.5	Epistemic Lexical Verbs = 3.7	Epistemic Adjectives = .3	Epistemic Likelihood Adverbs = 7.43
Would = .82 Could = .22 should = .82 Might = .37 May = .9 Can = 4.6	Think = 1.72 Thought = .07 Expect = .07 Mean = 1.35 Believe = 0 Predict = 0 Estimate = 0 Assume = .15 Suggest = .37 Calculate = 0 Felt = 0	Possible = .07 Probable = 0 Unlikely = 0 Likely = 0 Approximate = 0 Potential = .22	Probably = .07 Possibly = 0 Maybe = 1.12 Apparently = 0 Quite = .37 Normally = 2.2 Slightly = .07 Rarely = 0 Occasionally = 0 Almost = .15 Virtually = 0 Relatively =0 Generally = .07 Actually = 4.3 Potentially = .07
Hedging Total 18.32	**MCD Word Count 13,381 words**		

Normalized frequencies (per 1000 words)

From Table 5.2 it can be seen that the total amount of hedging in the Malaysian corpora is about 18.32 hedges per 1,000 words. The highest frequency of hedging forms in the MICASE corpus is the epistemic likelihood adverb "actually" which is seen 4.3 times per 1,000 words. Many of the forms seen in the MICASE corpus were not utilized at all in the MCD corpus. The most common lexical form of hedging in the Malaysian context is "can". It is seen 4.6 times per 1,000 words in the corpus far above any other modal verb. The word "actually", which is seen 4.3 times per 1,000 words, and "normally" which shows up 2.2 times per 1,000 words in the corpus follows as the next most common form of hedging in MCD. "Can" and "actually are the most common modal verbs and adverbs respectively, while "think", following personal attribution, is seen 1.72 times per 1,000 words and is the most common form of epistemic lexical verbs. "Potential" is the most common adjective seen in the corpus at .22 times per 1,000 words. So it is obvious to see that epistemic adjectives were not common forms used to hedge in the MCD corpus.

5.2.3 Comparing Hedging Forms by Discipline

5.2.3.1 Hedging Forms By Disciplines in MICASE

One goal of the present study was to look at how the use of hedging in PhD oral defense was different based on the discipline of study that the defense occurred in. Figure 5.4 shows the normalized frequencies of different hedging forms and the differences between sciences and social sciences in the forms chosen to hedge. These figures were taken for the MICASE Corpus.
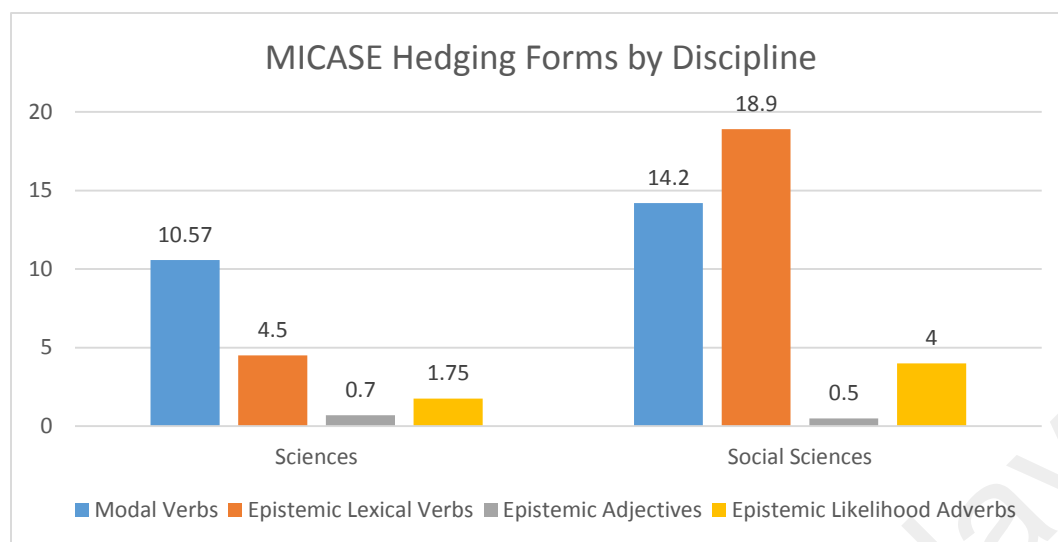
Figure 5.4 MICASE Hedging Forms by Discipline

-Normalized Frequencies per 1,000 words

From Figure 5.4 it can be seen that in the sciences modal verbs were employed the most at 10.57 times per 1,000 words. Epistemic Adjectives were utilized the least in the sciences at .7 hedges per 1,000 words. In the social sciences, epistemic lexical verbs were used to hedge the most at 18.9 times per 1,000 words. Similarly to the sciences, epistemic adjectives were the least employed form of hedging used in the social sciences at .5 times per 1,000 words.

5.2.3.2 Hedging Forms By Disciplines in MCD

To reach the aforementioned goals of the present study the differences in hedging forms by discipline had to be addressed in the Malaysian corpus as well. Figure 5.5 shows the difference in the utilization of hedging between sciences and social sciences in the Malaysian corpus.
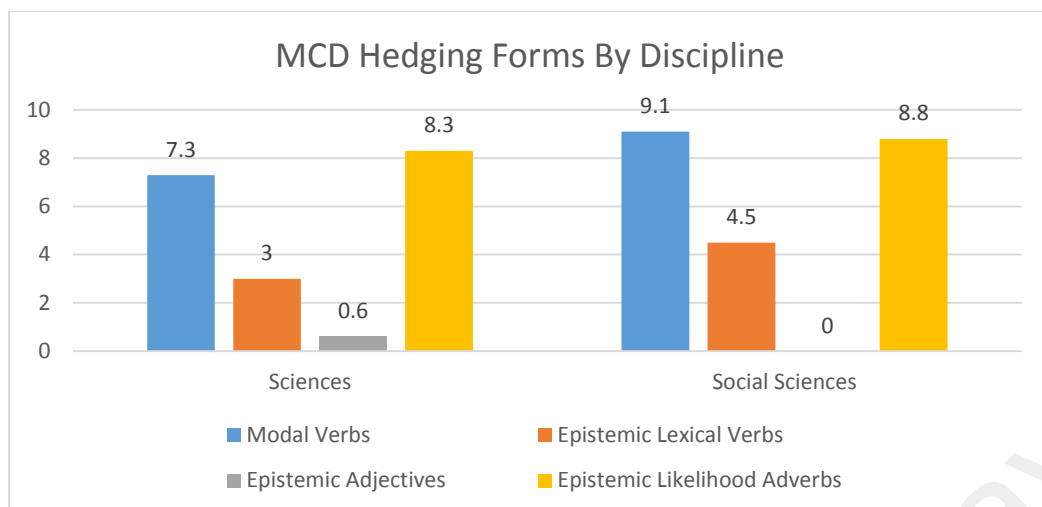
Figure 5.5 MCD Hedging Forms by Discipline

-Normalized Frequencies per 1,000 words

It can be seen from Figure 5.5 that, in the sciences, epistemic likelihood adverbs were the most often used form of hedging at 8.3 times per 1,000 words. In the sciences modal verbs were also used more often at 7.3 times per 1,000 words. Epistemic adjectives were used as a form of hedging the least in the sciences at .6 times per 1,000 words.

In the social sciences, modal verbs were the most often used form of hedging seen at 9.1 times per 1,000 words. Modal verbs were closely followed by epistemic likelihood adverbs at 8.8 times per 1,000 words. Similarly to the sciences, epistemic adjectives were the least utilized form of hedging and in the social sciences they were not utilized at all.

5.2.4 Comparing the Hedging Forms used by Candidates and panel Members

In the MICASE corpus there is a difference in the hedging forms chosen to hedge between the speaker and the candidates in the defense. Figure 5.6 shows this difference.
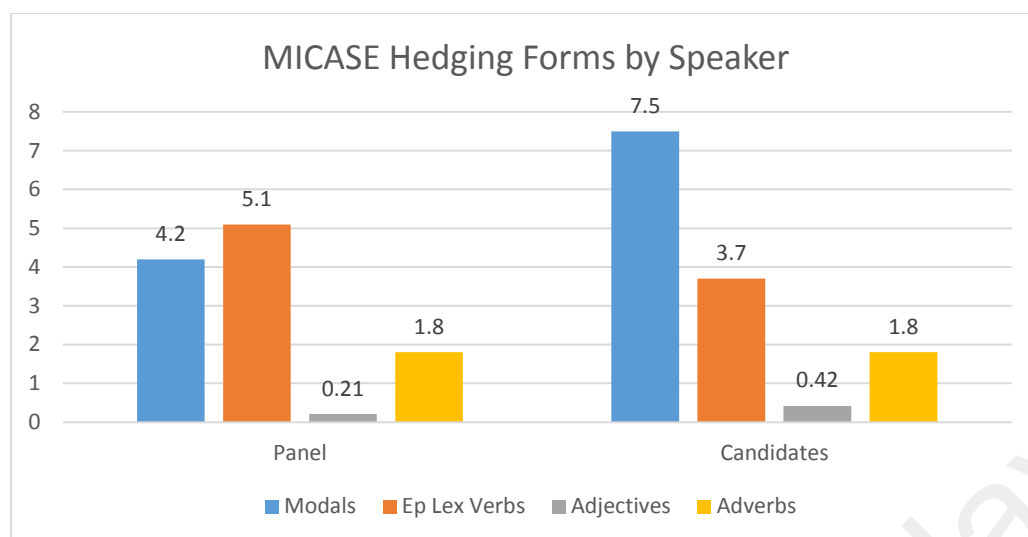
73

Figure 5.6 Hedging Forms by Speaker in MICASE

For the candidates, modal verbs are the most used form of hedging whereas the most employed form of the panelists was epistemic lexical verbs like 'think" or "mean". It is interesting to see that the use of epistemic adjectives and adverbs is quite similar between the panel and the candidates in the MICASE corpus. However, the difference between the use of modals and epistemic lexical verbs in the panel and candidates is a marked difference in the corpus. For the panelists, the use of modal verbs and epistemic lexical verbs was different but the amount of difference was not nearly as much as in the speech of the candidates where the gap between how much they hedge using modals verbs and epistemic lexical verbs is quite a bit larger.

The forms of hedging chosen by the speakers in the Malaysian corpus show an even greater of difference in hedging use between the panelists and the candidates. These differences are spelled out in Figure 5.7.

MCD Hedging Forms by Speaker
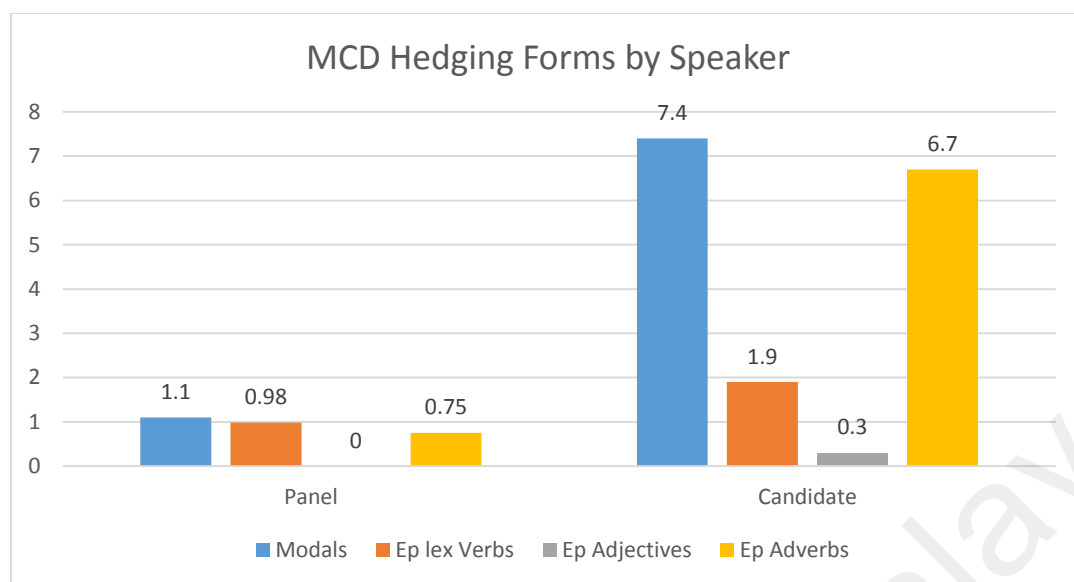
Figure 5.7 Hedging Forms by Speaker in MCD

When looking beyond the obvious fact that there is more hedging in the candidates' speech, some enlightening realities in hedging use start to emerge. In the panel there was less of an emphasis on hedging using one specific form. The panel seemed not to have as much of a preference for one form of hedging over another as much as the candidates did. The candidates obviously chose epistemic adverbs and modal verbs to hedge. Modal verbs were the most common hedge forms chosen by both speakers and in both groups epistemic adjectives like "probable" or "possible" were the least commonly used forms of hedging.

5.3 Frequency and Analysis of Hedging Functions in MICASE and MCD

It is important to look at the frequencies of hedging utilized not only in the forms of hedging seen in the corpora but also in the functions of hedging seen in the corpora. Figure 5.8 shows the frequency of the specific functions of hedging in the MICASE and MCD corpora.

Figure 5.8: Hedging Functions in MICASE and MCD

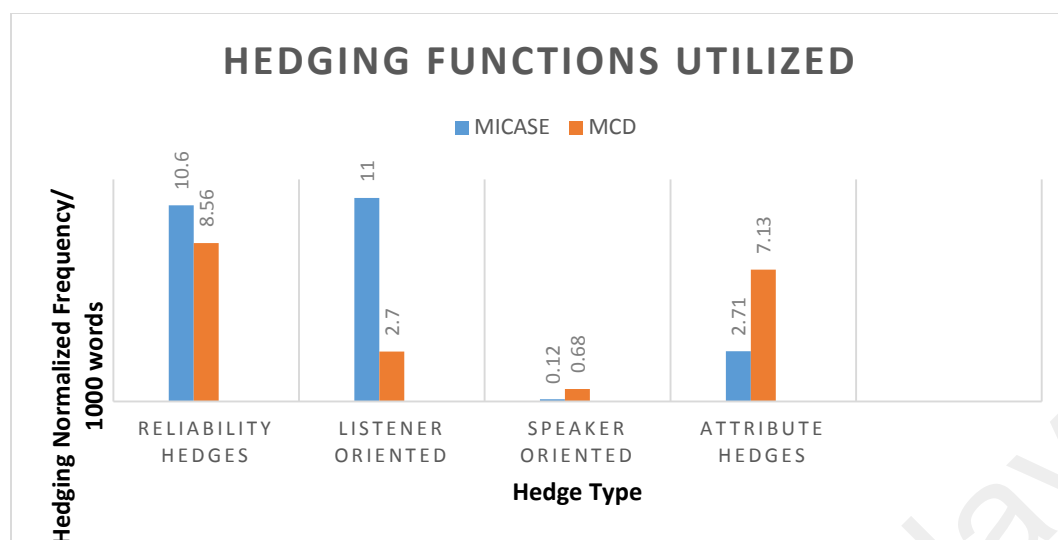The data shows that the use of reliability hedging is quite high and consistent between the MICASE, corpus where the normalized frequency is 10.6 per 1,000 words, and the Malaysian corpus that sees reliability hedges at ten per 1,000 words. For listener oriented hedging, it can be seen the reverse is true. There is a major discrepancy between the two corpora. In the MICASE corpus, listener orientated hedging is at 11 hedges per 1,000 words versus the Malaysian corpus where it is only at 2.7 hedges per 1,000 words. Speaker oriented hedging was not utilized very much in either corpus but the Malaysian side utilized that function of hedging more often at 0.68 times per 1,000 words versus the 0.12 times per 1,000 words for the MICASE corpus. Attribute hedges were used in both corpora but, again, were utilized 7.13 times per thousand words in the Malaysian corpus over the MICASE at 2.71 times per thousand words.

5.3.1 MCD Hedging Functions

As the focus of the present study was to understand the use of hedging in the Malaysian context it was obviously necessary to look at the functions of hedging that came out in the oral candidature defenses. The intention was then to look at the hedging functions that arose from Malaysian

candidature defense and compare them with the MICASE data in order to see the specific purposes that Malaysians were looking to gain from hedging devices. Table 5.3 shows various functions of hedging that were drawn out of the Malaysian data.

Corpus Word Count = 13,321		-Normalized frequency (per 1000 words)	
Function	Engineering	Linguistics	Total
Reliability Hedges	7.6	10.7	**8.6**
Listener Oriented	3.3	2.7	**2.7**
Speaker Oriented	.14	1.3	**.7**
Attribute Hedges	6.8	7.8	**7.1**
Total	**17.8**	**20.4**	**20.7**

Table 5.3 Hedging Functions in MCD Sub Corpora

The table shows that, in the MCD side of the corpus, reliability hedging was the most common function utilized in both disciplines for a total of 8.6 times per 1,000 words in the corpus. Attribute hedges were the second most used function of hedging at 7.1 times per 1,000 words. It becomes apparent how little speaker oriented hedges are utilized in comparison to other functions of hedging in the MCD in being used only .7 times per 1,000 words. It can be seen from the table that

the Social Science discipline utilized hedging a bit more at 20.4 times per 1,000 words versus the Science discipline showing hedges 17.8 times per 1,000 words.

5.3.2 Hedging Functions by discipline in the MICASE Corpus

In the MICASE corpus it can be observed a difference in the functions that hedging takes between the sciences and social sciences. Figure 5.9 shows the breakdown of frequencies by discipline in each of the four functions of hedging.
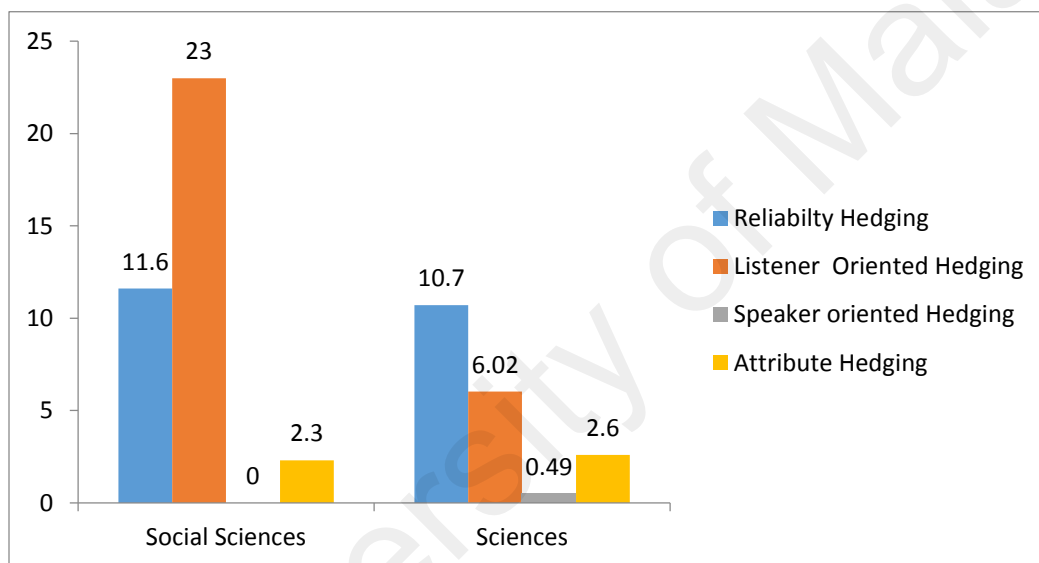
Figure 5.9: MICASE Hedging Functions by Discipline

From Figure 5.9, it can be seen that the normalized frequency of listener oriented hedging is far greater in the social sciences at 23 times per 1,000 words than in the sciences at 6.02 times per 1,000 words. It also shows that reliability hedging is pretty consistent between the two disciplines. In sciences the normalized frequency for reliability hedging is 11.6 times per 1,000 words while in social sciences it is 10.7 times per 1,000 words. It can be seen that in both disciplinary contexts, the use of speaker oriented and attribute hedging is low and extremely low for speaker oriented

hedging which is not used at all in the social sciences and only .49 times per 1,000 words in the sciences.

5.3.3 MCD Hedging Functions by Discipline

It is also important to draw out the differences in the use of hedging by discipline in the Malaysian candidature defense context as well. Figure 5.10 shows the normalized frequency per 1000 words of the various functions in the MCD corpus.
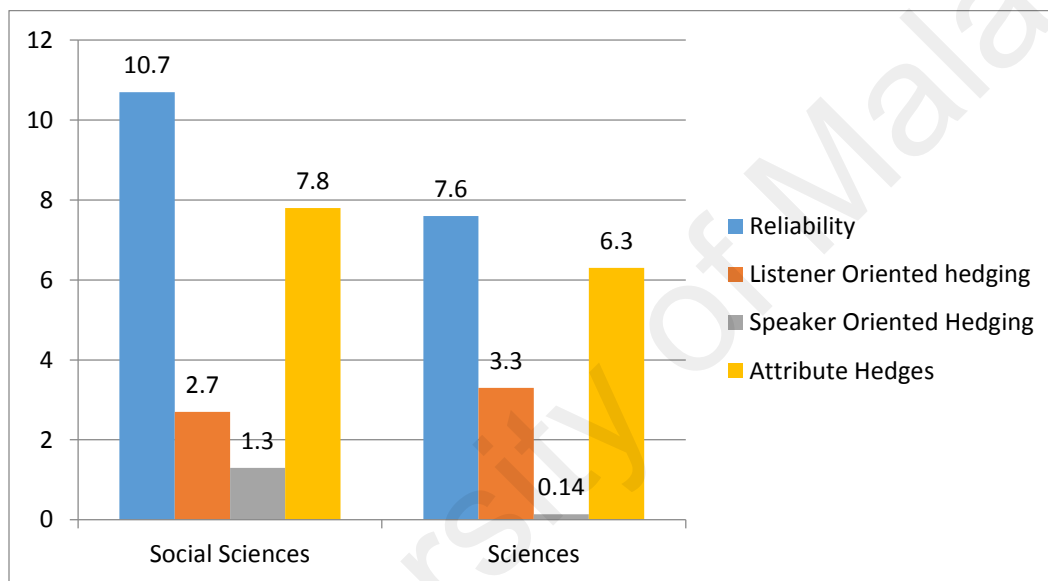
Figure 5.10: MCD Hedging Function by Discipline

From the data it can be seen that the use of reliability hedges is higher at 10.7 hedges per 1,000 words than in the social sciences where it occurs 7.6 times per 1,000 words in the corpus. The data also shows us that the use of reliability hedging and attribute hedging is more common than listener and speaker oriented hedging in both disciplinary contexts. This means that in both the sciences and the social sciences it can be observed a greater bend toward content oriented hedging versus the more interpersonal listener oriented hedging. Speaker oriented hedging was employed

the least in both the sciences at .14 times/one thousand words and social sciences at 1.3 times/one thousand words.

5.3.4 MICASE and MCD Hedging Functions by Discipline

Another level of the findings for this study were to look at the way that the corpora compared within each of the disciplines as far as the functions used to hedge. Figure 5.11 shows the breakdown of the functions employed to hedge in each of the corpora within social sciences.
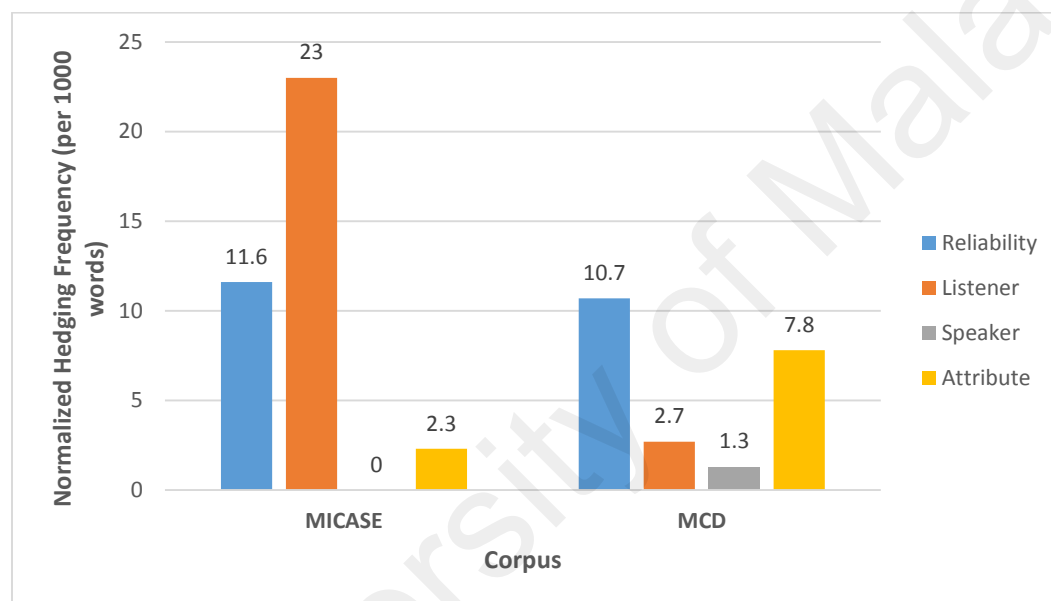
Figure 5.11: Functions of Hedging by Corpus in Social Sciences

From the findings it can be observed that within the social sciences, the use of reliability hedging is comparably high and consistent between the MICASE (11.6 times/ one thousand words) and MCD (10.7 times /one thousand words) corpora. It can be observed that speaker oriented hedging is the least utilized in the social sciences at 0.1 hedges per 1,000 words. Within social sciences the biggest differences between the corpora lies in listener oriented hedging. In the MICASE data listener oriented hedging is far and away the most utilized function of hedging at 23 hedges per

1,000 words. However, in the MCD corpus it is used at 2.7 hedges per 1,000 words. To build on this understanding with the disciplines the functions of hedging in each of the corpora within the sciences must be accounted for as well. Figure 5.9b breaks down the frequency of the hedging functions in each of the corpora all within the science discipline.
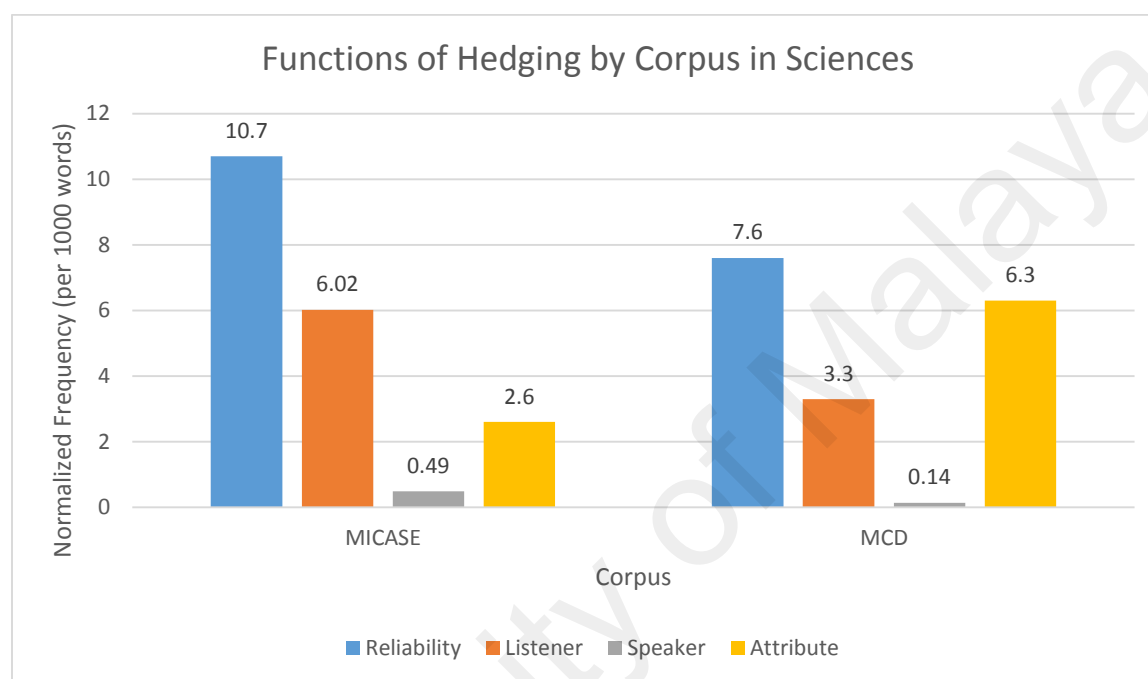
Figure 5.12: Functions of Hedging by Corpus in Science

Figure 5.12 shows that within the sciences reliability hedging was most common in both the MICASE (10.7 hedges/one thousand words) and MCD (7.6 hedges per 1,000 words) corpora. It can also be seen that listener oriented hedging was used much less in the MCD corpus at 3.3 hedges per 1,000 words versus the MICASE corpus where listener oriented hedges are used 6.02 times per 1,000 words. The difference in attribute hedging is also noticeable within the Sciences. In the MICASE attribute hedging is seen 2.6 times per 1,000 words while in the MCD corpus it is much higher at 6.3 hedges per 1,000 words.

5.3.5 Hedging Functions by Speakers in the PhD Oral Defense

As the different forms and functions in the MICASE and MCD corpora have been observed, the data in each of the corpora has also been taken into account as a whole. However, it is important to understand that in each of the corpora there are two groups speaking in the candidature defense. The speech of the candidate makes up the bulk of the defense but their presentation is followed by a question and answer time where panel members direct questions and comments toward the candidate as they analyzed their research. This portion of the defense is critical as a rich source of hedging as both the panelists and the candidates are naturally making claims and mitigating conflict in this portion. So here the data will be split to see the differences that exist between the use of hedging by the panel members and the candidates in the defense.

5.3.5.1 Hedging Functions by Candidates and Panel Members in MICASE

Figure 5.13 spells out the differences between the panel and candidates in the MICASE corpus, specifically in the functions of hedging.
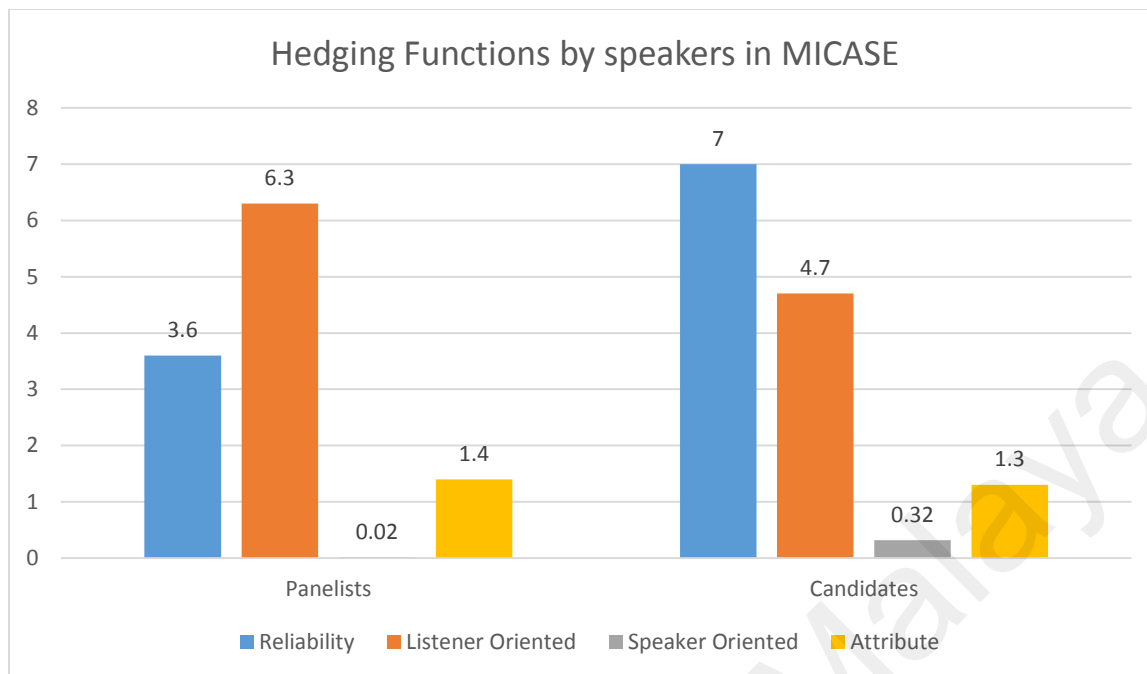
Figure 5.13 Hedging Functions by speaker in MICASE

An interesting note of difference between the panel and candidates is in their employment of listener oriented and reliability hedges. For the candidates reliability hedges were the most commonly used (7 times/one thousand words) where listener oriented hedges were the second most commonly employed (4.7 times/one thousand words). For the panelists, listener oriented hedges were utilized the most at 6.3 times per 1,000 words followed by reliability hedges at 3.6 times per 1,000 words. For both the panelists and the candidates, speaker oriented hedges were used the least at .32 times per 1,000 words for candidates and .02 times per 1,000 words for the panelists.

5.3.5.2 Hedging Functions by Candidates and Panel Members in MCD

Similarly to the previous figure, Figure 5.14 shows the difference in hedging functions by speakers but this time in the Malaysian corpus.
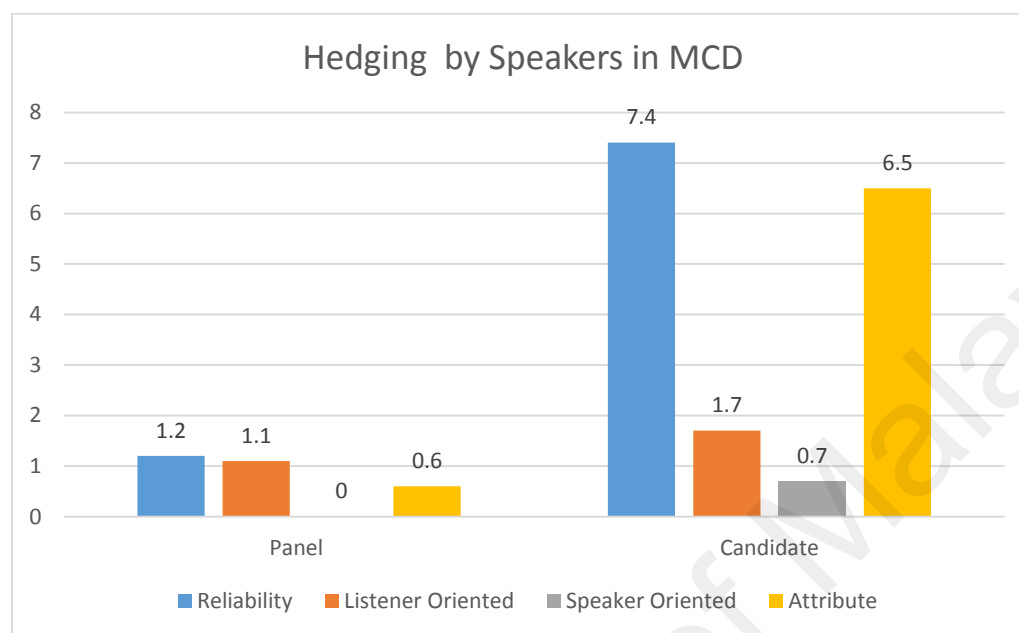
Figure 5.14 Hedging Functions by Speaker in MCD

It becomes quite obvious that overall hedges are used much more frequently by the candidates in the Malaysian corpus. Beyond this surface level reality it can be seen that both the candidates and the panelists used reliability hedges more than any other function. However, the data shows that candidates employed attribute hedges second most whereas listener oriented hedges were used the second most by the panelists. It is interesting to see that there is a complete absence of speaker oriented hedges in the panel's use of hedging. Candidates used speaker oriented hedging the least followed by listener oriented hedging as the second to least commonly used function.

5.3.6 Examples of Forms and Functions of Hedging

5.3.6.1 Examples of Hedging Forms

Another interesting difference lies in the forms chosen to hedge by Malaysian and American hedgers. In the MICASE data, modal verbs were chosen most of the time as the preferred hedging device. The forms "would" and "can" were the most common modal verbs used to hedge. Example 5.1 is an example of how modal verbs could be seen to hedge in the American Context.

Example 5.1:

*"probably a lot of other reasons too it **could** be, changes_differences in rainfall,"*

In this example the speaker is using the modal "could" as a reliability hedge to make a claim about what could be effecting the data she is presenting. She is hedging the reliability of her claim by pointing out that there is the possibility of other factors influencing the data.

Behind modal verbs, the second most popular way to hedge in the American context was using epistemic lexical verbs. The verb "mean" was the most common lexical verb chosen to hedge. Example 5.2 is another example taken from the MICASE corpus.

Example 5.2

*"its not fortuitous if we have, uh **I mean** we build a list of the states that we..."*

This example is quite common in the MICASE corpus. Here the speaker feels the need to clarify or the change their claim or how they talk about the claim. They needed to change their phrasing from "have" to "build" and the hedge gave them a way to do this without admitting a mistake.

On the other hand, Malaysian candidature defense speakers employed epistemic adverbs second most using them 6.7 times per 1,000 words. The forms "normally", and "actually" were the most common expressions of hedging represented in the Malaysian corpora. Examples 5.3 and 5.4 are examples of epistemic adverbs taken from the Malaysian corpus.

Example 5.3

*"when they tend to agglomerate, the value is **normally** close to each other."*

Example 5.4

*"When we look at feedback we are **actually** looking at opportunities for output…"*

Modals were the most common form of hedging seen in the Malaysian corpus occurring 7.4 times per 1,000 words. The word "can" was the most common modal used by Malaysian speakers to hedge. Example 5.5 is an example taken from the Malaysian corpus.

Example 5.5

*"task is important in that it **can** be taken, and crafted to generate language output."*

Epistemic adjectives were the least employed form of hedging in both corpora. The high profile of modal verbs in the data corresponds and supports many other study showing the high prevalence of modals as hedges (Hu and Cao, 2011; Biber, 2006; Hyland, 1996, 98; Vassileva, 2001).

The diversity of hedging forms was also different between the corpora. In The MICASE Corpora there was a higher degree of diversity in the forms used to hedge. Speakers in the MICASE corpus used 33 different forms to hedge in PhD oral defense. In the Malaysian data the variety of forms chosen to hedge was less diverse. Malaysian speakers chose 23 different forms of hedging in their oral defenses.

The data becomes more rich however when the incidence of hedging between the different groups of speakers in each of the corpora is addressed. In the MICASE it can be observed that the panel used hedging 11.3 times per 1,000 words while the candidates in that corpus used hedging 13.42 times per 1,000 words. In the MCD corpus things are markedly different. The panelists only used

hedging devices 2.85 times per 1,000 words while the candidates hedged 16.2 times out of one thousand words. So even though there was more hedging and more diversity of hedging in the MICASE corpus overall, it is actually candidates in Malaysian oral defense that hedge the most. It is enlightening to see that the difference in the amount of hedging between the groups of speakers in the MICASE corpus is much smaller than it is in the MCD corpus. In the Malaysian doctorate defense, the candidates hedge quite a bit more than the panelists do whereas in the MICASE corpus the gap is much smaller.

5.3.6.2 Examples of Hedging Functions

The MICASE data showed that American hedging employed listener hedges the most meaning that the interpersonal relationship between the speaker and listeners was held in high regard in the American context. Example 5.6 is an example of listener oriented hedging in the MICASE corpus.

Example 5.6

*"are close to having MATLAB simulations of what **we believe** are the dynamics for the airplanes."*

In this example the verb "believe" follows the personal attribution "we" and is working to hedge the claim that they have the simulations for airplane dynamics. By referring directly to themselves in the claim, the speaker is deferring to the panel members by giving them the opportunity to speak into a claim that is true in his estimation but maybe not in theirs.

The data also shows a strong presence of reliability hedging which directly relates to confidence in how reliable the claim is. This shows that from the present data it can be observed a sense of balance in the American use of hedging where hedges are used both in relating to claims

themselves and also the ones interacting with each other about those claims. Examples 5.7 and 5.8 are examples of reliability hedging in the MICASE corpus.

Example 5.7

*"on the other hand you **could** say that Asians become like Americans..."*

Example 5.8

*"so what you **would expect** is that, leaves would look different,"*

In both of these examples, the forms of hedging are used to hedge the reliability of the claims the speakers are making. Including "could" or "would expect" is a way of saying that these things are what the speaker believes are true based on the data but are not what can be expected a hundred percent of the time.

Malaysian hedging employed reliability hedging and attribute hedging the most throughout the corpora. This shows that Malaysians were also concerned with the content of the claims being made in the defense by both the panelists and the candidate. Example 5.9 is an example of reliability hedging in the Malaysian Corpus.

Example 5.9

*"meaning the lower proficiency **might** feel uncomfortable talking to the higher proficiency…"*

In this example the candidate is making a claim about how students will interact with each other based on her experience. By including the hedge "might" she is protecting herself if the claim is found to be incorrect by saying that her claim is a possibility and not a guarantee.

Example 5.10 is an example of attribute hedging in the Malaysian context can be seen here below taken from the science defense.

Example 5.10

>   *"**Generally** the flexural strength increase as the…"*

A key marker or attribute hedging is variability. The speaker uses this hedge in instances where they are discussing a theory or claim to hedge against something being outside of what they expect. So by adding a hedge like "generally" the speaker is able to add variation in case their assumption or claim does not work out to be true.

However, the Malaysian data saw a huge discrepancy in the amount of content oriented hedging versus more interpersonal hedging. The amount of listener oriented hedging was extremely low compared to reliability and attribute hedges. So by way of comparison, it can be observed that Malaysians used hedges far more often to address the accuracy of their claim versus relating with the listener regarding the force of that claim.

5.4 Hedging and Culture

The present study looked to connect the observed findings of hedging use with the cultural realities surrounding candidature defense in Malaysia. The goal was not only to understand how Malaysians use hedging but to get closer to understanding why they use hedges the way that they do. To do this, an amended version of Adrian Holliday's (1994) framework on small cultures was used. This framework was chosen to get a more holistic picture of all of the cultural forces that may have influence on Malaysian doctorate candidates and also the panelists. The present study

employed this framework to draw out cultural forces on four fronts: national linguistic culture, institutional culture, faculty culture, and disciplinary culture. However, it must be noted, as Holliday (1994) marks out, that the lines demarcating the borders between these small cultures can be rather blurred as they are interconnected and interrelated. This means that different cultural factors might have various implications that cut across the borders of small cultures. For instance power distance can be seen in national culture but it can also be seen as an influence within institutional culture.

5.4.1 L1/L2 National Linguistic Culture

The role of national linguistic culture on the use of hedging is pretty widely agreed upon (Hu and Cao 2011, Vassileva 2001). This cultural influence reflects the realities of what it is like to be a Malaysian speaker of English. It looks at the specifics that are directly related to the large culture of Malaysia both in its ideas and the linguistic expression of those ideas and values. The corpora in the present study shed light on this cultural influence on a few different fronts. First of all, the data shows a greater lack of diversity within the hedging forms chosen by the candidates in the Malaysian corpora that does not exist in the MICASE data. In the Malaysian corpus 23 different forms of hedging were used by the speakers in defense while in the MICASE corpus 33 different forms were used to hedge. This trend was especially true for Malaysian candidates who had less diversity in hedging forms and functions than the Malaysian panel did. So from this data it can be observed that Malaysian speakers had a harder time using a wider variety of forms to hedge in a variety of ways. This connects with a study done by Kim and Lim (2015) who studied Malaysian hedging in academic writing. One of the respondents in their study made the point that L2 users of English may have issues with socio-linguistic devices like hedging because the cultural dynamics of their L1 do conflict mitigation differently and so they experience the disconnect in

their target language. This may account for the lack of variety in Malaysian Hedging. This notion falls in line with other research that has found similar results in hedging among non-native speakers of English (Vassileva 2001).

A similar idea was conveyed directly by Social Sciences Respondent 2 in the current study who directly observed that candidates may be employing "learner grammar" where words are used even if the meanings are not completely understood or conveyed (see appendix b). The respondent spelled this out further saying,

"second language learners may not be able to distinguish between the various shades of meaning, 'can', 'could', 'may', 'might' high low medium and the various modalities without really having the actual meaning, so that the one listening to it may think this is the meaning that can be derived from it but actually that's really not, .it may not be that meaning actually."

This response shows that an observed reality for Malaysian L2 users of English is that there may be gaps in a complete conceptualization of hedges and what can be used as a hedge and how it should be used to hedge. From these observations, the lack of hedging diversity seen in the data may be resulting from an incomplete conceptualization of how hedging can be utilized and the many forms that can be used in order to hedge. The same lecturer addressed the "linguistic prowess" of candidates as an issue when candidates are trying to relate their research to an audience in a more intense situation. This may also indicate difference in the overall incidence of hedging used between the two corpora and why it can be observed more hedging utilized in the MICASE data.

However, there is an interesting note of difference that was brought forth by the data. Even though it can be observed less diversity in the forms and functions of hedging chosen in the Malaysian context, the group that actually hedged the most was Malaysian candidates who hedged 16.21 times per 1,000 words. This is a point of difference from other studies like Kim and Lim (2015) who found that Malaysians hedged less and were more direct in academic writing. The point made there was that Malaysian academic writers were unable to connect with hedging culturally and thus were more direct and hedged less. However, the present study found that Malaysian candidates hedged in PhD oral defense quite a bit and more than any other group.

5.4.2 Power Distance in Educational Culture

Hofstede (2010) conducted a comprehensive look at multiple cultural values that can take shape as people work together. One of the factors that he discusses is power distance and how it influences how people work together differently based on their culturally based set of expectations. An understanding of the notion of power distance begins with the reality that not every individual is the same. Different individuals have different levels of status or power depending on a variety of different markers. Power could be different based on job status (i.e. employer and employee) or political office. Individuals having different power is true across every society everywhere. However, what is different across cultures is how that power influences the way that individuals with different levels of status relate.

In many Asian countries, like Malaysia, the values regarding power distance are much different than in more egalitarian cultures. In these countries there is a higher value on maintaining proper distances based on status and power. These cultures would thus have a higher level of power

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distance. Hofstede (2010) measured the level of power distance seen in fifty different countries around the world in the corporate context and found that Malaysia ranked among the highest in power distance in the fifty. So in Malaysian culture, there is observed to be a higher value to maintain the difference between individuals based on their status or power.

Interestingly the data collected in the present study reflects that there may be a link between the notion of power distance specifically in educational culture and the use of hedging in PhD oral defense. Social Sciences Respondent 1, in the semi structured interview, mentioned the cultural value of the teacher in the Malaysian school context. They talked about how, in Malaysia, the teacher is seen as this super authority that should not be questioned and that any interaction with them must be done with extreme care. The participant went on to describe this in the candidature defense saying

"if this is somebody you should, like, be very respectful and everything, you would actually curb yourself from responding in a certain way or even posing comments that you just received from this person." (Appendix A)

In the estimation of this respondent, the educational culture in Malaysia is such that students are to revere those in authority over them. This would include the panel members in their candidature defense who are most likely members of the faculty who may have even been an instructor for the candidate. This reverence was observed by this respondent to make it challenging for the candidates to engage in critical conversation with those in authority.

Social Sciences respondent 1, when discussing candidature defense in Malaysia, mentioned that Malaysian candidates have trouble being independent from their supervisors in the defense and proposing ideas that are theirs. The respondent said,

"*so Malaysian students, some of them tend to be, they tend to be, too uh dependent and always wanting to know if the supervisor is approving of their doing and whether that's the way to go and not like take it away and do something and then come back and share their ideas. (Appendix B)*"

Again, it can be observed a connection to Hofstede (2010) and power distance in school. He highlights how the larger the power distance, the more that students are dependent on their teachers even in institutions of higher learning. In an institutional culture where students are spending their formative scholastic careers totally depending on their instructors, interpersonal hedging may be more unnatural for candidates.

The respondent continued to point out how they felt that this high level of dependence may be coming from the educational system previously where students are just required to memorize and regurgitate what has been given to them by the teachers without thinking for themselves (see appendix B). These observations continue to build the picture that the culture of the Malaysian education system is one where power distance is high. Respect for elders and for the proper authority is valued and taught to students from a very young age so it becomes a part of their experience and what they take into their future endeavors including things like candidature defense.

To believe that there is really a connection between hedging in PhD oral defense and power distance in the educational culture in Malaysia, there must be corroborating evidence seen in real data to support it. In the Malaysian corpus the amount of hedging employed by candidates is much higher than it is for the panelists. So the candidates feel the need to hedge at a higher level even if they might not be able to grasp all the complexities around it. This is actually quite different than

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other studies that look at the cultural aspect of hedging (Hu and Cao, 2011; Lim and Kim, 2015) Most other studies see that hedging is much lower for non-native English speaking candidates. However, this is where the genre of doctorate oral discourse must be considered. In written academic discourse, the writer is further separated from their speaker and so the cultural implications of their output is not nearly as direct and immediate as with spoken academic discourse. The immediacy and directness of these spoken presentations and interactions may be causing these candidates to hedge much more than they would in something like a research article.

 Another point of note from the Malaysian corpora was the low density of listener oriented hedges seen by Malaysian speakers in PhD oral defense. Listener oriented hedges are more interpersonal in nature and are looking to engage with the listener in such a way as to soften the force of a claim. So candidates in the defense and panel members both are not prone to hedge on an interpersonal level in this set of data.

These observations about the data seen in this study show a connection between hedging in PhD oral defense and power distance in educational culture. If candidates view panel members as individuals who are beyond questioning or even relating with on an interpersonal level, then the use of interpersonal hedging would be limited even if the linguistic capabilities to use this hedging exist. And this is expressed in the data collected form the Malaysian corpora. Hyland (1998) describes interpersonal hedging saying that it is the way that a speaker can subtly create a "persona" that endears itself to the listeners in such a way as to make the claim more acceptable (p. 178). Some might make the argument that an overt deference to authority should create more interpersonal hedging. However, if the institutional educational norms experienced by candidates, have reinforced the thinking that students should only discuss what has been taught to them, they may not have the experience in creating the kind of persona that Hyland described to be essential

in interpersonal hedging. The norms and values of the education institution in Malaysia thus may be creating a situation where students just don't have the experience in academic discussion required to utilize interpersonal hedges.

This level of interpersonal hedging may also extend to the panelists in the candidature defense as well. If panel members have not had the opportunity to relate with candidates on the more interpersonal level, it may be harder for them to communicate using interpersonal hedges as well. So overall, the data from the corpora along with the responses taken from the respondents, who are all faculty members in Malaysia, are pointing to a reality that power distance in the educational culture in Malaysia has an effect on the use of hedging in PhD oral defense.

5.4.3 Disciplinary culture

Disciplinary culture is the norms and values that shape specific academic disciplines like the sciences or social sciences. For the present study the question arises as to whether disciplinary culture effects the way that Malaysian speakers would use English in the genre of PhD oral defense and specifically in the way that they hedge. The perspective from three respondents in different disciplines brings greater insight into the importance that disciplinary culture plays in academic language use. Social Science Respondent 1 said,

"the field is very different, the focus would be very different I don't know, I'm just guessing, that maybe the science faculty would, they would maybe answer more questions about the stats involved in the lab, or how they use a machine or something, which we don't do here, so, yeah" *(see appendix A).*

This respondent made the point that different disciplines have different areas of focus for those who are practicing within the discipline. This difference in focus in inevitably going to shape the

use of language. Social Science Respondent 2 discussed her own field pointing out how important language use can be in her field:

"The subject matter itself comes in with linguistics and so a whole lot of attention is paid to, what do you call, the language aspects of the thesis itself which may be overlooked in the sciences; maybe they will go more for the content whereas here the language also matters not just the content alone. (See appendix B)"

This perspective shows that language can be very important especially in the social sciences to the point where it is something that the examiners are looking to measure. However, the respondent from the sciences also felt that language is a key part to her discipline. She was asked how much language proficiency matters in the sciences and she responded saying,

"it shouldn't because uh, I would say science is a universal language (see appendix C)"

So in her estimation, the discipline of science influences communication in such a way that a big thing like language proficiency can even be overcome by the language of science. So from all of these respondents it can be seen that discipline is extremely important in shaping the norms and values of how communication and language should be done.

So if language is shaped by discipline, is hedging in Malaysian PhD oral defense also shaped by disciplinary culture? To answer this question it is essential to know in what differences between disciplines, and specifically between science and social science, will hedging be evident. This is where the work of Sharon Parry (1998), who conducted a comprehensive analysis of discourse used in doctorate theses based on discipline of study, proves quite insightful. Her study went through the various aspects of the language used in doctorate theses in different disciplines to categorize the kind of language that characterizes each discipline. When she looked at the focus of

theses there was a strong orientation in social science to test or find an alternative to a framework or theory. If this is the case, the use of hedging in social sciences should utilize more attribute hedging as this kind of hedging works to specify or describe the specific aspects of the claim being made. If theory is being tested, the expectation would be to see some hedging as the speaker is making claims that address the specific nature of a theory or idea. The different attributes of the theory are in question and thus many claims in the social sciences surrounding the specific aspects of theory fall in line with attribute hedging which hedges the content of the claim in the actual specifics. For instance, the speaker may use the attribute hedge "generally" to imply that the theory in question applies most of the time but maybe not all of the time. In the Malaysian data, it can be observed that in the social science corpus attribute hedges occurred 7.8 times out of a thousand words. In the Sciences attribute hedges occurred 6.3 times per 1,000 words. So the data found in the present study corroborates a stronger pursuit to test theory in the social sciences just as Parry (1998) proposed.

Another distinction between disciplines seen in the Malaysian data is that of the referencing to other work done on the subject. Parry (1998) makes the point that in social sciences there is a greater need to include the accepted work of others in order to support the argument being made. In the sciences, referencing is done to bring in additional information that may be important. Speaker oriented hedging is hedging that looks to diminish the speaker's connection to a claim they are making because maybe they are not as convinced or perhaps don't have as solid a backing for the claim. Thus these hedges would be employed to take the pressure off of the speaker and put it onto other, more respected shoulders. Knowing this, the expectation would be to see more speaker oriented hedging in the social sciences. It is supported that speaker oriented hedging exists in the sciences (Hyland 1998). However, the strong connection between referencing and

argumentation in the social sciences would suggest that this kind of hedging would be even more pervasive in social science discourse. The present study reflects this idea showing that speaker oriented hedging was more common in the in the social science corpus than in the science corpus.

The results of this study have corresponded to disciplinary differences already found to be true. So the question arises as to why this is important. The answer to this question can be seen in this very simple reality already stated. If these differences are corroborated by actual results shown in the forms and functions of hedging in the Malaysian context, then it becomes clear to see that the differences in disciplinary culture do have an effect on hedging use in Malaysian academic discourse. In this study it can be observed, more specifically, that disciplinary culture effects the way that Malaysians hedge as they discuss the specifics of theory and how they make reference to other work done in their field in the genre of PhD oral defense.

5.5 Conclusion

The present chapter has attempted to show the findings for the present study. It began by showing the difference in the incidence of hedging forms between the MICASE and Malaysian corpora. This was followed by showing how often the various functions of hedging appeared in each of the aforementioned corpora. Completing the present chapter was a presentation of the differences seen between the sciences and the social sciences in each of the corpora to shed some light on the use of hedging by discipline. These findings were followed by a discussion that looked to put this data and the qualitative aspects of the study together. The goal is to give a comprehensive look at how these results (i.e. forms and functions of hedging) are flowing from specific cultural realities surrounding the doctorate candidature defense in Malaysia.

CHAPTER SIX
CONCLUSION

6.0 Introduction

This final chapter will bring forth an overview of the present study both in the framework of the study as well as the methods of the study. The overview will be followed by a summary of the findings brought forth by the study followed by the implications that these findings have both on theory and pedagogy. The chapter will conclude with some suggestions for further research to be done.

6.1 Overview of the study

The present study on the use of hedging in Malaysian PhD oral defense can be generally characterized as a corpus based analysis. A corpus was compiled of oral defenses taken from the University of Malaya in Kuala Lumpur as well as data taken from the Michigan Corpus of Academic Spoken English. This corpora was analyzed using a concordance software called Antconc. This software allowed us to identify all the forms that could potentially be hedges based on the theoretical framework of Hyland (1996, 1998). This framework allowed us to identify which words actually can work as forms of hedging and what functions of hedging they generally perform. The framework was also aided by Biber (2006) and Recski (2005) to shed light on which hedging forms would be the most pervasive in spoken academic discourse. Once these forms were identified, they were addressed one by one with specific coding as to whether they were in fact a hedge and what function of hedging they were used to employ. The frequencies both of the forms

of hedging but also of the functions they performed were taken based on corpus (MCD or MICASE), discipline (sciences or social sciences), and speaker (candidate or panel member).

To understand the cultural influences surrounding the genre of PhD oral defense, specifically for the Malaysian corpus, a semi structured interview was developed and taken from faculty members from the University of Malaya. The interview took an adapted version of Holliday (1994) framework of small cultures and to see the perceived influence those small cultures had on the oral defense in Malaysia. The goal of these interviews was to see if small cultural influences in Malaysian PhD oral defense could explain or give insight to the observed hedging frequencies.

6.2 Findings Summarized

There are different realities that the present study on hedging in spoken academic discourse in Malaysia, addresses. First, the study looked to get a more numerical bearing on the use of hedging in Malaysian doctorate oral defense by numerically looking at how much hedging exists in this context of Malaysian speech. To better understand this, a comparison was drawn using similar numeric data from the American academic context. The results showed that overall hedging use in the Malaysian context of PhD defense was lower and that there was less diversity in the forms of hedging used. However, the study also found that when specific groups of speakers were marked out, candidates in the Malaysian corpus hedged the most while panelists in Malaysian defense hedged the least.

The data continued to draw out the specific forms of hedging that Malaysian speakers used to hedge in the Malaysian context. It was found that Malaysians hedged using modal verbs the most and this was similar in the MICASE corpus. However, a key difference was that in the Malaysian

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corpus, epistemic adverbs were also common forms chosen to hedge and this was different than what was observed in the MICASE corpus. The findings continued by revealing specifics of how Malaysian speakers hedged and what functions of hedging were more prevalent in Malaysian PhD oral defense. The data revealed that Malaysian hedging was much more focused on content of claims being made over more interpersonal functions of hedging.

The numerical portion of the present study led into an attempt to gain a more holistic picture of what actually may be shaping English, specifically hedging, use in the genre of Malaysian PhD oral defense. The study confirmed the theory that, for Malaysian speakers of English, There are other cultural influences that shape the way they use English and specifically the way they hedge besides the fact they are not native speakers. The specifics of hedging in Malaysia cannot merely be attributed to the fact that these speakers are second language users of English. Other cultural influences are at work in doctorate oral defense that shape the way language is employed there. In many instances, the borders between these cultural influences, or small cultures, are permeable and we saw that some issues that effected hedging could be seen to overlap in these "small cultures" (Holliday 1994).

 For instance, the notion of power distance and its connection to the larger educational culture in Malaysia was observed to be an influencer of Malaysian hedging. The norms and values of the educational culture in Malaysia regarding the distance and association between superior and underling, and in this case panel member and candidate, seemed to influence observed hedging patterns. A connection was drawn between power distance in educational culture and the low use of interpersonal hedging. The large distance between student and teacher may be working to shape a situation where engaging in an interpersonal manner with the teacher or panel member is unnatural and unpracticed for Malaysian candidates. The observed uses of hedging in this study

work to show that interpersonal hedging was indeed much more uncommon for Malaysian candidates and panel members than it was for their counterparts in the American context who were speaking in a context where interpersonal communication between individuals with different power levels may be much more common throughout their academic careers. Another connection with power distance can be made to the large disparity in hedging use between candidates and panel members in Malaysian PhD defense. Large power distance may be working to build a situation where there is more of a felt need for candidates to hedge than there is for panel members to hedge. In this sense it would make sense that we would observe more hedging in the speech of the candidates.

The present study also found that the discipline of study was another "small" culture that did in fact have an impact on how speakers used hedging in doctorate oral defense. It influenced especially the way that speakers addressed the theoretical background for their research as well as how they discussed prior research done in their field. These specific areas of hedging in Malaysian oral defense fell in line with the findings of Parry (1998) in her work on hedging and discipline.

6.3 Theoretical Implications of the study

To say that language is shaped by and shapes the way that individuals use language is not a new idea. However, the relationship between culture and language often is often kept at a broad perspective of culture. This seems to be especially true in discussions about individuals using language that is not their first language. The present study looked to start a discussion by digging deeper and exploring how different, but interconnected, levels of culture are also involved in influencing how individuals use language in specific situations or genres like PhD oral defense.

The present study thus works to build a better base of knowledge on the connection between culture and academic spoken English in Malaysia. It shows that it is not enough to say that Malaysian speakers of English use language differently purely because they are second language users of English. From this study we see that their status as candidates also influences the way they hedge and how they use language. The study also shows that the discipline they are involved in shapes the way they hedge. So it seems that if this more holistic picture of culture and language sheds light on something as specific as hedging in Malaysian PhD oral defense, that this kind of perspective on culture and language could be used in many other contexts as well.

A great example of this implication from the study is the perspective on how power distance can play a role in the genre of PhD oral defense. In the study it was found that power distance can shape something as broad and pervasive as the educational culture in general. This has widespread influence on the way that Malaysians use language in education far beyond just the context of PhD oral defense and how candidates and panel members perceive each other and thus relate linguistically together.

Another set of theoretical implications has to do with what the present study tells us about the genre of PhD oral defense and how it is influenced by and influences language use. A key concept in genre theory is the notion of a discourse community that develops around a specific set of communicative purposes (Swales 1990). The present study is interesting in that it shows that the discourse community in Malaysian PhD oral defense does in fact shape their language use based on the communicative purposes they have. For instance, we see that in Malaysian PhD oral defense that the way members of the social sciences hedged very differently than the sciences in the way they approached theory and referencing. So the values of their discipline regarding those areas shaped the way that hedging was used. However, the present study also points out that there seem

to be overarching values like power distance that can permeate and shape the ways that discourse communities use language beyond just the values they establish on their own.

6.4 Pedagogical Implications of the Study

We must take into account that these cultural aspects like power distance are influencing language learners and thus are important pedagogically even starting at the beginning of our students' language journey. It must be stated that the Malaysian cultural context is not wrong or incorrect, it is just different. It is not that Malaysians must stop the way that they teach students to respect or value their teachers. It is not even that the Malaysian way of hedging is wrong or must be changed. However, what is important is that we understand that culture, and how it is passed on to the next generation, does influence how language is used and how it is perceived. In a world that continues to get smaller and smaller, the reality is that many of our students will need to cross cultures and understandings of language use even in the same language like English. If we can help students to understand the way that their cultural values are shaping the way they use language, they will be more prepared to engage with those from different cultures who might be using the same language but have very different values shaping the way they use it.

6.5 Suggestions for Future Research

The present study has set the stage for future research building on the findings discussed here already. One of the main limitations to the present study is the scope that was possible in doctorate oral defense. It was extremely difficult to collect enough data in order to build a representative sample. Because of this, a larger study would allow for a sample that could be statistically analyzed in such a way as to actually make statistically significant claims. Other future research may be

helpful looking at other modes of interpersonal communication in the same overall cultural context. Some of the observations and possible pedagogical implications could be more firmly supported or adapted based on a larger level of understanding when it comes to interpersonal communication in Malaysian oral defense. Connected with this, it would be interesting to see how much a specific influencer like power distance is shaping different genres within academic discourse.

6.6 Concluding Remarks

As an English speaker from a very different cultural context. I began this journey because I was interested in something like hedging works to build and connect relationships. It was interesting to me that something like hedging can be used in my context very differently than in Malaysia. So my goal was to learn about hedging in this new culture I was experiencing and to understand more about how my Malaysian friends and colleagues used hedging to build, establish, and connect with new relationships. I have truly learned quite a bit.

REFERENCES

Ädel, A. (2010). Just to give you kind of a map of where we are going: A taxonomy of metadiscourse in spoken and written academic English. *Nordic Journal of English Studies*, *9*(2), 69-97.

Ädel, A., & Mauranen, A. (2010). Metadiscourse: Diverse and divided perspectives. *Nordic Journal of English Studies*, *9*(2), 1-11.

Aijmer, Karin. 1986. "Discourse variation and hedging". In Corpus linguistics II: [...], Jan Aarts and Willem Meijs (eds.), 1-18. Amsterdam: Rodopi.

Atkinson, D. (2004). "Contrasting rhetorics/contrasting cultures: why contrastive rhetoric needs a better conceptualization of culture". *Journal of English for Academic Purposes*, 3, 277–289.

Anthony, L. (2010). AntConc (Version 3.2.1) [Computer Software]. Tokyo, Japan: Waseda University. Available from http://www.antlab.sci.waseda.ac.jp/

Bazerman, C. (1981). What written knowledge does: Three examples of academic discourse. Philosophy of the social sciences 11/3, 361-387, SAGE Publications.

Becher, T. (1987). Disciplinary discourse. *Studies in Higher Education*, *12*(3), 261-274.

Berkenkotter,C., Huckin, T. (1993). Rethinking Genre from a Sociocognitive Perspective. *Written Communication vol*. 10 no. 4 475-509.

Bhatia, V. K. (2007). Discursive practices in disciplinary and professional contexts. *Linguistics and the Human Sciences*, *2*(1), 5-28.

Biber, D. (1996). *University Language: A corpus-based study of spoken and written registers*. Amsterdam/Philadelphia: John Benjamins Publishing Company

Biber, D., Barbieri, F. (2007). Lexical bundles in university spoken and written registers. *English for Specific Purposes* 26, 263–286.

Biber, D., Connor,U., Upton, T.A (2007). *Discourse on the Move: Using corpus analysis to describe discourse structure.* Studies in Corpus Linguistics, Amsterdam/Philadelphia: John Benjamins Publishing Company.

Connor, U. (2004). Intercultural Rhetoric Research: Beyond Texts. *Journal of English for Academic Purposes*, 3, 291–304.

Conrad, S., & Mauranen, A. (2003). The corpus of English as lingua franca in academic settings. *TESOL quarterly*, *37*(3), 513-527.

Creswell, J. W. (2002). *Educational research: Planning, conducting, and evaluating quantitative*. Prentice Hall.

Crompton, P. (1997). Hedging in Academic Writing: SomeTheoretical Problems. *English For Specific Purposes*, 16(4), 271-287.

Crompton, P. (1998). Research and Discussion Note Identifying Hedges: Definition or Divination Peter Crompton Respond to Franciois Salager-Meyer's reply "Language is Not a Physical Object". *English For Specific Purposes*, 17(3), 303-311.

Dahl, T. (2004). Textual metadiscourse in research articles: a marker of national culture or of academic discipline? *Journal of Pragmatics*, 36, 1807–1825.

During, S. (2004). *Cultural studies: A critical introduction*. Routledge.

Fishelov, D. (1993). Metaphors of Genre. *The Role of Analogies in Genre Theory*.

Giddens, A. (1979). *Central problems in social theory: Action, structure, and contradiction in social analysis* (Vol. 241). Univ of California Press.

Gupta, A., & Ferguson, J. (1992). Beyond "culture": Space, identity, and the politics of difference. *Cultural anthropology*, *7*(1), 6-23.

Hinkel, E. (2005). *Handbook of Research in Second Language Teaching and Learning.* Mahwah, NJ: Lawrence Erlbaum Associates.

Holliday, A. (1994). *Appropriate Methodology and Social Context.* Cambridge: Cambridge University Press.

Holliday, A. (1999). "Small Cultures." *Applied Linguistics*, 20 (2), 237-264.

Hoftede, G., Hofstede, G. J., & Minkov, M. (2010). *Cultures and organizations: software of the mind: intercultural cooperation and its importance for survival*. McGraw-Hill.

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*, 2795–2809.

Hyland, K. (1996). Writing Without Conviction? Hedging in Science Research Articles. *Applied Linguistics,* Vol 17, No 4, Oxford University Press, 433-454.

Hyland, K. (1998). *Hedging in Scientific Research Articles*. John Benjamins, Amsterdam.

Hyland, K. (1998). Persuasion and Context: The pragmatics of academic discourse. *Journal of Pragmatics,* 30, 437-455.

Hyland, K., Tse, P, (2004). Metadiscourse in Academic Writing: A Reappraisal. *Applied Linguistics,* 25(2), Oxford: Oxford University Press, 156-177.

Hyland, K. (2005). *Metadiscourse*. John Wiley & Sons, Inc.

Itakura, H. (2013). Hedging praise in English and Japanese book reviews. *Journal of Pragmatics*, 45, 131—148.

Kaplan, R. B. (1966). Cultural thought patterns in inter-cultural education.*Language learning*, *16*(1-2), 1-20.

Kim, L.C. Lim, J.M.H. Hedging in Academic Writing - A Pedagogically-Motivated Qualitative Study. Procedia - Social and Behavioral Sciences 197 (2015) 600 – 607.

Lea, M. R., & Street, B. V. (2006). The" academic literacies" model: Theory and applications. *Theory into practice*, *45*(4), 368-377.

Leech, G., Meyers, G., & Thomas, J. (1995). Editors' general introduction.*Spoken English on Computer. Transcription, Mark-up and Application. London: Longman*, 1-11.

Lehtinen, E. (2013). Hedging, knowledge and interaction: Doctors' and clients' talk about medical information and client experiences in genetic counseling. *Patient Education and Counseling*, 92, 31–37.

Lemke, J. (1995). Textual Politics: discourse and social dynamics. London : Taylor & Francis.

Lewin, B.A. (2005). Hedging: an exploratory study of authors' and readers' identification of 'toning down' in scientific texts. *Journal of English for Academic Purposes*, 4, 163–178.

Li, T., & Wharton, S. (2012). Metadiscourse repertoire of L1 Mandarin undergraduates writing in English: A cross-contextual, cross-disciplinary study. *Journal of English for Academic Purposes*, *11*(4), 345-356.

Lindemann,S., Mauranen, A. (2001). ''It's just real messy'': the occurrence and function of just in a corpus of academic speech. *English for Specific Purposes*, 20, 459–475.

Locher, M. A. (2004). *Power and politeness in action: Disagreements in oral communication* (Vol. 12). Walter de Gruyter.

Matthiessen, C. M., & Halliday, M. A. K. (2009). Systemic functional grammar: a first step into the theory.

Mauranen, A., Hynninen, N., Ranta, E. (2010). English as an academic lingua franca: The ELFA project. *English for Specific Purposes 29 (2010) 183–190.*

Martin, J. R. (1984). Language, register and genre. *Children writing: reader*, *1*, 984.

Marx, K., Engels, F., Moore, S., & McLellan, D. (1992). *The Communist manifesto*. Oxford: Oxford University Press.

Mesthrie, R., & Bhatt, R. M. (2008). *World Englishes: The study of new linguistic varieties*. Cambridge University Press.

Michigan Corpus of Academic Spoken English. 2009 University of Michigan. http://quod.lib.umich.edu/cgi/c/corpus/corpus?c=micase;page=mbrowse

Miller, C. R. (1984). Genre as social action. *Quarterly journal of speech*,*70*(2), 151-167.

Morse, J. M. (1991). Approaches to qualitative-quantitative methodological triangulation. *Nursing research*, *40*(2), 120-123.

Parry, S. (1998). Disciplinary discourse in doctoral theses. *Higher Education* 36: 273–299.

Péry-Woodley, M. P. (1990). Contrasting discourses: contrastive analysis and a discourse approach to writing. *Language Teaching*, *23*(03), 143-151.

Poos, D., Simpson, R. (2002). In Reppen, R., Fitzmaurice, S.M., Biber, D. (Eds.), *Using Corpora to Explore Linguistic Variation* (3-24), Studies in Corpus Linguistics, Amsterdam/Philadelphia: John Benjamins Publishing Company.

Prince, E. F., Frader, J., & Bosk, C. (1982). On hedging in physician-physician discourse. *Linguistics and the Professions*, *8*, 83-97.

Recski, L. (2005). Interpersonal engagement in academic spoken discourse: a functional account of dissertation defenses. English for Specific Purposes 24, 5–23.

Sapir, E. 1929. The status of linguistics as a science. *Language* 5:207–214.

Schneider, K. P., & Barron, A. (2010). Variational pragmatics. *Variation and change: Pragmatic perspectives*, 239-267.

Simpson, R., Mendis, D. (2003). A Corpus-Based Study of Idioms in Academic Speech. TESOL quarterly, 37(3), 419-441.

Swales, J. (1990). *Genre Analysis: English in academic and research settings*. Cambridge, Cambridge University Press.

Swales, J. (2004). *Research genres: Explorations and applications*. Ernst Klett Sprachen.

Tan, H. (2002). *Hedging in the Discussion Section of research Articles written by Native and Non-Native writers of English.* Unpublished Manuscript, University Putra Malaysia, Kuala Lumpur, MY.

Tan, H., Chan, S.H. (2008). The Writing of Research Articles: How do native and non-native writers differ in the use of hedges?. In Jacobsen, R. Editor and Ain, N.A. (Eds.), andChan, S.H. (Eds.), *The Pulse of a Malaysian University: Ethno and Sociolinguistic Issues and the TESOL Dimension*, (163-178). New York: Peter Lang Publishing.

Tashakkori, A., & Teddlie, C. (1998). *Mixed methodology: Combining qualitative and quantitative approaches* (Vol. 46). Sage.

The British National Corpus, version 3 (BNC XML Edition). 2007. Distributed by Oxford University Computing Services on behalf of the BNC Consortium. URL: http://www.natcorp.ox.ac.uk/

Thompson, P. (2006). A corpus perspective on the lexis of lectures, with a focus on economics lectures. *Academic Discourse Across Disciplines, Bern, Peter Lang*, 253-270.

Varttala, T. (1999). Remarks on the Communicative Functions of Hedging in Popular Scientific and Specialist Research Articles on Medicine. *English for Specific Purposes*, 18(2), 177–200.

Vassileva, I. (2001) Commitment and detachment in English and Bulgarian academic writing. *English for Specific Purposes*, 20, 83-102.

Verhulst, A., Depraetere, I., Heyvaert, L. (2013). Source and strength of modality: An empirical study of root should, ought to and be supposed to in Present-day British English. *Journal of Pragmatics*, 55, 210—225.

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