

CHAPTER ONE

INTRODUCTION

Background

With the influence of globalization, English has been referred to as the lingua franca for the purpose of communication in various areas of practices, especially in academia. In terms of academic publication, students and researchers are encouraged and/or required to use English as a medium language, such as master's theses, PhD dissertations, research papers, and textbooks. In the disciplines such as Foreign Languages and Literature (FLL), Applied Linguistics, and Teaching English to Speakers of Other Languages (TESOL), students are required to write most essays or reports in English.

To some extent, employing English to construct academically legitimate knowledge has become an urgent need for both Native Speakers (NSs) and Non-Native Speakers (NNSs) of English. Comparing to NSs of English, NNSs of English have encountered greater difficulties in applying certain linguistic conventions in their disciplines. Accordingly, English for Academic Purposes (EAP) have been receiving much research interest in the academia (Hyland & Hamp-Lyons, 2002; Hyland, 2006, 2007a; Jordan, 2002) with the aim to assist learners successfully socializing in their academic practices pertaining to study or research purposes (Hyland, 2006, p.1-2).

In the domain of EAP research, the genre-based approach has been referred to as a relatively effective method in analyzing academic discourse. Genre is defined as a set of communicative events consisting of conventionalized forms or moves which can be associated with members of particular contexts or discourse communities (Swale, 1990). Specifically, in academic written genres, research articles (RAs) have

been seen as the main generic manifestation in academic knowledge production. Therefore, much of the EAP research has focused on the generic knowledge and rhetorical variation in RAs (Bhatia, 2002; Burgess, 2002; Hyland, 2007b; Holmes, 1997; Lores, 2004; Ozturk, 2007, Samraj, 2002, 2005; Yang & Allison, 2003, 2004). Aspects of generic and rhetoric structure of master's theses and doctoral dissertations have recently gained much special attention in EAP research (Bitcjenner & Basturkmen, 2006; Bunton, 2002, 2005; Kwan, 2006; Samraj, 2008).

Writing is a social engagement for writers to interact with their imagined readers. While disciplinary variation plays a dominant role in academic contexts, writing is further regarded as an interaction between writers and their disciplinary discourse communities. Academic writing, to a certain degree, entails that writers are in a process of “projecting themselves into their discourse to signal their attitudes toward both the propositional content and the audience of the text” (Hyland & Tse, 2004, p. 156).

Metadiscourse has often been recognized as discourse about discourse or talk about talk (Vande Kopple, 1985) because of its insufficient solid theoretical background. A range of previous studies have defined and discussed metadiscourse with different theoretical concerns (Adel, 2010; Crismore et al., 1993; Halliday, 1994; Hyland, 1998, 2000, 2005; Maruanen, 2010; Vande Kopple, 1985). Among these varied theoretical underpinnings, Halliday's (1994) distinction between the three different kinds of purposes or metafunctions (i.e. ideational function, interpersonal function, and textual function) simultaneously integrating in discourses have highly influenced the relevant discussions of metadiscourse (Amiryousefi, 2010; Hyland, 2000).

Metadiscourse reveals a perspective regarding how academic writers interact between their texts and readers (Hyland, 2000; Hyland & Tse, 2004), for writing is

considered to be a social and communicative engagement. With the help of certain metadiscourse markers in the process of proposition construction, academic writers are able to engage with their readers by presenting convincing and coherent texts in socially- and disciplinarily-defined contexts (Hyland & Tse, 2004, p. 167). On the other hand, the use of metadiscourse also enables academic writers to guide their readers to interpret and understand the written discourse following writers' intention.

To some extent, metadiscourse markers are one of the useful rhetoric strategies and linguistic tools which transform a professional academic text into a professional but relatively reader-friendly one (Li & Wharton, 2012). After all, the core concept of academic disciplinary writing refers to a process of effectively and sufficiently constructing while conveying professional knowledge to members in or out of the discourse communities. Therefore, for EAP learners the awareness and the application of metadiscourse as rhetoric strategies are crucially important in the process of academic writing practices.

In the process of academic writing, writers construct their arguments based on their professional disciplinary training and their understanding as well as expectation toward readers. That is, to present coherent and persuasive arguments to particular community of readers, writers often need to construct their academic work according to readers' prior knowledge of the texts with frequent reiteration and clarification of the immediate prior proposition. As writers, texts, and readers are regarded as the three inseparable core elements in the communication of academic writing, metadiscoursal devices applied in reiteration and clarification are termed reformulation markers, and the rhetorical strategy is called reformulation. Among various metadiscourse models (Crismore et al, 1993; Hyland & Tse, 2004; Hyland, 2007a; Vande Kopple, 1985;), reformulation markers are known as code glosses for their textual-elaborative and interactive characteristic in academic writing practices.

In the present study, the term reformulation markers instead of code glosses are used to indicate the metadiscoursal reformulating devices in academic writing.

Reformulation markers function to elaborate textual materials and help readers to appropriately decode writers' intended meaning (Vande Kopple, 1985; Crismore et al., 1993; Hyland & Tse, 2004; Hyland, 2007a). To a certain degree, it could be stated that reformulation markers play the role of catalyst in the interaction between the delivering and receiving of academically-legitimated knowledge. Serving as powerful and useful metadiscoursal devices, academic writers manipulatively employ reformulation markers to guide their readers toward writers' preferred interpretation and understanding of the texts. Conversely, readers rely on reformulation markers to interact with writers, decode the message or discourse functions embedded in the texts, and most importantly, to socialize into or be qualified as members of certain discourse communities. Employing reformulation markers as rhetorically guiding tools in academic practices, they supplement instead of providing additional information to the proposition via explanation, implication, presentation, paraphrase, and specification.

With the application of reformulation markers, writers clarify texts while negotiating with readers. Accordingly, reformulation markers are regarded as a rhetoric device and linguistic tool that helps to “contribute to the creation of coherent, reader-friendly prose while conveying the writer’s audience-sensitivity and relationship to the message” (Hyland, 2007a, p. 266). To some extent; therefore, reformulation markers reflect writers' predictions and expectations toward their readers. These reformulating devices could be realized by punctuation such as *parentheses* as well as phrases such as *in other words*, *namely*, *that is*, *be defined as*, and other elaborative metadiscoursal devices.

Rationale of the Study

Metadiscourse research has gained much attention in the fields of EAP and English for Specific Purposes (ESP). Relevant research has centered on different types of metadiscourse (e.g., hedges, boosters, self-mentions, authorial stance and engagement markers, attitude markers) with different variables, such as disciplines, written genres (e.g. textbooks, research articles, PhD dissertations, course assignments), and L1 vs. L2 (e.g. English as L1 vs. English vs. L2). These studies suggested that metadiscourse should be a required argumentative skill, especially for EAP learners in the process of academic writing practices.

Compared to different aspects of metadiscoursal devices research, reformulation markers studies have been relatively limited. Though some well-designed studies (Cuenca, 2003; Cuenca & Bach, 2007; Hyland, 2007a; Murillo, 2004) have investigated reformulation markers in academic writing, the research focus was on research articles (RAs) instead of master theses (MA theses). Previous studies have enriched the academia with valuable implications on academic writing teaching and learning; however, they have not rhetorically and pragmatically explored reformulation in MA theses, in particular reformulation markers, and their pragmatic discourse functions.

MA theses have its exclusive research value in metadiscoursal reformulation study. Conducting MA theses are the connection graduate students build for the preliminary formal communication with professional discourse communities. MA theses are graduate students' first formal practice with the discipline communities. In addition, the application of metadiscoursal reformulation in MA theses writing is far more frequent and important than academic research articles considering the length, and its richer and more complicated structure, organization as well as linguistic choice in MA theses.

Familiarizing with the conventions of a particular academic community and behaving as a good community member are crucial challenges for both graduate students and researchers. One of the prerequisite and also the solution for these challenges is to possess the disciplinary-preferred argumentation and persuasion competence. Students have to appropriately employ certain rhetorical reformulating devices so as to connect the textual information while interacting with the readers. With the use of reformulating devices, pragmatic performance, or pragmatic discourse functions would be of certainty to be performed and intertwined with writer, readers, and texts, and the preferred communicative purposes could be reached accordingly.

Therefore, it is worth investigating metadiscourse reformulation devices and their pragmatic discourse functions in MA theses. The present study aimed to fill the gap and shed some light on the study of metadiscourse study, specifically on reformulation markers and their pragmatic discourse functions in MA theses.

Purpose of the Study

In light with the research gap, the present study used genre-based approach, corpus analysis, and contextual discourse analysis to investigate reformulation markers and their discourse functions in MA theses by Taiwanese graduate students.

Three research questions were examined in the present study:

- (1) How are reformulation markers and their discourse functions realized in MA theses by Taiwanese graduate students?
- (2) What is the multifunctionality between reformulation markers and their discourse functions?
- (3) How reformulation markers used and what discourse functions do they perform in the major sections of MA theses by Taiwanese graduate students?

CHAPTER TWO

LITERATURE REVIEW

With the trend of pursuing higher education, English is used as the medium language in academic participation and conventions due to its international status. Mastering good and academic English, especially discipline-appropriate English is therefore crucial for people living in and living on the academia. In addition, several journals (e.g. English for Specific Purposes, English for Academic Purposes, English of Pragmatics) have centered on the relevant topics covering from macro to micro perspectives with the aim to cater to the urgent needs in the academia, specifically in the field of EAP. In recent years, metadiscourse has come into prominence in EAP research and pedagogy, for it helps to foster successful communication between writers, texts, and readers. Moreover, it also significantly reveals disciplinary and generic variation that highly associates with academic writing.

The present study thus aims to explore reformulation markers and their discourse functions in MA theses. In this chapter, an extensive review of relevant research is provided. To begin with, the development and research scope of EAP as well as the characteristics of academic writing were presented. The second section reviewed metadiscourse, featuring on its historical development and relevant studies. The last but most important section zoomed into reformulation markers to specifically explicate reformulation markers in academic writing practices.

The Field of English for Academic Purposes

EAP is commonly defined as teaching English to native and nonnative speakers of English with the aim to assist learners familiarizing with and socializing in their academic communicative practices for study or research purposes (Hyland, 2006, p.

1-2). In other words, EAP centers on the issue of socialization into the academic discourse community with English as a medium language so as to enable learners with different cultural backgrounds and varied language competence to successfully construct and represent knowledge in particular disciplines or fields. In terms of academic discourse community socialization, it implies to adapt or even acculturate into the disciplines by not only identifying and familiarizing with rules of the community, but also manifesting appropriate ways to act like a community member.

Responding to the concept of academic discourse community socialization is disciplinary socialization. Disciplinary socialization, as mentioned in Hyland (2006), denotes “an integrated view which links language, user, and context” (p. 20). Namely, academic knowledge can only be successfully constructed and presented when specific teaching and training have been delivering to learners in diverse disciplines. Therefore, it is necessary for researchers to explore the organization and linguistic features realized in academic discourse in order to equip learners with such language tools while hoping them to socialize into the academic cultures and become members of the discourse communities.

Even though EAP research recently has attracted much attention in academia, the term does not simply appear on the papers and gain its important status at the first place. With the effect of internationalization and globalization, English is regarded as the lingua franca used for the communicative purpose in various areas of practices. Accordingly, the term ESP was coined and has been waving its flags and developing its colonization in the research of occupational English, business English, technical English, and English of other specific areas. To some extent, ESP has been theoretically and pedagogically expanding and spreading its influence over English for specific rather than general purposes for over 30 years. However, with the trend of pursuing higher education, English has been required as the medium communicative

tool that using English to construct academically legitimate knowledge has become an urgent need for students of both native and nonnative speakers of English.

Accordingly, EAP has magnetized considerable research interests no matter in English language teaching and research. In other words, EAP has taken distinctive attitudes of its own and eventually independent from the branch of ESP.

The genesis of EAP; however, is unavoidably destined to inherit and reflect many of ESP's strengths and weakness. On the one hand, EAP emphasizes on the interdisciplinary research to reveal the "constraints of social contexts on language use" (Hyland, 2006, p. 2) and provides learners with feasible ways for these constraints to be conquered. On the other hand, EAP has also conformed ESP research tradition to linguistic analysis, contextual relevance, and the pedagogically-designed of disciplinary community-specific communicative events in teaching. However, despite these advantages, some of ESP's limitations have also carried over to EAP. For example, one of the major limitations lies in "a tendency to work *for* rather than *with* subject specialists" (Hyland, 2006, p. 3). In other words, ESP and EAP have been criticizing for deliberately neutralizing learners' identities so as to cater to the conventionalized institutional practices. On the one hand, the idea of preferred conventionalized institutional practices implies certain prestigious genres. On the other hand, such prestigious genres can only be manifested when language, rhetoric, structure, and organization are properly designed to the academic production of particular disciplines. As a result, the process of conforming to prestigious genres or socializing into the academic discourse and disciplines to some extent indicates the representation of "an elite of expertise and power" (Hyland, 2006, p. 31). With regard to the pros and cons of EAP, much research has moved from macro perspectives of register and genre analysis to micro perspectives (Connor, 2000), or some might combine both perspectives in order to have better understanding toward the nature of

EAP.

Early 1960s ESP focused on quantitative studies employing register analysis approach to explore the functional language variation. Swales (1990, p. 40) defined register by citing the definition provided by Gregory and Carroll (1978, p. 4): “a contextual category correlating groupings of linguistic features with recurrent situational features”. Such research was descriptive in nature with the aim to prioritize the teaching materials of target language variety with distributional frequencies. However, to a certain degree, applying register analysis as approach has been criticizing for “impose constraints at the linguistic level of vocabulary and syntax” (Swale, 1990, p. 41) which lacks of a more sophisticated categorization and description concerning socio-cultural factors in academic writing convention.

In light with the limitations of register analysis, the concept of genre was shaped and gradually disentangled from the realm of register. Although the concept of genre partially overlaps with register, genre analysis is noted for emphasizing more on social contexts comparing to linguistic choices preferred by register (Leckie-Tarry, 1993, p. 31). Therefore, social communicative purposes containing in texts, as Swales proposed (1990), could be revealed and accomplished via genre-analysis approach, and the nature as well as the characteristics of genre-analysis approach has led to the research of discourse structure analysis (p. 41).

In terms of genre-based analysis, it has been widely employed in EAP research. Specifically, in the domain of EAP, research articles (RAs) is seen as the main generic manifestation in academic knowledge production. Therefore, much of the EAP research has focused on the generic knowledge and rhetorical variation of RAs (Bhatia, 2002; Burgess, 2002; Hyland, 2007b; Holmes, 1997; Lores, 2004; Ozturk, 2007, Samraj, 2002, 2005; Yang & Allison, 2003, 2004).

In addition, with the advancement of technology, genre-based analysis often

integrated with corpora approach to investigate rhetorical movement and specific linguistic features (Flowerdew, 2002) in academic writing practices. The results of corpus-based research not only reveal linguistic convention such as the recurrent and formulaic features in certain genre or even particular discourse community, but also retrieve specific linguistic examples of language use from the target discourse contexts. These results thus could be contributed to EAP pedagogy and future research. For example, Coxhead (2000) based on the frequency counts in the corpora presented a list of vocabulary for academic writing. Moreover, studies of recurrent word combinations (e.g. formulaic language, lexical bundles, and collocation) combine frequency counts and concordancing to reveal authentic language use in academic writing contexts (Adel & Erman, 2012; Durant & Mathews-Aydinli, 2011; Liu, 2012). The employment of language corpora in teaching and learning, to a certain extent, has been changing the nature of language learning from highlighting what is correct to what is relatively common or frequent. In addition, much research often integrated corpora approach with genre analysis for not only provide macro perspective of structural information but also unfold micro perspective of lexical-grammatical usage realized in academic genres, particularly in research articles (Lores, 2004; Ozturk, 2007; Samraj, 2002, 2005; Williams, 1999; Yang & Allison, 2003, 2004), MA theses (Samraj, 2008), and doctoral dissertations (Bunton, 2002, 2005; Kwan, 2006). The results of these studies reveal the structurally and/or rhetorically generic variations, while such variations are often diverse in terms of rhetorical strategies, specifically the application of metadiscourse.

To some extent, familiarizing with these generic variations is the prerequisite but also a life-long practice for EAP learners to involve into the academic disciplinary communities. Therefore, the awareness and the application of metadiscourse as rhetoric strategy are crucially important in EAP writing conventions.

Academic writing indicates a process of social engagement between writers and readers. In the social engagement, an interaction between writers and readers is built for knowledge accumulation and transmission. On the one hand, writers construct academic legitimate knowledge based on their assumption of readers' prior knowledge of the field and also on their assumption toward potential question raised by readers. On the other hand, writers are required to produce academic works conforming to the discourse community of discipline. Referring academic writing as "concrete realization" (Li & Wharton, 2012) in particular field of the discipline, familiarizing with and employing preferred rhetorical structure and linguistic devices are salient in academic writing teaching and learning. That is to say, the "norms and expectation of particular cultural and professional communities" (Abdollahzadeh, 2011, p. 289) is closely associated with the process for writers to project themselves, present and negotiate an argument as well as engage with their readers via "community-oriented application of appropriate linguistic resources" (Abdollahzadeh, 2011, p. 289) .

In the recent years, metadiscourse studies have been gained its importance in the field of EAP research. Previous studies (Cheng & Steffensen, 1996; Hyland, 2004; Li & Wharton, 2012; Perez-Llantada, 2010; Simin & Tavangar, 2009) have reported that metadiscourse is highly related to the successfulness of academic writing. Moreover, the application of metadiscourse has been noted for conforming to particular discipline cultures or academic discourse communities. Therefore, knowledge and application of metadiscoursal devices should be regarded as necessary communicative skills for EAP learners to develop in the process of their academic writing practices. Further information in relation to metadiscourse is presented in the next section of this chapter.

Metadiscourse

Definition of Metadiscourse

Writing is a process of social engagement (Hyland, 2004, 2005; Hyland & Tse, 2004; Hyland, 2010). Writing is not merely about proposition-making and information providing; rather, it concerns how the propositional content is connected to the contexts and how the propositional content reveals the relationship among writers, readers, and texts.

Especially in academic contexts, writers manifest their personality, attitudes, and attempts to guide and influence the perception of readers by means of projecting themselves into their discourse with metadiscoursal devices (Hyland & Tse, 2004, p. 156; Hyland, 2005, p. 3). The awareness and ability of self-projection in academic writing is highly valued and necessary since it signals writers' positions, perspectives, and their preferred communicative purposes toward both argumentative statement and the readers of the text (Hyland & Tse, 2004, p. 156; Hyland, 2005, p. 4). Such academic writing goal and requirement are embodied in the employment of appropriate academic disciplinary community-oriented linguistic resources (Abdollahzadeh, 2011, p. 289). Self-reflective and interactive in nature, these linguistic resources have been collectively termed as metadiscourse. To some extent, such metadiscoursal rhetorical devices are applied not only to present and negotiate arguments with readers, but also to reveal their understandings toward the "norms and expectations of particular cultural and professional communities" (Abdollahzadeh, 2011, p. 289).

In general, metadiscourse refers to the idea of writer-reader relationship. Specifically in the process of academic writing, the concept of metadiscourse is realized in writers' self-projection, reader awareness as well as academic disciplinary socialization. Viewing academic writing as interactive, metadiscoursal devices are

employed to assist writers to evaluate readers' needs and textualize certain contextual factors so as to make their academic texts comprehensible, credible, persuasive, and discipline-approved (Amiryousefi, 2010; Hyland, 2004, 2005). A range of metadiscoursal devices, particularly in written discourse, are manifested through words, phrases, clauses, and even punctuation as well as typographical markers.

Even though the concept of metadiscourse has gained much interest in EAP research, it has been characterized as a fuzzy term for its “descriptive and explanatory potential” (Hyland, 2005, p. 14). Over decades, metadiscourse has been recognized as discourse about discourse or talk about talk (Vande Kopple, 1985) for the difficulties in defining metadiscourse and classifying the discourse features according to its diverse pragmatic meanings and functions in texts. The vagueness and heterogeneity in theorizing metadiscourse implies the dynamic roles metadiscourse represents for it not only refers to the inward aspects of the text but is also related to the outward aspects of the social contexts.

Remaining embryonic, a range of studies have defined and discussed metadiscourse with different theoretical concerns and research trends (Adel, 2010; Crismore et al., 1993; Halliday, 1994; Hyland, 1998, 2000, 2005; Mauranen, 2010; Vande Kopple, 1985). Three issues concerning defining and indentifying metadiscourse have been considered. As regards to the inward and outward referential essence of metadiscourse, the first issue refers to how to make a distinction between metadiscourse and propositional content. Halliday (1994) presented the test of falsifiability for proposition identification, while other researchers (Crismore et al., 1993; Vande Kopple, 1985) proposed the idea of levels of meaning in texts.

As a functional grammar linguist, Halliday (1994) argued that language is a system of meaning and proposed the test of falsifiability to identify propositions. He argued that “propositional material is something that can be argued about, affirmed,

denied, doubted, insisted upon, qualified, tempered, regretted and so on” (cited in Hyland & Tse, 2004, p. 160). Primarily emphasizing on the proposition identification, Halliday is not aimed for taking metadiscourse as research interest. However, his idea of falsifiability test toward proposition has shed lights on the later metadiscourse studies, especially in metadiscourse definition and recognition.

Vande Kopple (1985) stated that different levels of meaning, i.e. propositional and interpersonal, can be discovered in a text. On the level of propositional meaning, writers supply “information about the subject of their texts via expanding propositional content” (p. 83). However, on the other level of interpersonal meaning, metadiscoursal devices are applied to “help receivers organize, classify, interpret, evaluate and react to such [propositional] material” (p. 83) instead of adding additional propositional material to the text as the former level does. In this case, Vande Kopple (1985) argued that metadiscourse is non-propositional in essence that “do not expand the propositional information of the text and do not make claims about states of affairs in the world that can be either true or false” (p. 85). Therefore, Vande Kopple (1985) defined metadiscourse as “discourse about discourse or communication about communication” (p. 83). Crismore et al. (1993) also supported the idea of different levels of meaning in texts. She defined metadiscourse as “linguistic material in texts, ..., which does not add anything to the propositional content but that is intended to help the listener or reader organize, interpret and evaluate the information given” (p. 40).

Rather than claiming levels of meaning in texts, Hyland (1999) emphasized the non-propositionality of metadiscourse as writers’ use of the metadiscoursal devices signals the “characteristics of an underlying community” (p. 5). Specifically in academic disciplines, the application of metadiscourse denotes the “rhetorical personality which influences the ways writers intrudes into their texts to organize their

arguments and represent themselves, their readers, and their attitudes” (p. 5).

In terms of meanings of a text, Hyland, based on Myers’ (1990), claimed that in academic contexts, writing conventions are frequently revised or rewritten by the writers themselves or by the journal editorials for different readers of communities. Such re-textualization might cause considerable changes in the meaning instead of the content of target texts (Hyland, 2005, p. 21-22). Therefore, Hyland (2005) stated that “meaning of a text is not just the propositional material... It is the complete package” (p. 22). With regard to the concept of complete package, it refers to both propositional and metadiscoursal content. Metadiscourse is an indispensable and inseparable part of meaning that cannot be excluded from proposition. Metadiscourse to some degree is rooted in the proposition even though it does not add any information to the propositional content. The point to separate the metadiscoursal content from the propositional content is largely for the purpose of exploration and research (Hyland & Tse, 2004).

In addition to separating metadiscourse from the propositions in the text, the second issue relating to whether the syntactic or functional approach is relatively appropriate to employ and identify metadiscourse. In metadiscourse studies the term ‘functional’ refers to how language is used to achieve certain “communicative purposes” for users (Hyland, 2005, p. 24). In academic writing, the term ‘functional’ not only indicates textual meaning, but also applies contextual meaning through language use as well as rhetorical strategies employment. In the metadiscourse literature, most researchers tend to adopt a functional approach to identify and classify metadiscourse markers, or metadiscourse devices, based on the functions they perform in a text and reveal to the context.

Adel (2006) stated that metadiscourse is a “functional category that can be realized in a great variety of ways” (p. 22). A linguistic device may be recognized as

metadiscursive for its relation to its use and to its co-text, while it might not be metadiscursive in other texts (Hyland, 2005; Adel, 2006). It implies that metadiscourse cannot be considered as a “strictly linguistic phenomenon at all, but must be seen as a rhetorical and pragmatic one” (Hyland, 2005, p. 25). Moreover, metadiscoursal devices may not only perform different functions in different texts, but may also manifest more than one function in the text at the same time (Adel, 2006; Hyland, 2005). Such multifunctionality, accordingly, makes each metadiscoursal device should be individually and manually examined in contexts in order to ensure its pragmatic function in the text.

The last issue concerns the role of metadiscourse as whether metadiscourse is textual or interpersonal. Mauranen (1993) considered metadiscourse as textual and brought up the concept of ‘text reflexivity’ in identifying metadiscourse in texts. Metadiscourse is regarded as writers’ explicit expression toward the text itself, instead of the readers. Mauranen (1993) stated that the way of excluding evaluation and interpersonal metadiscourse devices enables researchers to clarify the concept of metadiscourse. With text-referential features included only, it is helpful in distinguishing metadiscoursal devices from non-metadiscoursal materials. However, such text-oriented separation seems to be rather arbitrary regarding the essence of metadiscourse. Metadiscourse is the reflection of writers’ awareness toward readers’ processing needs regarding elaboration and clarification of the text. As writers show their awareness in relation to their texts, they also lead readers to become aware of the interaction that writers tend to build and sustain. Therefore, in the process of generating and conveying such awareness writers must consciously have a reader-oriented motivation in mind so as to successfully achieve preferred communicative purpose. That is to say, drawing attention to the text is not only textual but also interpersonal since it “represents a writer’s goal relative to an assessment of

the readers' need for guidance or elaboration" (Hyland, 2005, p. 17).

In contrast to Mauranen's perspective (i.e. textual exclusive), the majority of recent metadiscourse studies have adopted the view that metadiscourse is both textual and interpersonal. Both of the roles of metadiscourse are regarded as discretely manifesting in texts; however, they are crucially necessary in written genre practices. Writing is a communicative engagement between writers, texts, and readers, while metadiscourse indeed enacts and glues such interaction.

Other researchers (Halliday, 1994; Hyland, 1999) stated that metadiscourse performs textual function to organize the text while presenting interpersonal function to engage with writers and their readers of communities. Halliday (1994) argued that people communicate to achieve three macro functions: the ideational function, the interpersonal function, and the textual function. The ideational function corresponds to the propositional content that people express their experiences or ideas through language use or other forms of medium. To fulfill interpersonal function, people have to interact with their message receivers. People engage and encode interaction while expressing and understanding their evaluations and feelings toward each other. The textual function, on the other hand, refers to people using certain rhetorical strategies to organize their text in order to make it coherent to the external reality and to the readers. In the domain of Halliday's (1994) three macro communicative functions, the interpersonal and the textual functions are usually performed in the employment of metadiscourse. In the process of interaction, the three functions work independently but still mutually influence each other for the expected communicative purposes of readers of academic disciplinary discourse communities.

Hyland (1999) referred to textual metadiscourse as "organizing propositional information in ways that will be coherent for a particular audience and appropriate for a given content" (p. 7). Writers anticipate possible processing difficulties of readers as

well as conform to the requirements of academic discourse communities by employing certain textual metadiscoursal devices in their texts. On the other hand, interpersonal metadiscourse in Hyland's (1999) perspective is essentially an "evaluative form of discourse and expresses the writer's individually defined, but disciplinary circumscribed persona" (p. 7-8). Interpersonal metadiscourse is used to express writers' point of view and evaluations toward the propositional content and readers.

To some degree there seem to be two levels of interactions in the process of academic writing practices. One indicates the interaction between writers and their texts by means of textual metadiscourse application. The other refers to the interaction between writers and their readers of academic disciplinary discourse communities via the employment of interpersonal metadiscourse. On the one hand, both levels of interaction are independent from each other; however, they are intertwined with each other and composed of indispensable elements with propositional contents in academic writing.

However, as mentioned earlier about the multifunctionality of metadiscourse which may manifest in texts, it is proclaimed that even textual devices can perform interpersonal functions. Textual metadiscourse may not exclusively reveal textual function, but often show interpersonal function. In this case, textual metadiscourse may not only perform the function of textual organizer, but also represent as textual guider to direct readers toward writers' expected understanding and interpretations.

Therefore, neither different levels of meaning nor levels of interactions should be regarded as an absolute way for explaining and understanding metadiscourse.

Metadiscourse, fairly speaking, is a collective term for a set of rhetorical linguistic materials for constructing and maintaining appropriate communication between writers, texts, and readers as information receivers. Metadiscourse is

interaction-oriented. On the one hand, metadiscourse aims to organize textual information to make it as coherent and discipline-approved as possible. On the other hand, metadiscourse is expected to guide readers through the text based on readers' prior experiences and writers' planned communicative goal in order to reach the so-called proper realization of texts.

Metadiscourse Models

A great variety of metadiscourse taxonomies have been proposed along with diverse issues and definitions (Adel, 2006; Crismore et al., 1993; Hyland, 2004, 2005; Hyland & Tse, 2004; Thompson & Thetela, 1995; Thompson, 2001; Vande Kopple, 1985).

Vande Kopple (1985) proposed a classification system for metadiscourse (p. 82). He divided metadiscourse features into two categories as textual metadiscourse and interpersonal metadiscourse (see Table 2.1). Based on the specific function enacted, textual metadiscourse is further classified into four subcategories, and three subcategories in interpersonal metadiscourse. Vande Kopple's (1985) metadiscourse model has received considerable attention in metadiscourse literature for it is the first systematic taxonomy that has activated much metadiscourse research as well as other new taxonomies.

However, the model has its weaknesses in categorization and problems in functional overlap. To begin with, it is difficult to distinguish between *narrators* and *attributors* (under the category validity markers). For example, citation usually performs a variety of rhetorical functions, especially in the academic writing context. On the one hand, citation can function as a validity marker to enhance academic arguments with credible sources, and as a narrator to fairly inform readers what previous research or researchers have done/claimed. On the other hand, citations

might be applied for building an “intertextual framework to suggest a cumulative and linear progression of knowledge” (Hyland, 2005, p. 33). Functions of citations are diverse and might be multi-functional at the same time. Writers may aim to achieve a certain rhetorical function via citation; however, there is a great chance for readers to misdecode such a rhetorical act writers wish to perform.

Table 2.1

Vande Kopple's Classification System for Metadiscourse (1985, p. 82-92)

Category	Function
Textual Metadiscourse	
Text connectives	Used to help show how parts of a text are connected to one another. Included sequencers (first, next, in the second place), reminders (as I mentioned in chapter 2), and topicalizers, which focus attention on the topic of a text segment (with regard to, in connection with).
Code glosses	Used to help readers to grasp the writer's intended meaning. Based on the writer's assessment of the reader's knowledge, these devices reward, explain, define, or clarify the sense of a usage.
Validity markers	Used to express the writer's commitment to the probability of or truth of a statement. These include hedges (perhaps, might, may), emphatics (clearly, undoubtedly), and attributers which enhance a position by claiming the support of a credible other (according to Einstein).
Narrators	Used to inform readers of the source of the information presented--- who said or wrote something (according to Smith, the Prime minister announced that).
Interpersonal Metadiscourse	
Illocution markers	Used to make explicit the discourse acts the writer is performing at the certain points (to conclude, I hypothesize, to sum up, we predict).
Attitude markers	Used to express the writer's attitudes to the propositional material he or she presents (unfortunately, interestingly, I wish that, how awful that).
Commentaries	Used to address readers directly, drawing them into an implicit dialogue by commenting on the reader's probable mood or possible reaction to the text (you will certainly agree that, you might want the third chapter first).

In addition to functional ambiguity of citation, Vande Kopple's (1985) model also causes the problems in decoding *illocution* and *validity markers*. Examples such as *we predict that* and *I hypothesize that* seem to refer to the degree of commitment writers would like to present in an argument on the one hand. On the other hand, these markers seem to indicate the "explicit discourse acts the writer is performing at the certain points" (Hyland, 2005, p. 32).

The two problems found in Vande Kopple's (1985) metadiscourse model cannot be solved through close analysis of the context. Instead, they are an inherent weakness embedded in the classification of the metadiscourse itself. Vande Kopple's (1985) model has been refined and reorganized by Crismore et al. (1993) and Hyland (1998, 1999).

Crismore et al. (1993) proposed a revised metadiscourse categorization (see Table 2.2) which consists of only two major categories textual and interpersonal metadiscourse. However, several metadiscoursal functions have been reorganized in two new subcategories of textual metadiscourse as *textual markers* and *interpretive markers*. The two new subcategories are used for explaining and concretizing the textual role metadiscourse performs. Textual markers are metadiscoursal features for organizing the discourse, while interpretive markers refer to features in relation to writer-reader relationship constructing and maintaining in academic writing. Namely, the interpretive markers function to "help readers interpret and better understand the writer's meaning and writing strategies" (Crismore et al., 1993, p. 47).

Several problems; however, are still inherent in the model. One problem is the functional arbitrary between the subcategories *reminders* and *announcement* placed in the textual metadiscourse as textual markers and interpretive markers. Referring to textual materials earlier in the text, *reminders* are classified in textual markers, while *announcement* in interpretive markers for reporting upcoming materials. With slight

functional difference between *reminders* and *announcement*, the classification seems to eclipse the grouping basics of textual markers and interpretive markers.

Table 2.2

Metadiscourse Categorization by Crismore et al. (1993, p. 47-54)

Category	Function	Examples
Textual metadiscourse		
<i>1. Textual markers</i>		
Logical connectives	Show connection between ideas	Therefore; so; in addition; and
Sequencers	Indicate sequence/ ordering of material	First; next; finally; 1, 2, 3
Reminders	Refer to earlier text material	As we saw in chapter one
Topicalizers	Indicate a shift in topic	Well, now we discuss...
<i>2. Interpretive markers</i>		
Code glosses	Explain text material	For example; that is
Illocution markers	Name the act performed	To conclude; in sum; I predict
Announcements	Announce upcoming material	In the next section
Interpersonal metadiscourse		
Hedges	Show uncertainty to the truth of assertion	Might; possible; likely
Certainty markers	Express full commitment to assertion	Certainly; know; shows
Attributers	Give source/ support of information	Smith claims that...
Attitude markers	Display writer's affective values	I hope/ agree; surprisingly
Commentary	Build relationship with reader	You may not agree that

Another fundamental problem arises from the two subcategories in textual metadiscourse. On the one hand, organizational metadiscoursal features are essentially associated with the coherence of the discourse. Therefore, organizational metadiscoursal features, or collectively termed as textual markers according to the model (Crismore et al., 1993), are used to assist readers to interpret the discourse. In other words, the division principle between textual markers and interpretive markers

seems to be unnecessary for both types of metadiscourse markers contribute in the coherence, organization, and understanding of the discourse.

Stating that textual metadiscourse sometimes also enacts interpersonal function, Hyland and Tse (2004) introduced another metadiscourse model (see Table 3) modifying Thompson and Thetela's (1995) conception of metadiscourse. Although originating a great deal from Thompson and Thetela's (1995) idea, Hyland and Tse's (2004) amended metadiscourse model displays a wider focus by including stance and engagement markers.

Hyland argued that “textual function is intrinsic to language [for] it exists to construe both propositional and interpersonal aspects of texts into a coherent whole” (Hyland, 2005, p. 43). Accordingly, the so-called textual metadiscourse devices do not function independently but jointly organize the propositional materials while relating writers' statements to readers. Textual metadiscourse is interpersonal-oriented to a certain degree; metadiscourse should generally be interpersonal. Further metadiscourse functional categorization should therefore be presented based on the prerequisite.

An important distinction among interpersonal function is proposed by Thompson and Thetela (1995) who believed interpersonal function is composed of two related but relatively independent functions. The two functions are termed as the *interpersonal/ interactive* and the *interactional*. The interactive features “guide the reader through the text” (Thompson, 2001, p. 58) while the interactional features “involves the reader collaboratively in the development of the text” (Thompson, 2001, p. 58). In other words, interactive resources are employed to reveal the ways writers arrange their texts based on their understanding towards readers' prior knowledge and familiarity of particular disciplinary discourse community. Such understanding is related to the reader-friendliness of a discourse for it “involves the management of

information flow, addressing how writers guide readers by anticipating their likely reactions and needs” (Hyland, 2005, p. 44). On the other hand, emphasizing more on reader-involvement, interactional resources are applied to present writers’ “explicit interventions to comment on and evaluate material” (Hyland, 2005, p. 44).

Table 2.3

An Interpersonal Model of Metadiscourse (Hyland & Tse, 2004, p. 169)

Category	Function	Examples
Interactive	Help to guide the reader through the text	
Transitions	Express relations between main clauses	In addition; but; thus; and
Frame markers	Refer to discourse act, sequences and stages	Finally; to conclude; my purpose is
Endophoric markers	Refer to information in other parts of the text	Noted above; see figure; in section 2
Evidentials	Refer to information from other texts	According to X; Z states
Code glosses	Elaborate propositional meaning	Namely; e.g.; such as; in other words
Interactional	Involve the reader in the text	
Hedges	Withhold commitment and open dialogue	Might; perhaps; possible; about
Boosters	Emphasize certainty and close dialogue	
Attitude makers	Express writer’s attitude to proposition	Unfortunately; I agree; surprisingly
Self-mentions	Explicit reference to authors	I; we; my; me; our
Engagement markers	Explicitly build relationship with reader	Consider; note; you can see that

Thompson (2001) stated that the two types of interaction are “essentially the two sides of the same coin” (p. 61) for any discourse having interactional purpose might

also simultaneously indicates the textual information flow, and thus functions interactively to both the writer and readers. The collaboration and mutual-influence of interactive and interactional features implies “solidarity with readers, showing concerns for their processing of the text, and the stance of the writer” (Hyland, 2005, p. 45).

Hyland and Tse’s (2004) model to some degree has solved the problem in deciding whether certain metadiscourse feature should be seen as textual or interpersonal. Recent metadiscourse research tends to regard metadiscourse as a collective interpersonal resources used to manage the triangular interaction between the writer, readers, and the text. In the current study, the well-designed Hyland and Tse’s (2004) model will be adopted to describe reformulating metadiscourse devices.

Studies on Metadiscourse

Based on Vande Kopple’s (1985) model, Intaraprawat and Steffensen (1995) analyzed the metadiscourse application in persuasive essays written by twelve English as a Second Language (ESL) university student writers. Their result showed that essays using greater variety of metadiscourse resources tend to receive higher grades. The study indicated that good writers are usually capable of revealing awareness towards readers’ processing needs by employing certain rhetorical strategies to enhance the coherence of their texts. On the other hand, Cheng and Steffensen (1996) conducted a quasi-experimental study concerning the relationship between metadiscourse teaching and university-level students’ essay performance. The result revealed that the student essays of the experimental group indeed improved a lot. Such improvement could be attributed to the metadiscourse instruction for the use of metadiscourse features strengthened “the ideational as well as the interpersonal and textual meaning of the texts” (Cheng & Steffensen, 1996, p. 149), and also increased

the reader-friendliness of the discourse. Thus, Cheng and Steffensen (1996) suggested that metadiscourse teaching should not be margined during writing instruction for it has considerable positive influence on students' writing performances.

Acknowledging the important value of metadiscourse instruction, much research paid more attention to writers' employment of metadiscourse in various written genres. Hyland (1999) examined metadiscourse in 21 university introductory textbooks across disciplines, and compared it with a RAs corpus. The result showed that different genres would lead to different metadiscourse deployment. Therefore, he pointed out that it might not be appropriate for students to use textbooks as academic writing model in terms of metadiscourse application. In addition, Simin and Tavangar (2009) adopted Vande Kopple's (1985) model to investigate metadiscourse in 90 Iranian EFL student essays from three-level proficiency groups. A total of 360 argumentative essays were collected through a semester. It was discovered that metadiscourse employment was influenced by different levels of proficiency. Proficient student writers attempted to appropriately use more metadiscourse, making their writing more coherent to readers and acceptable to the discourse community.

In addition, Hyland (1998) adopted Crismore et al.'s (1993) model to examine metadiscourse in 28 research articles (RAs) across four academic disciplines. The result indicated that disciplinary variation is highly related to the diverse use of metadiscourse. Other relevant studies (Hyland, 2004; Hyland & Tse, 2004; Hyland, 2010) analyzing metadiscourse distribution in 240 samples of ESL postgraduate dissertations also revealed that disciplinary variation is an important factor in metadiscourse employment. In terms of disciplinary variation, it was showed that the frequency of interactional metadiscourse features is much higher in the soft knowledge disciplines. Under the interactional metadiscourse category, hedges and self-mentions were much frequently used in the soft disciplines, compared to boosters

and engagement features which are relatively fairly distributed across disciplines.

Apart from disciplinary variation, Wharton (2012) adopted Hyland and Tse's (2004) model and conducted a cross-discipline and cross-context study. The study explored metadiscourse in academic writing composed by final-year student writers in two universities. The result showed that both disciplinary and contextual factors were associated with patterns of metadiscourse. However, the influence of contextual factors seems to outweigh disciplinary factors.

Furthermore, much research also zoomed into different aspects and functions of metadiscourse markers. Some studies (Hyland, 2005, 2008; McGrath & Kuteeva, 2012) focused on stance and engagement metadiscourse markers in RAs. Hyland's (2005, 2008) studies showed that the employment of stance and engagement markers not only revealed disciplinary variation, but also reflected and constructed the disciplinary communities. In McGrath and Kuteeva's (2012) research, they stated that a low number of hedges and attitude markers were used in pure Mathematics, compared to other soft and hard science fields. However, engagement markers were more frequently used in pure Mathematics RAs than other soft and hard disciplines.

Hyland (2005) exclusively paid attention to engagement markers in project papers written by final-year Hong Kong undergraduates, and compared them to engagement markers in RAs corpora. The results revealed that the concept of readership establishment was poorly built by student writers. Such limited and constrained writer-reader engagement, as Hyland (2005) stated, may result from the "consideration of institutional power, rhetorical confidence, and perhaps, cultural preference" (p. 375).

Apart from engagement markers, much research (Abdollahzadeh, 2011; Duenas, 2007; Harwood, 2005; Hu & Cao, 2011; Hyland, 2001, 2002a; Martinez, 2005) closely investigated stance markers, specifically self-mentions, hedges, boosters, and

other interpersonal metadiscourse. Several studies (Duenas, 2007; Harwood, 2005; Hyland, 2001) examined self-mention resources in RAs. The results showed that disciplinary variation existed since the approved degree of authorial presence was diverse among different disciplinary communities. Cultural contextual influence was also regarded as a determining factor in the application of self-mentions, supported by Duenas's (2007) study that toward greater use of self-mentions in English RAs, compared to Spanish ones. On the other hand, Hyland (2002a) analyzed authorial identity in Hong Kong undergraduate theses, and compared it to a larger RAs corpus. The result showed that authorial reference was obviously underused by student writers, especially in presenting arguments. Besides, Martinez (2005) explored self-mentions in biology articles written by native English-speaking writers and non-native English-speaking writers. It was observed that sectional variation also influenced the patterns and distribution of self-mention features.

Furthermore, Hu and Cao (2011) investigated hedges and boosters in RAs' abstract section of applied linguistics in English- and in Chinese-medium journals. The results on the one hand revealed that hedges were frequently employed in abstracts of English-medium journals than Chinese-medium ones. On the other hand, a considerable amount of boosters were found in abstracts of empirical RAs, compared to those non-empirical studies. Moreover, Abdollahzadeh (2011) examined hedges, emphatics, and attitude markers in RAs' conclusion section of Applied Linguistics produced by Anglo-American and Iranian academic writers. Both groups were reported to frequently hedge their arguments. However, differences were found in terms of emphatics and attitude markers highly used by Anglo-American writers, compared to Iranian writers with high certainty avoidance and great restraint on attitudinal linguistic resources.

From the previous studies discussed above, several factors have been announced

to be remarkably influential in regard to the application and distribution of metadiscourse in academic written genres. The use of metadiscourse could be influenced and attributed to generic differences, disciplinary and contextual variations. Metadiscourse is essentially important and necessary in academic writing for writer-reader relationship construction and writers' authorial commitment towards the disciplinary communities. Both of the interactive and interactional aspects of metadiscourse (following the categorization of Hyland and Tse's (2004) model) are equally crucial, playing a vital role in the process of academic writing practices. However, it can be noticed that the majority of previous metadiscourse research centered on the interactional (or interpersonal) aspects of metadiscoursal manifestation, rather on the interactive aspects.

In addition, compared to RAs, little attention has been given to MA theses as well as PhD dissertations as target research genres. Specifically, MA theses are regarded as the first formal practice to participate in the professional academic discourse communities. Therefore, employing proper metadiscourse resources is considered to be rather important in discourse community socialization.

Considering the insufficiency in metadiscourse literature, particularly in the aspect of interactive metadiscourse, this study attempts to focus on a subcategory of code glosses in interactive metadiscourse which is introduced and discussed in the next section.

Reformulation

Definition of Reformulation

Writing in academic contexts is a process of interaction embodied in the negotiation and engagement of readers of particular discourse communities. A well-established and well-developed writer-reader relationship is considered to be

rather important for it is a cornerstone for arguments to be comprehensible and persuasive. Therefore, there is a tendency for writers to employ certain metadiscourse devices in academic statements to make them more accessible to readers. Such rhetorical propositional embellishments are applied to “enhance understanding, shape meanings more precisely to the writer’s goals, and relate statements to the reader’s experience, knowledge-base, and processing needs” (Hyland, 2007a, p. 267).

Reformulation (or reformulation markers), one of the propositional embellishment resources in metadiscourse should be regarded as an useful and crucial rhetorical strategy in academic writing. However, few metadiscourse studies have explored reformulation in terms of its forms, use, and pragmatic functions it performs in academic written genres.

Reformulation is defined as a discourse function used to “re-elaborate an idea in order to be more specific,... or in order to extend the information previously given” (Cuenca, 2003, p. 1071). Hyland (2007a) described reformulation as “markers which supply additional information by rephrasing, explaining or elaborating what has been said to ensure the reader is able to recover the writer’s intended meaning” (p. 268). In other words, it is a process of “textual reinterpretation” (Cuenca & Bach, 2007, p. 149) for writers to reiterate and elaborate their arguments in a reader-friendly way. Similar to the main characteristic of metadiscourse, reformulation is only employed to assist comprehensiveness of previous argument, rather than adding new ideas to the original.

Reformulation, to a certain extent, is based on the concept of equivalence operation. Practically, strict equivalence is scarcely possible to compose; even the act of producing two identical statements is believed to be redundant and unnecessary. The adjacent reformulated discourse; therefore, is theoretically equivalent but a range of pragmatic functions can be drawn on. Such pragmatic functions can be achieved by

either expanding or reducing the meaning of the original argument (Cuenca, 2003; Cuenca & Bach, 2007; Hyland, 2007a) so as “to convey particular meanings or achieve particular rhetorical effects” (Hyland, 2007a, p. 269).

Generally speaking, the main purpose of applying reformation lies in anticipating readers’ processing needs and facilitating their understanding of the preceding argument or even the entire discourse. As Cuenca & Bach (2007) stated, reformulation “ensures textual cohesion and facilitates discursive progression” (p. 149) by increasing discourse coherence and reducing possible processing difficulties.

Studies on Reformulation

Cuenca (2003) as well as Cuenca and Bach (2007) analyzed reformulation markers in Linguistics in English, Spanish, and Catalan research articles. The finding revealed that cultural variation is a crucial factor in the use of metadiscourse markers. The results also indicated that English RAs have less reformulation markers, compared to RAs in the other two languages. English writers preferred simple fixed markers. In contrast, a wider variety of markers were employed by both Spanish and Catalan writers, implying greater amount of reformulation forms in RAs written in these two languages.

On the other hand, Hyland (2007a) examined reformulation markers in 240 RAs across 8 disciplines with approximately 1.4 million words. Similar to other metadiscourse studies, disciplinary variation was observed. Reformulation markers such as *parentheses* and *i.e.* were highly preferred in hard science fields, indicating the tendency of simple appositional reformulation favored in these disciplines. Moreover, “fixed connectors which exhibit no predictive structures over more complex forms such as *this means that, put another way, to be more precise, etc.*” (p. 273) were reported to be preferred by all disciplines.

Although metadiscoursal reformulation has been recognized as a crucial and determined strategy in academic writing, few of the studies have investigated it thoroughly.

Reformulation Models

Owing to the limited research of reformulation markers in written genres, few models regarding the forms and functions of reformulation markers have been developed.

Murillo's Model

Murillo (2004) used relevance theory to examine reformulation markers in natural data from two subcorpora of COBUILD*direct*. Metadiscoursal reformulation markers could perform two functions. One is Explicatures, based on the cognitive relationship generated between the original and the reformulated statements, such reformulation markers might support the “inferential process of reference assignment in nominal apposition uses” (p. 2063). Another function of reformulation markers is Implicatures, which could be further divided into two subcategories: “those that make implicated premises explicit” and “those that concern implicated conclusions” (p. 2064). However, Murillo only examined certain forms of reformulation markers. Especially in the case of Explicatures function, only reformulation markers of *that is (to say)*, *in other words*, as well as *i.e.* were discussed in detailed. Accordingly, Murillo's (2004) model of reformulation markers may not be appropriate for the present study.

Hyland's Model

Hyland (2007a), on the contrary, presented a relatively well-developed model in

relation to the forms and functions of reformulation markers. Hyland proclaimed that two main pragmatic functions could be enacted with either Expanding the original statement via Explanation or Implication, or Reducing it by Paraphrase or Specification (see Figure 2.1).

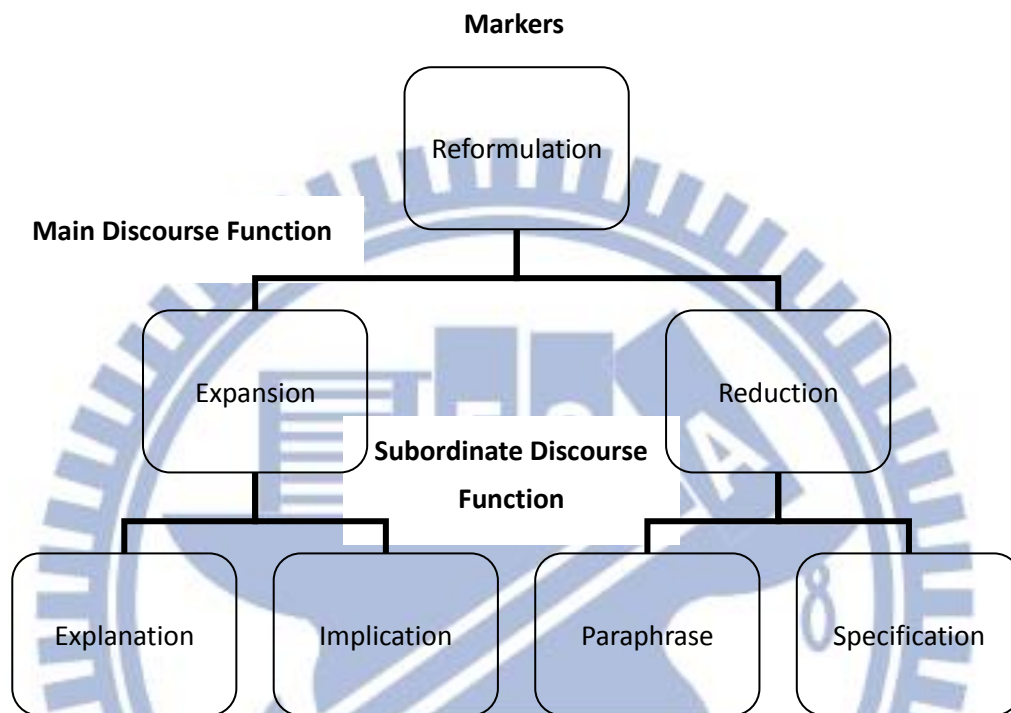


Figure 2.1: *Discourse Functions of Reformulation Model* (Hyland, 2007a)

Main Discourse Function: Expansion

Expansion in reformulation functions to restate an idea to clarify the implicit meaning expected to be perceivably understood. With an explanation or an implication suggested by the original proposition, the function of expansion is achieved. The goal of expansion is to enhance the accessibility of the previous statement and mark writer’s preferred interpretation in respect to academic writing practices.

Subordinate Discourse Function: Explanation

Explanation refers to “situated clarification which elaborates the meaning of a preceding unit to make a concept more accessible by providing a gloss or a definition” (Hyland, 2007a, p. 274). In academic writing, Explanation could be manifested with offering definition and/or further clarification towards a technical term. Also, it could be embodied in presenting a technical term for a concept already expressed with more accessible alternatives. Some common reformulation features were reported in Hyland’s (2007a) study, such as *parentheses*, *i.e.*, and *that is* as well as other defining markers such as *called*, and *referred to*. For example, as cited in Hyland’s (2007a, p. 274-275) study:

Among blacks, increases in nonmarriage have accounted for the overwhelming share of the post-1960 rise in the nonmarital fertility ratio, *that is, the ratio of nonmarital births to all births.*

Due to the lack of success in using several conventional methods, an unbiased recognition algorithm is proposed based on a novel statistical feature point recognition principle, *called the maximum principle of slope difference.*

Subordinate Discourse Function: Implication

Implication is defined as “to draw a conclusion or summarize main import of the prior segment” (Hyland, 2007a, p. 275). It functions to rephrase the preceding argument to a writer-intended and reader-perceivable conclusion. For instance, as cited in Hyland’s (2007a, p. 275) study:

In order to understand the complex decision-making process involved in the organization of written text, a pedagogical theory of L2 writing needs to look beyond the background of ESL writers. *In other words, an alternative theory of L2 writing is needed.*

She was in direct control of something of which Dan's death was a consequence and only in this way did she have control over Dan's death. *This means that Dan's death was not in Shirley's control except insofar as this something was in her control.*

Main Discourse Function: Reduction

In contrast with Expansion, Reduction serves to confine the meaning regarding the prior presented statement via narrowing the scope of possible interpretation. It could be realized by either Paraphrase or Specification.

Subordinate Discourse Function: Paraphrase

Paraphrase provides a summary by restating an argument with different words or forms to increase its clearness compared with the original one. To some extent, Implication (as categorized in Expansion) and Paraphrase (as categorized in Reduction) seem to functionally overlap with each other. However, it should be noted that what Implication enacts is to draw a conclusion from the preceding statement, while Paraphrase serves to offer a summary. This function is commonly signaled by linguistic forms such as *or put differently, that is to say*, and the use of *parentheses*. For example, as cited in Hyland's (2007a, p. 276) study:

These people are often active in social change organizations, but their theories do not provide intellectual support for their actions, *or put differently, do not explain their practices to them.*

12 of the 18 (67 per cent) crimes were rape and murder, or a combination relating to a sexual murder.

However, the value of past participants as information carriers and the persuasive influence of supporters in senior managerial positions soon became abundantly apparent. *That is to say, the value of an internal network of committed 'true believers' in contributing to this border crossing activity became abundantly clear.*

Subordinate Discourse Function: Specification

Specification functions to specify features or concepts salient within the preceding argument to restrict or ensure interpretation perceived by readers. Precisely specified arguments allow writers both “highlight the specification and simultaneously include it within the scope of the original reformulation” (Hyland, 2007a, p. 276). Features such as *in particular*, *especially*, and *specifically* were identified in Hyland’s (2007a) study and presented in the following instances.

...they refer to psychoanalysis, to existential phenomenology and to Marxism (*in particular to the earlier works of Marx*).

As a result, implementation of a commercial lighting program can affect the costs and benefits of different stakeholders. *Specifically, it can affect*

utility rates, the total resource cost to the society, the utility expenditures, and the total cost to all customers.

Hyland's (2007) model of reformulation markers is comparatively well-framed. However, the dichotomy of the pragmatic function of metadiscourse reformulation markers may be over-absolute to some degree. In other words, between the pragmatic function of Expansion and Reduction, the grey area, or Other function perceivably exists, which should be also included as one of the possible discourse functions of metadiscourse reformulation markers entailed. An example from the corpus in the present study, "The result showed that a high percentage of teachers (*over 80%*) have used picture books in their teaching, ... (NCCU_7)", the *parentheses* are reformulation markers while *over 80%* the reformulation. It is hard to decode the reformulation (i.e. *over 80%*) as either Expansion or Reduction, for it can be regarded as supplementary information to *a high percentage of teachers*. On the contrary, it can also be understood as specifying the accurate percentage of teachers using picture books. In light with such dilemma, Other should be included as one of the main discourse functions metadiscourse markers may perform. Other in the current study refers to the ambiguous and uncertain pragmatic function (comparing to Expansion and Reduction) that certain reformulation markers reveal in academic writing.

Moreover, the ultimate function of Expansion is to elaborate and implicate the preceding proposition, a properly planned information-based background surely should be given. In terms of information-based background, the domain of the dichotomous subordinate discourse functions of Expansion is rather limited. A proposition with Expansion reformulation markers might be unfit for neither categorized as Explanation nor Implication. An example extracted from the present study "The study used two criteria to examine assistance from the tutor, *that is, the*

principle of gradualness and contingency proposed by Aljaafreh and Lantolf (1994) and the scaffolding functions by Wood, Bruner, and Ross (1976, cited in Anton, 1999).” could support the preceding argument. The subordinate discourse function enacted by *that is*, it neither gives a definition or a gloss nor makes a conclusion from the original proposition. Rather, it fairly presents and lists what the two criteria used by the study. Accordingly, besides Explanation and Implication, another subordinate discourse function Presentation might be necessary in order to amend the limited domain of Expansion. Based on above statements, Hyland’s (2007a) model is modified and presented in Chapter Three as the main coding scheme for the current study.

Rearranging and generating information into the X is equal to Y formula is seen as a common rhetorical strategy and process in academic writing. However, it is hardly possible to produce perfect equivalence through reformulation. The process of reformulation inevitably changes the pragmatic and rhetorical realization contained in the preceding argument. Providing credible and accessible arguments is regarded as the foremost purpose of reformulation employed in academic writing. Accordingly, proposing identical arguments may be unnecessary and even affect textual economy. In the scope of academic writing, reformulation to a certain extent invents a pragmatic equivalence instead of developing a logical one.

CHAPTER THREE

METHODOLOGY

Under the research topic of metadiscourse, information of reformulation is still insufficient though EAP has been a hit in academia. The present study took a corpus-based approach and discourse analysis to explore metadiscoursal reformulation markers in MA theses by Taiwanese EFL graduate students. Issues of frequency of preferred reformulation markers and their discourse functions (RQ1), relation of multifunctionality between reformulation markers and their discourse functions (RQ2), and sectional occurrences of reformulation markers and their discourse functions in MA theses (RQ3) were explored.

This chapter begins with a description of corpus compilation and concordance analyzing tool. Next, the coding scheme of reformulation markers and discourse functions is presented. In the last section, a description of the process of designing and examining the modified coding scheme is offered.

Corpus and Analyzing Tool

The corpus in the present study was composed of 60 MA theses in the fields of TESOL and Applied Linguistics from four national prestigious universities in Taiwan (i.e. National Chiao Tung University, National Tsing Hua University, National Taiwan Normal University, and National Chengchi University). The English proficiency of the graduate students majoring in TESOL and/or Applied Linguistics from the four national universities are reasonably considered to be high, and could be termed as advanced English users/learners. They have good English skills, especially in academic writing. On the other hand, since I am more familiar with these two fields, it would be easier for me to conduct discourse analysis and appropriately decode the

data in these fields. Fifteen theses were chronically and odd-numbered selected from the TESOL institute or program from each of the four universities from year 2006 to 2012 via National Digital Library of Theses and Dissertations in Taiwan (臺灣博碩士論文知識加值系統).

Oriented as a small-scale corpus-based text analysis research, the 60 theses were first converted from pdf file to word file, and then further converted to text file for the acceptability of the target concordance program *AntConc 3.2.4*. to calculate the total numbers of words (1,426,896 words in total, approximately 1.43 million words). Later, the compiled learner corpus was electronically analyzed via the concordance program to calculate the total number of words and to elicit reformulation markers that occur in each text.

Target Reformulation Markers and Coding Scheme of Discourse Functions

Table 3.1 shows 28 reformulation markers which are based on those listed in reference books (Hyland, 2000, 2005), previous work on metadiscourse (Hyland, 2007a), as well as a thorough contextual examination in the present study (Appendix A), all the data were manually examined to ensure they function to reformulate arguments in the texts.

Moreover, to reveal the discourse functions in reformulation markers perform, data were manually analyzed in contexts based on the modified coding schemes from Hyland (2007a). Hyland's (2007a) model is considered to be the most appropriately accommodated for the current study because it serves to examine the rhetorical variation and reveal the pragmatic manifestation reformulation markers performed in MA theses.

Table 3.1

Target Reformulation Markers

Reformulation Markers	
<i>as a matter of fact</i>	<i>put another way</i>
<i>called</i>	<i>put it more specifically</i>
<i>defined as</i>	<i>referred (to) as</i>
<i>especially</i>	<i>simply put</i>
<i>generally speaking</i>	<i>so-called</i>
<i>i.e.</i>	<i>specifically</i>
<i>in other words</i>	<i>specifically speaking</i>
<i>in particular</i>	<i>that is to say</i>
<i>known as</i>	<i>that is</i>
<i>namely</i>	<i>that/this means</i>
<i>(or) more specifically</i>	<i>to say the thing differently</i>
<i>or X</i>	<i>to be more precise</i>
<i>parentheses</i>	<i>viz.</i>
<i>particularly</i>	<i>which means</i>

Hyland's (2007a) coding scheme has already been presented in Chapter Two with examples. In this chapter, a modified coding scheme (Figure 3.1) is presented, because it is found that certain kinds of reformulation data in the current study are failed to be coded based on Hyland's (2007a) coding scheme. A new main discourse function called Other (Examples 1 to 2) was added for data with both characteristics of Expansion and Reduction functions. In addition to Explanation and Implication, another subcategory Presentation (Examples 3 to 5) was added to the discourse functions of Expansion in order to refer to the data which mainly plays the role of a reminder and helps to provide background information relating to the previous proposition. The modified coding scheme could be referred to Figure 3.1 below.

The definition of each function (including the main discourse functions and their

subcategories) of the modified coding scheme was further summarized below.

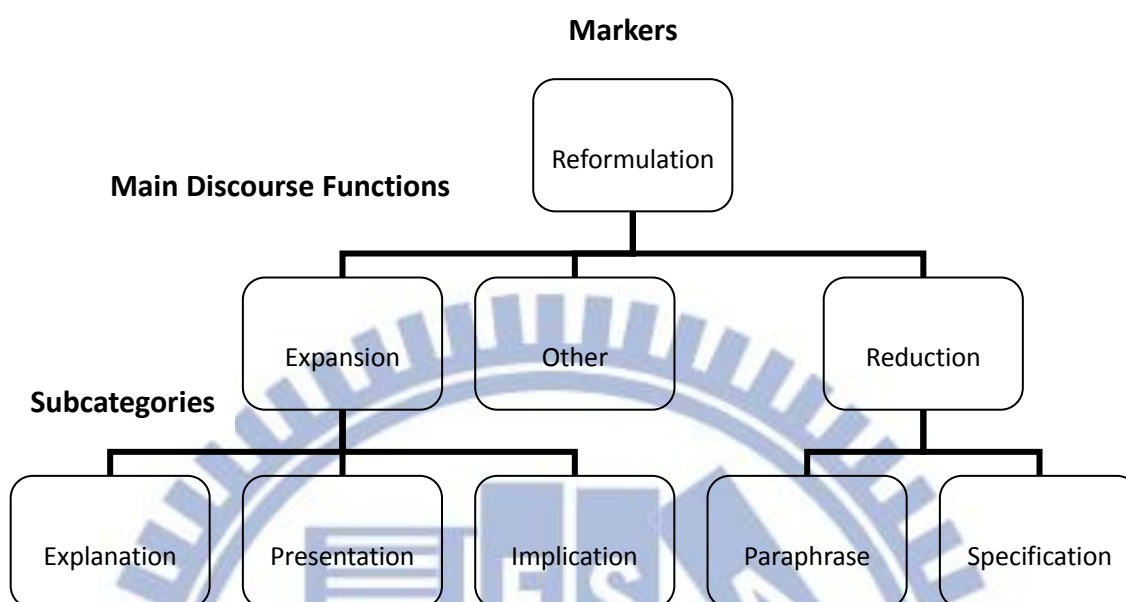


Figure 3.1 *A Modified Model of Discourse Functions of Reformulation* (based on Hyland, 2007a)

Main Discourse Function: Expansion

Expansion serves to elaborate and clarify the proposition with three subcategory functions: Explanation, Implication, and Presentation.

Subcategory of Expansion: Explanation

Explanation gives a technical term a definition or a gloss, or offers a technical term a more understandable term.

Subcategory of Expansion: Implication

Implication functions to provide a writer-preferred conclusion based on the previous statement.

Subcategory of Expansion: Presentation

Presentation supplies necessary background information to the prior proposition and ideas to remind and to reduce readers' processing loads.

Main Discourse Function: Reduction

Reduction serves to narrow down the possible interpretation of the previous statement with two subcategories functions: Paraphrase and Specification.

Subcategory of Reduction: Paraphrase

Paraphrase offers a summary to the prior ideas with different words or ways of expression.

Subcategory of Reduction: Specification

Specification spotlights the core point from the previous statement which leads readers to focus on the key idea that might be crucial in discourse comprehension.

Main Discourse Function: Other

Other stands between Expansion and Reduction, signaling the ambiguity among the other two main discourse functions.

Examples 1 to 5 are for the new function Other and Presentation. Other mainly occurs with *parentheses* to provide supplementary numeral data supported the previous statement. For instance, examples of Other function elicited from the corpus are presented in Examples 1 and 2.

- (1) In the EPS multiple-choice writing test, the participants employ more writing knowledge at the above-sentence level, namely establishing coherence in contexts (*above 80.7% in all of the four subtests*).

(NCCU_2_Other)

- (2) The results showed that a high percentage of teachers (*over 80%*) have used picture books in their teaching, and most of the teachers (*over 70%*) used picture books within four times a semester. (NCCU_7_Other)

On the other hand, the subordinate discourse function Presentation was included to supplement the domain of the main discourse function Expansion. The subordinate discourse function Presentation is used to elaborate and display information-based knowledge of the prior statement via clarification (Example 3), re-clarification (or echoing) (Example 4), and listing (Example 5) elements which were hinted or referentiated in the preceding discourse. Examples from the corpus were as below:

- (3) The first one was strictly the word class unique to Mandarin but not to English, *that is*, *locative particles*. One child in the study omitted a locative particle that should follow a noun phrase to specify a spatial relationship (i.e., 在牠的頭 ‘on it head’). (NCTU_9_Presentation)

- (4) As noted in the last chapter, Anne’s citation of Schmitt’s work diverged her knowledge claim (*the importance of examining generic vocabulary*) to another theme (words go beyond the level of single words), rendering her knowledge claim unfounded and argumentation less forceful.

(NCTU_10_Presentation)

- (5) For the instruction of listening strategy, three types of cognitive strategies in Imhof's (2001) study were identified, *namely interest management, asking pre-questions, and elaboration strategies.* (NCCU_9-6_Presentation)

In the present study, the elicited reformulation markers were first analyzed to ensure the main discourse function of either Expansion, Other, or Reduction they enact. Later, these markers were further examined in contexts to show the subcategory functions they reveal in reformulation.

Modified Coding Scheme Examiner

To assure validity, about 200 of the data were independently coded by two coders to examine the appropriateness of the coding scheme. It helps to ensure the classification and interpretation of the reformulation entries to be appropriate. One of the coder was a MA graduate student majoring in TESOL, whom was trained in a workshop hosted by me before coding. We coded 50 reformulation data a week, and it took around a month to finish all 200 data. We met every week to discuss the coding result and examine the appropriateness of the coding scheme. If discrepancies occurred during coding, we discussed and modified the coding scheme until we reached consensus on the coding. With the modified coding scheme, the agreement rate is about 92%.

CHAPTER FOUR

RESULTS AND DISCUSSIONS

The aim of this chapter is to demonstrate the findings revealed from data analysis and to answer the three research questions:

- (1) How are reformulation markers and their discourse functions realized in MA theses by Taiwanese graduate students?
- (2) What is the multifunctionality between reformulation markers and their discourse functions?
- (3) How reformulation markers used and what discourse functions do they perform in the major sections of MA theses by Taiwanese graduate students?

Reformulation Markers in MA Theses

The Overall Frequency of Reformulation Markers in MA Theses

With 28 reformulation markers examined in the present study (as listed in Table 3.1 in Chapter Three, or in Appendix A), there are 3883 occurrences of reformulation markers in the corpus; with a density of 37 occurrences per thousand words. Table 4.1 shows the occurrences and the respective frequencies of the 28 reformulation markers in the 60 MA theses.

It is well acknowledged that lightening readers processing loads while strategically leading readers toward planned realization of the text are the paramount goal of metadiscoursal reformulation markers in academic written communication. In terms of frequency of use, *parentheses* (41.00%) are the most frequently employed reformulation marker in MA theses, covering two-fifths of the total occurrences. Other markers, including *i.e.* (9.71%), *that is* (9.40%), *especially* (7.31%), and

specifically (6.00%) together, account for about one-third of the employment.

Table 4.1
Frequency of Reformulation Markers in 60 MA Theses

Reformulation Markers	Freq.	%
<i>parentheses</i>	1592	41.00
<i>i.e.</i>	377	9.71
<i>that is</i>	365	9.40
<i>especially</i>	284	7.31
<i>specifically</i>	233	6.00
<i>in other words</i>	223	5.74
<i>particularly</i>	190	4.89
<i>namely</i>	143	3.68
<i>in particular</i>	67	1.73
<i>defined as</i>	64	1.65
<i>called</i>	52	1.34
<i>that is to say</i>	43	1.11
<i>generally speaking</i>	39	1.00
<i>more specifically</i>	37	0.95
<i>which means</i>	36	0.93
<i>referred to as</i>	29	0.75
<i>known as</i>	26	0.67
<i>as a matter of fact</i>	16	0.41
<i>so-called</i>	15	0.39
<i>or X</i>	14	0.36
<i>this means</i>	11	0.28
<i>simply put</i>	8	0.21
<i>or more specifically</i>	7	0.18
<i>specifically speaking</i>	4	0.10
<i>that means</i>	4	0.10
<i>referred as</i>	2	0.05
<i>put it more specifically</i>	1	0.03
<i>to be more precise</i>	1	0.03
<i>put another way</i>	0	0.00
<i>to the thing differently</i>	0	0.00
<i>viz</i>	0	0.00
TOTAL	3883	100.00

With regard to frequency of use, preference for simple apposition reformulation is fairly obvious, for nearly half of the reformulation markers applied is *parentheses*. Simple apposition reformulation (Hyland, 2007a) refers to the reformulation, in most of the cases, via brackets (or *parentheses*), “syntactically separated from the rest of the sentence” (Hyland, 2007a, p. 273). Hence a pragmatic distance is created, for the information provided within such brackets segregates itself from the main idea of the statement, and turns itself more similar to background information (Hyland, 2007a).

Examples below display entries of *parentheses*, the simple apposition reformulation marker. Playing a role of background information provider, *parentheses* rhetorically and pragmatically can be used as a device of denotation, clarification, and data-supporting, as respectively presented in Examples 6 to 8. It should be noted that in the examples the words in bold are reformulation markers, while the words in italic are reformulating propositions.

- (6) More importantly, the three activities (*partner reading, paragraph shrinking, and prediction play*) practiced within the tutoring sessions in CWPT offer students opportunities to engage actively in strategy-based reading practice (Delquadri, et al., 1986; ...), and improve reading skills of diverse learners (Maheady, et al., 2006). (NTNU_1)
- (7) Sixty MSN talks are all collected from friends of the author to ensure the participants’ genders (*20 male-to-male talks, 20 female-to-female talks, and 20 mix-gender talks*). (NTNU_8)
- (8) It is also noted that both ENSs and CNSs used more noun phrases with possessives to refer to the secondary characters (*ENS: 21.33%, CNSs:*

10.16%) than to the protagonist (*ENSs*: 0.69%, *CNSs*: 1.17%). This indicates that these native speakers tended to refer to the dog and the frog via their connection to the boy. (NTHU_6)

Separated from the main statement, *parentheses* in Example 6 function to denote and refer to “*the three activities practiced within the tutoring sessions in CWPT*” (i.e. partner reading, paragraph shrinking, and prediction play). Moreover, *parentheses* can also be employed as a device of clarification, as shown in Example 7 in which *parentheses* further clarify how the gender of the participants was well-controlled in the research. In addition, *parentheses* can also be applied to provide precise supporting data, especially the numeral one, as in the case of presenting results of the research. As in Example 8, instead of simply stating the result, the writer employed *parentheses* to offer precise number of percentage data to increase credibility to his/her research statement.

Parentheses, *i.e.* (9.71%) and *that is* (9.40%) together comprise over 60.00% of occurrences in the present study. In particular, reformulation marker *i.e.* is semantically similar to *that is*, since *i.e.* refers to *id est* in Latin, which is understood as *that is* in modern English. Variant in form; however, *that is* and *i.e.* are dissimilar to each other in terms of context of use, as shown in Examples 9 to 13.

In Examples 9 to 13, with regard to the context of use between reformulation markers *i.e.* and *that is*, it can be observed that the latter allows more reformulation compared to its counterpart *i.e.* On the one hand, *i.e.* tends to be applied in/ with the simple apposition marker *parentheses*, which pragmatically and discourse-functionally molds it into somewhat subordinate position to the main proposition. Namely, the reformulation, or the message conveyed by *i.e.* is more similar to a reminder or background knowledge.

On the other hand, *that is* is mainly positioned at the beginning of a sentence, or sometimes the head leading a subordinate clause (as in Example 13). In addition to an information reminder resembling to *i.e.*, *that is* can also be an information provider or even a message summarizer and discourse concluder as shown in Examples 11 and 12.

- (9) “If a longer span of field work was available, a better understanding of Bert’s teaching repertoire can be gained and the explanations of several specific significant features in Bert’s teaching (*i.e. his emphasis on vocabulary*) may also be explored.” (NCCU_12)
- (10) “One possible account for this result was that the interval of time between the two vocabulary posttests (*i.e. two weeks*) caused most of the participants in the MG condition to forget how they initially processed the meaning of the glossed words during the treatment.” (NTNU_14)
- (11) “From the aforementioned studies, it is apparent to know that children’s limited lexical knowledge reflects their difficulties in reading. **That is**, *they have difficulties to comprehend the text because they cannot recognize the meanings of words, and finally create mental images.*” (NCTU_4)
- (12) “To sum up the findings for group differences based on Delivery scores, we can see that the high group always performed significantly better than the low and mid groups in terms of temporal measures across all six task types. **That is**, *the high group had the fewest unfilled pauses, the shortest total pausing time, the fastest speaking speed, managed to say the most words in*

a single utterance and spent the most time on the responses in each task.”

(NTHU_1)

- (13) “FSP believes that in coherent topics are constructed in a hierarchy, **that is**, *discourse topic, subtopics of paragraphs and sentence topics.*” (NTHU_12)

Pragmatically speaking, the use of *i.e.* seems to be more limited than *that is*. Pragmatically complementary to, or partially overlapped with each other, *i.e.* and *that is* are certainly important metadiscoursal devices in academic writing, particularly in MA theses, for both of them respectively rank as the second and the third place as the most frequent reformulation markers in the present study.

Moreover, *especially* and *specifically* rank as the fourth and the fifth, indicating the importance of specification in MA theses. Examples 14 to 17 refer to entries of these two reformulation markers, along with their variant form *particular* and *in particular*. Generally speaking, they help to highlight the crucial ideas from the statements which are expected to be noticed and understood by readers.

- (14) And five interviewees said that they made progress in writing, **especially** *in organization, grammar and content.* (NCCU_10)
- (15) The primary principle for assigning points depends on how the participants’ retelling content fitted the description on the GO map checklist. **Specifically**, *if the retold story content corresponded with the description of an element, the participants could get the maximum point.* (NTNU_7)
- (16) Moreover, little is known about effects of reading stories aloud to children

in school settings, **particularly** at primary school level in the context of learning English as a foreign language (EFL) in Taiwan. (NCTU_4)

- (17) For the purpose of communication, a certain language would be chosen as the common language among some areas or nations. English, **in particular**, now serves as an international language, to enable people of different cultural backgrounds to communicate. (NCTU_8)

In Example 14, *especially* points out the three aspects in which the interviewees progressed the most in the research, which might be an important finding of the research. In Example 15, reformulation marker *specifically* is employed to emphasize the scoring criteria of the research. Moreover, in Example 16, *particularly* presents the research gap the current research addressed, and which would be the niche for the research. In Example 17, *in particular* is used to emphasize the international status of English for communication purpose.

Comparison of Reformulation Markers with Hyland (2007a)

A comparison of the frequency of reformulation markers in the present study with that revealed in Hyland (2007a) (i.e. 240 published papers in 8 disciplines divided into fields of hard science and soft science, see Appendix B) is illustrated in Table 4.2 below. With regard to genre and disciplinary comparison, the average frequency of the 8 disciplines (i.e. “Overall” column), in hard science (Physics, Biology, Mechanical Engineering, Electrical Engineering) as well as soft science (Philosophy, Sociology, Applied Linguistics, Marketing) are presented. Applied Linguistics (i.e. AL) from Hyland (2007a) is further independently listed.

Note that in Hyland (2007a), except for those markers with explicit frequency;

others were categorized as Others. Accordingly, we may fail to get the full picture of what reformulation markers were included in the category of Others, despite the understanding of their scarce frequency of use discovered in Hyland (2007a). In the present study, reformulation markers *particularly, in particular, this means, which means, that is*, and *that is to say* are identified as separated ones. In Hyland (2007a); however, *(in) particularly, this/which means*, and *that is (to say)* were treated as the same reformulation markers. In Table 4.2, accordingly, any reformulation marker in the present study with a frequency less than 2.00% (as shown in Table 4.1) is under Others, except for those clearly excluded from Hyland(2007a) Others group, or treated as the same form of reformulation markers.

Table 4.2

Frequency of Reformulation Markers in the Present Study and Hyland

Reformulation Markers	Present study	Hyland (2007a)			
		Overall	AL	Hard Science	Soft Science
<i>parentheses</i>	41.00	26.10	6.30	49.73	7.40
<i>i.e.</i>	9.71	25.50	30.00	21.17	27.60
<i>that is</i>	9.40	8.60	22.10	4.28	11.43
<i>especially</i>	7.31	6.40	6.30	3.83	8.68
<i>specifically</i>	6.00	3.90	4.50	0.90	5.85
<i>in other words</i>	5.74	5.30	7.70	2.50	7.55
<i>particularly</i>	4.89	8.90	9.50	5.70	11.47
<i>namely</i>	3.68	4.90	3.40	3.73	6.45
<i>in particular</i>	1.73	---	---	---	---
<i>that is to say</i>	1.11	---	---	---	---
<i>which means</i>	0.93	3.50	2.90	2.53	4.63
<i>or X</i>	0.36	3.60	3.60	2.23	5.02
<i>Others</i>	8.14	3.30	3.70	3.40	3.92
TOTAL	100.00	100.00	100.00	100.00	100.00

Note: AL refers to Applied Linguistics

As Table 4.2 shows, *parentheses*, *i.e.*, *that is*, *especially*, *particularly* could be recognized as the preferred ones in the present study as well as in Hyland (2007a). Namely, there seems a tendency for writers to employ these 5 reformulation markers more frequently than others whereas they are used in MA theses and published RAs of soft and hard science fields of study.

Parentheses (41.00%) in the current study occur by far more frequently than in RAs (26.10%). Moreover, the frequency of *i.e.* in RAs (25.50%) is nearly three times higher compared to the one applied in MA theses (9.71%). Despite generic differences, the result in the current study, especially the top two (*parentheses* and *i.e.*) are similar to the ones in hard science fields in Hyland (2007a).

In addition, it is found that *parentheses* (41.00%) in MA theses are considerably outperformed than in soft science (7.40%) in Hyland (2007a). In fact, frequency of *parentheses* in the current study is similar to the ones in hard science (49.73%) in Hyland (2007a). Moreover, *i.e.* in soft science (27.60%) and hard science (21.17%) are obviously preferred than in the present study (9.71%).

As comparing reformulation markers in the current research and Applied Linguistics in Hyland (2007a), it is shown that *parentheses* appealing to major attention in the present study, while in Applied Linguistics of RAs (Hyland 2007a), *i.e.* is the one that more credits granted.

Furthermore, markers functioning to spotlight important points such as *especially* and *particularly* are both proved to be rather critical in the present study as well as in Hyland (2007a). Namely, the application of specification reformulation markers is a must no matter in MA theses or journal articles, for the act of highlighting could be a crucial part in academic persuasive writing.

Frequency of reformulation markers in the present study is compared with Hyland (2007a), and the result shows that *parentheses*, *i.e.*, *that is*, *especially*, and

particularly are the preferred ones in both studies. Namely, it is argued that preference for simple apposition reformulation markers (Hyland, 2007a) and simple fixed marker (Cuenca, 2003, 2007) is clearly the case despite genre and disciplinary difference.

In addition to those preferred markers in the current study and/or in Hyland (2007a) as presented in Table 4.1 and Table 4.2, it is found that certain markers are particularly dispreferred in terms of their frequency of use. Among the 28 reformulation markers as well as 3883 occurrences analyzed in the present study, *put it more specifically* (0.03%), *to be more precise* (0.03%), *put another way* (0.0%), *to the thing differently* (0.0%), and *viz.* (0.0%) clearly fail to have their impact on the application in the present study in particular, and also in Hyland (2007a). Such a tendency could be explained via tallying with the concept of simple fixed markers (Cuenca, 2003, 2007) as well as fixed connectors (Hyland, 2007a) in which reformulation markers “exhibit no predictive structures over more complex forms” (Hyland, 2007, p. 273) is preferred by all disciplines. In other words, as reaching to expected readers with anticipated understanding of texts as the ultimate goal, the notion of text economy is still regarded as a critical premise in academic written communication. Namely, expressing sophisticated and legitimate knowledge of ideas with precise and comprehensible expressions is the common consensus, or even the foundation in academic production.

However, the tendency toward simple fixed markers or fixed connectors may not be used to explain the extreme scarce application of the reformulation marker *viz.* *Viz.* is the abbreviation from Latin *videlicet*, meaning *namely, that is (to say)*, and *to wit*. To a certain extent, *i.e.* and *viz.* are identical since both are understood as *that is (to say)* as well as *namely*, especially in the modern English. Moreover, they are indeed simple fixed markers and fixed connectors. It is, accordingly, reasonable to assume that their frequency of use should be similar to each other (or at least certain amount

of *i.e.* frequency should have given to *viz.*). However, in the present study the frequency of *i.e.* is 9.71% (377/3883), while *viz.* is 0.00%.

Such superb preference to *i.e.* over *viz.* may be due to the fact that *viz.* is used comparatively more in legal writing and in literature as footnotes. On the contrary, it might be originated to the fact that *viz.* may not be familiar to the writers in the present study (or even to authors in Hyland (2007a)). We might not be able to pinpoint the core factor that causes such discrepancy, since further research regarding contextual analysis together with genre comparison is surely needed. What we could be of certainty at the present is the use of metadiscourse reformulation marker *i.e.* in academic writing, especially in the genre of MA theses and RAs in hard science and soft science fields is apparently the case.

In this section, frequency of reformulation markers in the present study as well as in Hyland (2007a) is presented and discussed. A comparison concerning application of reformulation markers between different genres and disciplines is also provided. In MA theses writing, certain pragmatic discourse functions are proved to be performed (Hyland, 2007a; Murillo, 2004) as reformulation markers are applied to reach writer-preferred communicative functions. In next section, accordingly, the focus is extended to reformulation markers and their discourse functions in MA theses.

Discourse Functions of Reformulation Markers in MA Theses

Reformulation Markers in Three Main Discourse Functions

To explore the pragmatic discourse functions performed by reformulation markers, the total 3883 occurrences are further examined in contexts. With the modified coding scheme as described in detail in Chapter Three, the respective frequencies of the three main pragmatic discourse functions in 60 MA theses is presented in Table 4.3.

Table 4.3

Frequency of Main Discourse Function in 60 MA theses

	Freq.	%
Expansion	1729	44.53
Reduction	1424	36.67
Other	730	18.80
TOTAL	3883	100.00

As reveals in Table 4.3, Expansion and Reduction are the dominant discourse functions that reformulation markers performed. About a half (44.53%) of the reformulation markers function to expand, or to elaborate the adjacent original idea, while around two-fifths (36.67%) tend to narrow down or specify, and around one-fifth (18.80%) functions as Other. The respective top five preferred markers in each of the three main discourse functions in MA theses are given in Table 4.4.

Table 4.4

Frequency of Top 5 Reformulation Markers in Three Main Discourse Functions

Expansion (N=1729)	Freq. (%)	Reduction (N=1424)	Freq. (%)	Other (N=730)	Freq. (%)
<i>parentheses</i>	627 (36.26)	<i>parentheses</i>	235 (16.50)	<i>parentheses</i>	730 (100.00)
<i>that is (to say)</i>	317 (18.33)	<i>specifically</i>	233 (16.37)	---	---
<i>i.e.</i>	298 (17.24)	<i>particularly</i>	190 (13.34)	---	---
<i>in other words</i>	116 (6.70)	<i>in other words</i>	107 (7.51)	---	---
<i>namely</i>	113 (6.50)	<i>that is (to say)</i>	91 (6.40)	---	---

* Number in parentheses indicates percentage (%)

Table 4.4 shows *parentheses* are the most preferred reformulation markers among the three main discourse functions, especially in Expansion (36.26%) and Other (100.00%). In Expansion, its frequency is two times higher than others. Particularly in Other, *parentheses* indeed have the stage to perform, which account for

100.00% frequency of use. Moreover, markers such as *that is (to say)* as well as *in other words* could be used to perform both Expansion and Reduction functions. Examples of *parentheses* of Reduction and Other functions as well as *in other words* of Expansion function are listed below.

- (18) Furthermore, News Night Club also stood out in the use of hypothetical reported speech, which accounts for 45.2% (47/104) percentage of use.
(NTNU_11_Reduction)
- (19) As for listening difficulty being identified, there were few participants (23.81%) being hindered by the appearance of new words in their process of listening. (NCCU_9_Other)
- (20) “Besides, everyone looks so hard-working and diligent right now. I can’t just sit there and doing nothing.” **In other words**, *her persistent in English learning was more under the influence of the class’ learning atmosphere rather than out of her genuine interest in the language.*
(NCCU_4_Expansion)

In Example 18, *parentheses* are used to paraphrase and provide an alternative expression to 45.20% (i.e. 47/104). In Example 19, on the other hand, *parentheses* help to deliver accurate quantitative data to the proposition *there were few participants being hindered by the appearance of new words*. In Example 20, *in other words* is applied to interpret the previous statement while leading the conclusion about the participant’s persistency in English learning. In the following sections, a description and analysis on the subcategories of the three main discourse functions is

presented in detail.

Reformulation Markers in the Subcategories of Expansion

Under the domain of Expansion three subcategories are identified as Explanation, Implication, and Presentation, as shown in Table 4.5. The frequencies of the subcategories are 20.94% (Explanation), 24.35% (Implication) and 54.71% (Presentation) respectively, of which Presentation is two times higher than the others.

Table 4.5

Frequency of Subcategories of the Discourse Function of Expansion

	Freq.	%
Explanation	362	20.94
Implication	421	24.35
Presentation	946	54.71
Total	1729	100.00

To examine closely, the top five preferred reformulation markers under Expansion are listed in Table 4.6. In terms of frequency of use, Table 4.6 not only shows the raw number of respective reformulation marker, but also presents the frequency of each marker in the subcategories.

It is found that the top five most frequently applied markers of Explanation function (N=362) are *i.e.* (22.00%), *parentheses* (18.20%), *defined as* (17.70%), *called* (11.00%), and *namely* (6.00%). The top three constitutes around 60.00% of frequency, indicating their unique status in performing Explanation function.

Table 4.6

*Frequency of Top 5 Reformulation Markers in Subcategories of the Discourse**Function Expansion*

Explanation (N=362)	Freq. (%)	Implication (N=421)	Freq. (%)	Presentation (N=946)	Freq. (%)
<i>i.e.</i>	80 (22.00)	<i>that is (to say)</i>	195 (46.32)	<i>parentheses</i>	561 (59.30)
<i>parentheses</i>	66 (18.20)	<i>in other words</i>	115 (27.30)	<i>i.e.</i>	212 (22.40)
<i>defined as</i>	64 (17.70)	<i>generally speaking</i>	39 (9.00)	<i>that is (to say)</i>	102 (11.00)
<i>called</i>	40 (11.00)	<i>namely</i>	22 (5.00)	<i>namely</i>	70 (7.00)
<i>namely</i>	21 (6.00)	<i>which means</i>	13 (3.00)	<i>as a matter of fact</i>	1 (0.10)

* Number in parentheses indicates percentage (%)

- (21) Backward transfer (**i.e.** *transfer from L2 to L1*) was also documented in a series of studies conducted by Dussias (2003, 2004) that examined the parsing strategies of monolingual Spanish and English speakers and Spanish-English bilinguals. (NTHU_6_Explanation)
- (22) One experiment was designed to explore how the interaction between the intralingual factor (*semantic similarities and differences between L2 spatial prepositions*) and the interlingual factor (*the overlaps and differences between L1 and L2 spatial categorization*) influenced the learning of spatial prepositional semantics. (NTNU_2_Explanation)
- (23) Phonological awareness is **defined as** *the ability to recognize or manipulate units of spoken language, such as rhyming units within words, syllables within words and words within sentences* (Adams, 1990; Blevins, 1998).
(NCCU_11_Explanation)

Explanation function though simply accounts for one-fifth (20.94%) under Expansion and around one-tenth (9.33%) under Reformulation, it is beyond ignorance. As in academic writing, MA theses in particular, writers set their research territory by giving definition to certain terminology and idea known in the field of discipline, or offering relatively authentic ways of expression to readers new to the discourse community (Examples 21 to 23).

On the other hand, the top five markers of Implication function (N=421) are *that is (to say)* (46.30%), *in other words* (27.30%), *generally speaking* (9.00%), *namely* (5.00%), and *which means* (3.00%), of which the top two accounts over 70.00% occurrences. Among them, *that is (to say)* and *in other words* are apparently preferred, which corresponds to the application of “fixed connectors which exhibit no predictive structure over more complex forms [in all disciplines]” (Hyland, 2007a), or “simple fixed markers” as in Cuenca (2003, 2007) studies.

Compared to Explanation, Implication has a slightly higher frequency, with around one-quarter (24.35%) under Expansion and one-tenth (10.84%) under Reformulation. Examples 24 to 27 show the use of markers *that is*, *in other words*, *generally speaking*, and *namely* performing Implication in the corpus. In academic writing, markers of Implication usually wrap up the results of research (Examples 24, 26, and 27), or conclude the findings of previous studies (Example 25).

(24) In Wu’s case P1 (62%) ranks first in frequency of post, followed by P4 (51%) and P2 (40%). P3 only accounts for 25% and ranks the fourth place.

That is, *at the beginning of their blogging process, Lin focused on interaction with the online community while Wu put more emphasis on awareness of personal educational autobiography such as emotional sharing.* (NCTU_5_Implicaiton)

(25) Lenneberg claimed that brain lateralization and left-hemispherical specialization for language learning ability matured around age thirteen. **In other words**, *learners cannot achieve second language fluency as well as achieving the first one once past puberty, the critical period.*

(NCCU_4_Implication)

(26) The implicit lexical elaboration would have positive effect on the recognition of word meanings from reading only when typographical enhancement was added. **Generally speaking**, *learners tended to acquire the vocabulary items when they were explicitly mentioned; no matter they were explicitly elaborated or typographically enhanced.*

(NTNU_9_Implication)

(27) Despite the fact that the title and the content were in similar colors which lead to visual coherence, there seemed to be no other special changes in the visual design to facilitate the transmission of her meaning. **Namely**, *it was a plain posting which strictly conformed to the rule of traditional print-based writing.* (NTHU_5_Implication)

In Example 24, *that is* is employed to decode the result, or to make those percentage numbers meaningful. In Example 26, *generally speaking* is used to conclude the proposition of implicit lexical elaboration in vocabulary recognition from reading. In Example 27, on the other hand, *namely* is applied to conclude the research finding which “*strictly conformed to the rule of traditional print-based writing.*” Moreover, in Example 25, *in other words* is used to provide the implication of language learning ability corresponds to Lenneberg’s claim about lateralization and

left-hemispherical specification.

To be more precisely, the Implication markers could direct readers toward the preferred ways of understanding research results. On the other hand, these reformulation markers could also be an intermediary that links and echoes current study to the former ones. Such linking relationship may reasonably increase the validity of the findings, and also help to gain considerable persuasiveness to present study.

Apart from Explanation and Implication, the last subcategory under Expansion is Presentation, which accounts for 54.71%. The top five markers of Presentation function (N=946) are *parentheses* (59.30%), *i.e.* (22.40%), *that is (to say)* (11.00%), *namely* (7.00%) as well as *as a matter of fact* (0.10%). Among them, *parentheses* are of the critical preferred one for covering nearly 60.00% of the occurrences in this subcategory. This further supports the concept of preference for simple apposition markers (Hyland, 2007a) which are positively and pervasively employed to explicit the referent that previous proposition stated, as revealed in the present study.

Moreover, *parentheses* as well as *that is (to say)* together constitute over 80.00% of frequency under Presentation. Examples 28 to 30 are entries of Presentation elicited from the corpus of the current study.

In academic writing, Presentation markers are usually applied as supplementary information, or positive reinforcement. Example 28 shows that *parentheses* are used to clarify the nature of technical words list compiled for the study. In Example 29, *i.e.* is applied to provide the information of the three distinct written genres previously mentioned. Moreover, *that is* in Example 30 is employed to help to denote the hierarchical topic structure of coherent texts.

- (28) To explore the nature of words used in the RAs in this particular field, we compile the frequency list of the corpus and analyze the coverage of the GSL (28.20%), AWL (12.75%), and technical words (*as generally represented by off-list words*) (59.05%) in the list. (NCTU_5_Presentation)
- (29) The researcher built an academic writing corpus of 3.5 million words, which contained written data of three distinct genres, *i.e.*, *research articles, master's theses, and doctoral dissertations* in the fields of applied linguistics, biology, electrical engineering, and business studies. (NTNU_3_Presentation)
- (30) FSP believes that in coherent texts, topics are constructed in a hierarchy, **that is**, *discourse topic, subtopics of paragraphs and sentence topics*. (NTHU_12_Presentation)

The importance of Presentation function can be observed from its high frequency under Reformulation (54.71%) and under the domain of the main discourse function Expansion (24.36%). It implies the fact that in MA theses, providing readers with necessary background information (as in Example 28 to 30) is necessary. Presentation function might be a so-called transition zone between any definition and conclusion.

Reformulation Markers in the Subcategories of Reduction

Two subcategories under Reduction are Paraphrase and Specification, which constitute 41.92%, and 58.08% respectively, as shown in Table 4.7. Accounting for nearly 60.00%, Specification indeed speaks for itself regarding its crucial status in academic writing. Specification helps to grab readers' attention to the key idea and

crucial findings which writers expect to be focused on. Without Specification, readers may easily lose their focus during reading, which might leads to inappropriate understanding or incorrect comprehension of texts.

Table 4.7

Frequency of Subcategories of Discourse Function of Reduction

	Freq.	%
Paraphrase	597	41.92
Specification	827	58.08
Total	1424	100.00

With about two-fifths occurrences under Reformulation, the top five markers under Reduction function (Table 4.4) are *parentheses* (16.50%), *specifically* (16.37%), *particularly* (13.34%), *in other words* (7.51%), and *that is (to say)* (6.40%). It can be seen that the respective frequencies of the top five markers are comparatively equally distributed compared to their counterparts in Expansion and Other. It might indicate the fact that exceptional preference toward certain markers is not the case in Reduction function.

Moreover, further analysis of the top five reformulation markers under the subcategories of Reduction is presented in Table 4.8. As found in the present study, the top five markers of Paraphrase function (N=597) are *parentheses* (39.10%), *in other words* (18.00%), *that is (to say)* (15.20%), *i.e.* (13.00%), and *namely* (5.00%). It is clear that *parentheses* are preferred the most, accounting for nearly 40.00% Paraphrase function. Examples 31 to 35 are entries of Paraphrase from the corpus. As the Examples reveal, Paraphrase markers in academic writing are employed to grasp the key idea from previous adjacent proposition while summarizing it into an expression which is rather accessible and comprehensible to readers.

Table 4.8

Frequency of Top 5 Reformulation Markers in Subcategories of Reduction

Paraphrase (N=597)	Freq. (%)	Specification (N=827)	Freq. (%)
<i>parentheses</i>	234 (39.10)	<i>especially</i>	284 (34.30)
<i>in other words</i>	106 (18.00)	<i>specifically</i>	233 (28.10)
<i>that is (to say)</i>	91 (15.20)	<i>particularly</i>	190 (23.00)
<i>i.e.</i>	78 (13.00)	<i>in particular</i>	67 (8.00)
<i>namely</i>	30 (5.00)	<i>more specifically</i>	37 (4.00)

* Number in parentheses indicates parentheses (%)

(31) All of the children (n=22, 100%) told stories using the serial verb construction and sentence linking, *15 of them (68%)* used the Ba construction, and *7 of them (32%)* made sentences with the Bei construction (see Table 6). (NCTU_9_Paraphrase)

(32) Teachers' beliefs about teaching are often a reflection of how they themselves were taught. **In other words**, *they learn a lot about teaching through their vast experience as learners.* (NCCU_6_Paraphrase)

(33) The exercise requires the students to identify sentences that do not fit well into its context; **that is**, *sentences with ill functioning themes.*
(NCCU_1_Paraphrase)

(34) In addition, we measured how motivated our participants were in preparing for GEPT, **i.e.**, *their test motivation.* (NCTU_13_Paraphrase)

- (35) Besides, the amount of the new vocabulary within the text is less than 5% of the total words, **namely**, *less than 12 words*. (NTNU_14_Paraphrase)

In Example 31, writer uses *parentheses* to present the percentage result (i.e. (68%)), offering a different way to view the finding. In Example 35, on the contrary, the writer uses *namely* to show the finding (i.e. *less than 12 words*) which the way of paraphrase is different compared to Example 31.

In addition to demonstrating the numeral-to-numeral data (Examples 31 and 35), Paraphrase can also be realized in textual-to-textual manifestation, as in Examples 32 to 34. In Example 32, *in other words* is used to paraphrase the statement about reflection of teacher's belief during learning (i.e. *they learn a lot about teaching through their vast experiences as learners*). In Example 34, author summarizes his/her expression "how motivated our participants were in preparing GEPT" to *their test motivation* with *i.e.* employed.

The preferred application of *parentheses* in Paraphrase supports the statement that simple apposition reformulation marker is proven to be preferred in academic writing (Hyland, 2007a). In addition, such a tendency also reflects writer's awareness and consideration toward discourse accessibility and reader realization as they attempt to present information (especially in displaying numeral data) with various ways of expression.

In addition to Paraphrase, Specification is another subcategory under Reduction. Specification markers though do not be used to sophisticate research domain with providing definition, nor be applied to introduce crucial findings or insights, their frequencies; however, indeed earns considerable credit in the genre of academic writing, in MA theses in particular. Specification is the second (21.30%) dominated subcategory under Reformulation, only after Presentation (24.36%). The frequency of

Specification indicates that in persuasive academic writing, particularly MA theses, assisting with and providing readers an appropriate way to understand the discourse with spotlighted core points is considerably fundamental.

The top five markers of Specification function (N=827) are *especially* (34.30%), *specifically* (28.10%), *particularly* (23.0%), *in particular* (8.00%) as well as *more specifically* (4.00%). It is found that the top three have already covered over 85.00%, the others (i.e. *in particular*, and *more specifically*) could even fairly be regarded as the form variants to the top three. Such a fact points that markers performing Specification function might be of uni-functionality in terms of their essential metadiscoursal characteristics.

Examples 36 to 37 are entries of Specification extracted from the corpus of the current study. It can be observed that Specification function is to draw readers' attention to the highlighted points writers present. In Example 36, *especially* is used to spotlight the things (i.e. *what certain Chinese words mean in English*) Bert would like students to teach him in class. In Example 37, *specifically* is applied to draw readers' attention to the researcher Berndardt who recommended oral retelling on assessment of L2 reading comprehension.

- (36) Based on this belief, Bert encouraged students to teach him things in class, **especially** *what certain Chinese words mean in English*.

(NCCU_12_Specification)

- (37) In terms of L2 assessment, some literature suggests that retelling can be utilized to evaluate L2 learners' learning. **Specifically**, *Berndardt (1991) recommended oral retelling as a way to assess L2 learners' reading comprehension*. (NTNU_7_Specification)

Specification markers, accordingly, in academic writing are similar to fluorescent marker that highlights the critical points from the previous statement. In MA theses, considering its length as well as rather complicated structure and organization, it is necessary to remind readers to focus on certain points of view that are comparatively crucial in understanding the texts. That is, utilizing these Specification markers could be of assistance for writers to ensure readers are on the planned tracks without getting lost in the flow of words. In other words, readers are similar to captain of a boat navigating on the wide broad sea, and these markers are a lighthouse shining from a distance, catching captains' attention while leading them safe home.

As such reformulation markers applied, it seems to be more efficient for writers to guide readers toward the preferred realization of the discourse. With certain viewpoints to be emphasized repeatedly, positive reinforcement, or the so-called preferred understanding of the discourse as known in the present study, may be triggered and enhanced while further increasing the persuasiveness and validity of the text as perceived by members of discourse community.

Compared to other subcategories, reformulation markers are apparently less diverse in Specification. On the contrary, Specification markers have more variations in form, such as *particularly* versus *in particular*, and *specifically* versus *more specifically*. Responding to the notion of text economy, it is evidently appropriately projected to the application of reformulation markers, as in the case of Specification ones. The simple and concise, the better --- *especially* (34.30%), the top one frequently employed Specification marker has its point. *Specifically* (28.10%) and *particularly* (23.00%) rank as the second and the third, which both have variations in form as an alternative ways of use. However, it can be seen that those variations (i.e. *in particular*, *more specifically*) are less frequent compared to their rather simple-in-form counterparts.

Reformulation Markers in the Discourse Function of Other

Besides Expansion and Reduction, the last main discourse function Other contains no subcategory. Accounting for nearly one-fifth (18.80%) under Reformulation, Other markers present readers with rather precise numeral data to assist its adjacent proposition. In the current study, simple apposition reformulation marker *parentheses* in charge of enacting such pragmatic discourse function. In academic writing, producing discourse first with gradable noun phrase while later providing supporting evidence might be a good start in catching readers' attention. Or to be more precise, such a writing strategy could be an effective way that implants readers with arranged preferred perception and realization of the discourse.

As revealed from the corpus, *parentheses* have the dominant status to Other. Below are the examples from the corpus. In Example 38, *parentheses* (i.e. (75%)) help to reformulate the previous gradable noun phrase proposition *most students*. Pragmatically as decoding such reformulation, it is hard to identify it as Expansion or Reduction (i.e. whether the *parentheses* are applied to expand or reduce readers' understanding about what the exact percentage of TSA positive evaluation). With this concern in mind, such reformulation is identified as Other, positioning as the grey and ambiguous area between Expansion and Reduction. The same understanding can be applied to Example 39, in which *parentheses* are employed (i.e. (76 out of 81)) to reformulate and denote to the former adjacent noun phrase *a high percentage*.

- (38) Survey of students' opinions on the strategy revealed that most students (75%) positively evaluated TSA for helping them connect the sentential topic to the discourse topic and achieve a better organization of ideas.

(NTHU_12)

- (39) Similarly, Zhang (1995) also found that a high percentage (76 out of 81) of college freshmen chose teacher feedback when being asked to state their preference among teacher, peer, and self-feedback. (NCTU_11).

Compared to Expansion and Reduction, Other only accounts for 18.80% under Reformulation; however, its application is still important and might be necessary besides the other two main discourse functions. On the one hand, it increases the variety of possible pragmatic discourse functions that reformulation markers may perform. On the other hand, it pinpoints the importance of contextual factor playing among writers, discourse, and readers since the performed pragmatic discourse functions may varied from context to context, and even from reader to reader. Namely, the discourse function is considerably mutually influenced by the information provider/constructor (i.e. writer) as well as information receiver/ decoder (i.e. reader).

We have discussed frequency of reformulation markers as well as their pragmatic discourse functions displayed in MA theses. In the next section, the discussion is extended to the comparison of metadiscoursal discourse functions in genres with previous study.

Comparison of Discourse Functions of Reformulation Markers with Previous Research Findings

To explore discourse functions revealed in genres, the present study is compared to Hyland (2007a) (Table 4.9). The discourse functions in Hyland (2007a) are presented in Appendix C.

Though there are minor differences between the classifications of discourse functions, a plain comparison as shown in Table 4.9 still has its necessity and value. On the one hand, Hyland (2007a) took published RAs as target sources, which to

some extent indicate that those texts, or those reformulation markers were constructed and manipulated by members of more experienced and discipline-sophisticated discourse community. Namely, their use of reformulation markers might be valuable for new members of the discourse community.

On the other hand, disciplinary variation is fully discussed in Hyland (2007a) in terms of frequency and discourse functions of reformulation markers, which is taken as a reference for the present study. In other words, with such comparison, it is expected to draw the similarity and dissimilarity concerning the frequency of reformulation markers and their discourse functions between genre as well as disciplines.

Despite with coding scheme discrepancy, several findings are of certainty. To begin with, Explanation (9.33%) and Implication (10.84%) are far less valued compared to Hyland (2007a), especially in soft science fields (21.50% & 23.15%).

Even as comparing these two subcategories to Applied Linguistics (24.70% & 17.70%), the occurrences in the present study still greatly falls behind. Second, Specification (21.30%) in the current study is over two times lower than the ones in RAs, no matter in hard (52.72%) or soft science fields (49.05%). Moreover, Paraphrase (15.37%) revealed in the MA theses is found to be two times higher than those in Hyland (2007a) (hard science fields: 7.10%, soft science fields: 6.30%). In other words, in MA theses writing, Expansion (especially Explanation and Implication) as well as Reduction (Specification in particular) are remarkably less performed than those in research articles.

Table 4.9

Comparison of Discourse Functions between Hyland (2007a) and the Present Study

	Present		Hyland (2007a)		
	study	Overall	AL	Hard Science	Soft Science
Expansion	44.53	42.40	50.00	40.18	44.65
Explanation	9.33	24.70	26.00	27.90	21.50
Implication	10.84	17.70	24.00	12.28	23.15
Presentation	24.36	---	---	---	---
Reduction	36.67	57.60	50.00	59.82	55.35
Paraphrase	15.37	6.70	4.40	7.10	6.30
Specification	21.30	50.90	45.60	52.72	49.05
Other	18.80	---	---	---	---
TOTAL	100.00	100.00	100.00	100.00	100.00

Note: AL refers to Applied Linguistics

Moreover, the two-times higher frequency of Paraphrase (15.37%) in MA theses as compared to that of Hyland (2007a) indicates reformulating propositions with reiteration and summary, or simply speaking, to give the mentioned ideas with a more accessible expression, is rather preferred by MA theses authors. In terms of the counterpart Implication (10.84%) and Paraphrase (15.37%), it is evident that to repeatedly express ideas with different words (i.e. Paraphrase) instead of drawing a conclusion (i.e. Implication) is favored by writers of MA theses. Such a tendency, as a matter of fact, is totally opposed to the results revealed in Hyland (2007a). In Hyland (2007a), the occurrences of Implication and Paraphrase in RAs (Implication: 17.70%; Paraphrase: 6.70%) in general, or particularly in AL (Implication: 24.00%; Paraphrase: 4.40%) show that the former (i.e. Implication) accounts for higher frequency.

In addition, the considerable frequency of the Presentation (24.36%) and Other (18.80%) reveal the fact that elaborating statements with background information, and/or with precise numeral supporting data are found to be an obvious tendency in the present study. In contrast, the comparatively scarce Specification in the present study may pinpoint to the fact that such function might not be given enough attention in MA theses, for a great amount of efforts have been given to Paraphrase, or other functions such as Presentation and Other.

The discrepancy of discourse function frequency between the genres of MA theses and RAs might be attributed to the notion of familiarity, and the awareness of the application of reformulation markers. That is, authors of RAs are professional members in the disciplinary discourse community. They are considered to be much more experienced and rather familiar with the use of such metadiscoursal devices in academic writing. Also, as experienced members of certain disciplinary community, they might know better legitimate knowledge construction and representation corresponding to disciplinary socialized norms, namely, the preferred ways of narration comprehensively and persuasively (Hyland, 2006).

On the contrary; however, such divergence of distribution of discourse functions between the present study and Hyland (2007a) might denote another possible explanation. That is, whether such discrepancy as a matter of fact refers to the essential generic differences between MA theses and research articles? The question unfortunately might be failed to be answered at this point, for it does not covered in the scope of the present research. Further research integrating analysis of metadiscoursal reformulation markers and their pragmatic discourse functions in diverse genres is needed.

In this section discourse functions performed by reformulation markers are explored and analyzed in contexts, and also compared in different genres. In the next

section the focus is moved to the multifunctionality of reformulation markers and their discourse functions.

Multifunctionality of Reformulation Markers and Their Discourse Functions

Compared to the frequency of reformulation markers under the three main pragmatic discourse functions Expansion, Reduction as well as Other, it is found that certain markers can entail more than one function. It surely corresponds to the notion of multifunctionality of metadiscourse (Adel, 2006; Hyland, 2005). In other words, metadiscourse, or reformulation markers as specifically analyzed in the present study, could be realized in diverse ways (Adel, 2006) depending on their metadiscursive contextual manifestation (Hyland, 2005).

Table 4.10 summarizes the top five reformulation markers respectively under the three main discourse functions with multifunctionality. It can be seen that the subcategories of Specification is out of the list, which is due to the fact that the top five markers under Specification are scarcely multifunctional across discourse functions. Unlike other reformulation markers, Specification markers are less possible to be misdecoded as other subcategories. Accordingly, the concept of multifunctionality principle of metadiscourse seems do not correspond to the case of Specification. In other words, due to the characteristic of Specification markers, they are a group with uni-functionality in the domain of metadiscoursal pragmatic discourse function.

As Table 4.10 reveals, *parentheses* and *namely* are the most multifunctional. *Parentheses* can multifunction all main discourse functions, including Expansion (esp. Explanation, Presentation), Reduction (esp. Paraphrase), and Other. *Parentheses* are dominantly performed in Other (100.00%), with Presentation (59.30%), Paraphrase (39.10%) and Explanation (18.20%) ranked after.

Table 4.10

Multifunctionality of Reformulation Markers

	Expansion		Reduction		Other
	Explanation	Implication	Presentation	Paraphrase	---
<i>parentheses</i>	66 (18.20)	---	561 (59.30)	234 (39.10)	730 (100.00)
<i>namely</i>	21 (6.00)	22 (5.00)	70 (7.00)	30 (5.00)	---
<i>i.e.</i>	80 (22.00)	---	212 (22.40)	78 (13.00)	---
<i>that is (to say)</i>	---	195 (46.30)	102 (11.00)	91 (15.20)	---
<i>in other words</i>	---	115 (27.30)	---	106 (18.00)	---

* Number in parentheses indicates percentage (%)

On the other hand, *namely* is the only marker that can perform all three subcategories of Expansion, and Paraphrase under Reduction. Presentation (7.00%) has the highest frequency *namely* performs. Other reformulation markers listed in Table 4.10 are only multifunctional across two to three subcategories respectively. For instances, *i.e.* (22.40%) and *that is (to say)* (46.30%) are especially popular in Presentation as well as Implication function.

In regards to multifunctionality, it does not mean that only those markers listed in Table 4.10 can be multifunctional. Instead, it merely presents the fact that those are the ones with higher frequencies of use in the corpus, and of which with tendency to multifunction across pragmatic discourse functions. Therefore, the superb multifunctionality of *parentheses* and *namely* may not be regarded as the exceptional reformulation markers with multifunctionality; in contrast, it simply shows that other markers are possibly less used and thus cannot be ranked on the top five list. On the contrary; however, the high frequency of use and multifunctionality of *parentheses* and *namely* in their close entirety indicate that their metadiscursive reformulating essence seems can adapt to varied metadiscursive contexts, and therefore diverse pragmatic discourse functions can be performed.

Examples 40 to 43 display the multifunctionality of *parentheses* that play the role of definition giver (Example 40), supplementary information provider (Example 41), textual-to-numeral data paraphraser (Example 42), and precise supporting data echoer (Example 43), respectively.

- (40) Online users usually use ‘XD’, ‘: P’ (*laughing with a tongue sticking out*), and ‘^^’ to express embarrassing laughs. (NTNU_8_Explanation)
- (41) Each interlocutor occurs in the data twice at the most (*once in a same-sex conversation, and once in a mixed-sex conversation*). (NTNU_8_Presentation)
- (42) In addition, within total 144 hours of class time, one quarter (*36 hours*) was saved for students to read. (NTHU_10_Paraphrase)
- (43) Second, about half of the participants (*55%*) wrote English composition at teachers’ or parents’ request (Item 2). (NCCU_10_Other)

In addition, Examples of multifunctional *namely* are shown below. It can be a device bridging the technical term and its rather simplified alternative (Example 44); a conclusion opener (Example 45); a list nominator or information reminder (Example 46), and a summarizer of statement (Example 47).

- (44) Topical subject, **namely** *sentence topic*, can be combined or separate from the other two elements. The criterion for sorting the sentence topic out from the other elements is that it should “relate directly to the discourse topic”

(p.89). (NTHU_12_Explanation)

(45) It can be noted that generally speaking, the learners were aware that weblog-based journal writing had advantages, such as sharing experiences, fostering L2 thinking speed and so on. **Namely**, *they identified it as a good writing opportunity*. (NTHU_15_Implicaiton)

(46) In Chapter 3, the methods used for this study are described in detail, **namely** *the participants, data collection, procedure, and data analysis*.

(NCTU_6_Presentation)

(47) The study was set up to determine the effects of synchronous CMC online chatting on second language learners' real time oral proficiency performance, **namely**, *the transferability from synchronous CMC to speaking*. (NTHU_8_Paraphrase)

Furthermore, as can be observed in the present study, *i.e.* as well as *that is (to say)* not only have propositions reformulated via Expansion, but also via Reduction. Marker *i.e.* can be applied to offer definition (or a more assessable way of understanding) (Example 48); while it can also be used to give another way of expression to the previous idea (Example 49). On the other hand, *that is (to say)* in Example 50 serves to analyze and provide concrete conclusion to the research finding. Or as in Example 51, *that is (to say)* assists to paraphrase and rephrase the statement of whom equipping with basic computer literacy in the research. Namely, in terms of multifunctionality, *that is (to say)* and *i.e.* both can perform Expansion and Reduction. The fact is; therefore, indeed opposed to the statement in Murillo's (2004) study that

that is (to say) (and/or its variant *i.e.*) is “the only reformulation marker that introduces restrictions” (p. 2062).

- (48) The mean scores on the pruned word count (**i.e.**, *the number of words in the retold story with false starts and repetitions excluded*) are summarized in Table 3 to show the average pruned length of the stories retold by the EG and the CG in the pretest and posttest. (NTNU_7_Explanation)
- (49) The findings showed that the participants reading under the single gloss condition could comprehend the text better (**i.e.**, *correctly answer more questions*) than those reading with access to the dictionary and those reading without any supplementary aids. (NTNU_14_Paraphrase)
- (50) As shown in Table 10, members who have joined TM for more than three years totaled the mean scores of the four types of motivation greater than 4.25. **That is**, *members who have been in the Toastmasters club for a longer period of time have higher levels of motivation.* (NCTU_3_Implication)
- (51) Third, they were all equipped with basic computer literacy. **That is**, *they were able to operate basic computer systems, such as Microsoft word processor and Internet searching.* (NCTU_6_Paraphrase)

Generally speaking, with multifunctionality, certain pragmatic discourse function not only can be triggered by various reformulation markers, but vice versa certain reformulation marker can attribute to diverse pragmatic realizations (Adel, 2006; Hyland, 2005). In other words, this multifunctionality is mutually effective toward

both reformulation markers and their pragmatic discourse functions with the most decisive factor context as catalyst.

We have discussed metadiscoursal reformulation markers in terms of their frequency, and also their pragmatic discourse function occurrences in MA theses. In the next section, the discussion is targeted to reformulation markers and their functions in MA theses sections which are generally structurally categorized into Abstract (AB), Acknowledgement (AC), Introduction (I), Literature Review (L), Method (M), Results and Discussions (R+D), and Conclusion (C) with reference to the structure of the 60 MA theses in the study.

Reformulation Markers and their Discourse Functions in Sections of MA Theses

Reformulation Markers in Sections of MA Theses

To present the occurrences of reformulation markers in sections of MA theses, the top five preferred reformulation markers is reported in Table 4.11. As showed in Table 4.11, *parentheses* are still with no doubt the most preferred marker, for it ranks as the top 1 in sections of Results and Discussions (56.70%), Method (38.00%), Literature Review (31.80%), and Conclusion (24.00%). In Results and Discussion section in particular, *parentheses* accounts for nearly three-fifths of the occurrences.

In addition to *parentheses*, on the other hand, *that is (to say)* ranks as the second place in Conclusion (15.70%), Literature Review (13.00%), and Results and Discussions (8.00%). Generally speaking, it does not reveal outstanding or dominant frequency compared to *parentheses*; however, *that is (to say)* is commonly applied in every section with fair ranking. Moreover, marker *i.e.* has its pervasive application across sections. It is preferred and ranks the second place in Method (14.60%) and Introduction (14.00%); third place in Literature Review (10.00%) along with Results and Discussions (6.80%). In addition, marker *especially* centered for Specification

function is mainly preferred in Conclusion (14.10%), with two times more frequent to Literature Review (7.70%). Another Specification marker *specifically* receives its attention largely in Introduction (16.70%), which the frequency is two and a half times to Method (6.70%).

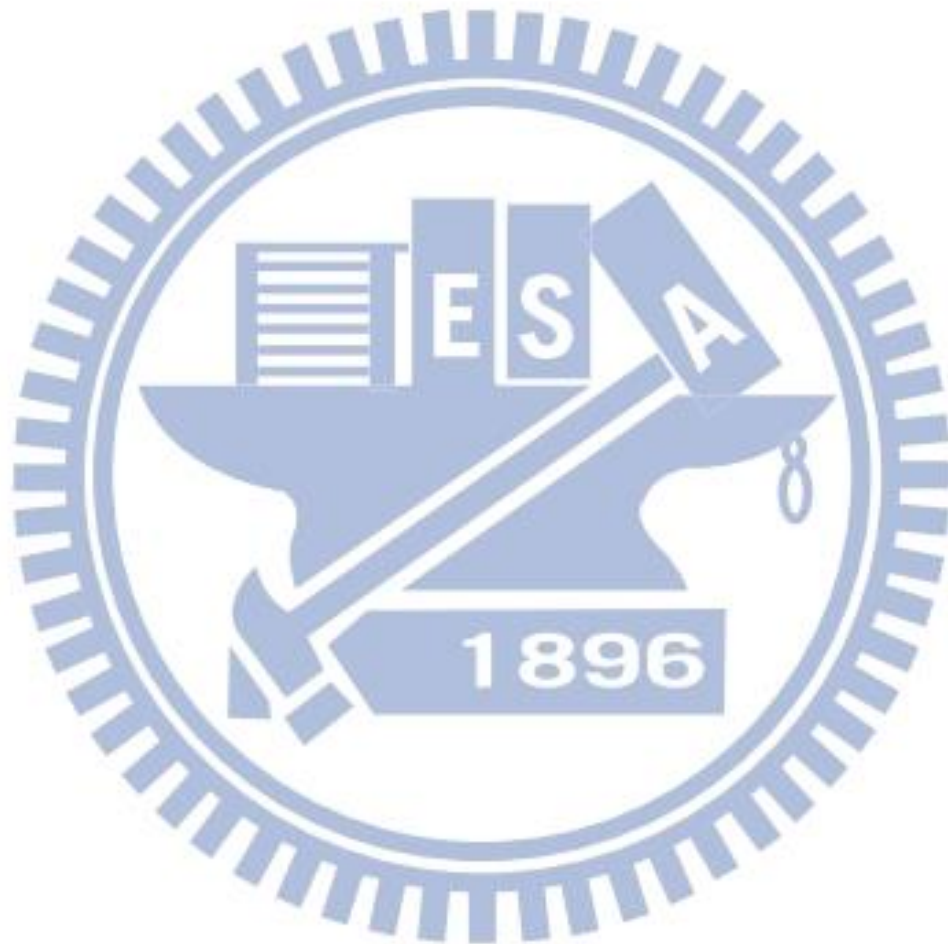


Table 4.11

Frequency of Top 5 Reformulation Markers in Sections of MA Theses

AB (N=60)	parentheses	22 (36.67)	i.e.	11 (18.33)	especially	7 (11.67)	particularly specifically	5 (8.33) 5 (8.33)	namely that is	3 (5.00) 3 (5.00)
AC (N=22)	especially	17 (77.27)	particularly in particular	2 (9.10) 2 (9.10)	so-called	1 (4.55)	---	---	---	---
I (N=186)	specifically	31 (16.70)	i.e.	26 (14.00)	particularly that is (to say)	18 (9.70) 18 (9.70)	parentheses	15 (8.00)	especially in particular namely	11 (5.91) 11 (5.91) 11 (5.91)
L (N=1081)	parentheses	344 (31.80)	that is (to say)	141 (13.00)	i.e.	107 (10.00)	especially	83 (7.70)	in other words	73 (6.80)
M (N=536)	parentheses	204 (38.00)	i.e.	89 (14.60)	that is (to say)	57 (10.60)	specifically	36 (6.70)	in other words	26 (4.90)
R+D (N=1615)	parentheses	915 (56.70)	that is (to say)	129 (8.00)	i.e.	110 (6.80)	especially	90 (5.60)	in other words	78 (4.80)
C (N=383)	parentheses	92 (24.00)	that is (to say)	60 (15.70)	especially	54 (14.10)	in other words	37 (10.00)	i.e.	34 (8.90)

*Number in parentheses indicates percentage (%)

AB = Abstract; AC = Acknowledgment; I = Introduction; L = Literature Review; M = Method; R+D = Results and Discussions; C= Conclusion

Discourse Functions of Reformulation Markers in Sections of MA Theses

The discussion starts with the focus on the frequencies of the three main discourse functions respectively in sections of MA theses (Table 4.12). Later, the discussion is zoomed into the occurrences of subcategories under the main discourse functions in varied sections of MA theses (Table 4.13).

As Table 4.12 reveals, there are high frequencies of reformulation in Results and Discussion (41.60%) as well as Literature Review (27.80%). Section of Results and Discussions in particular, contains two times reformulation as compared to Literature Review while accounting for over two-fifths of occurrences among all sections.

Table 4.12

Frequency of Reformulation Markers of Main Discourse Functions in Sections

Section	Expansion	Reduction	Other	TOTAL
AB	29 (1.70)	27 (2.00)	4 (0.56)	60 (1.50)
AC	1 (0.00)	21 (1.50)	0 (0.00)	22 (0.60)
I	89 (5.10)	96 (6.70)	1 (0.14)	186 (4.80)
L	634 (36.70)	393 (27.60)	54 (7.40)	1081 (27.80)
M	327 (18.90)	163 (11.40)	46 (6.30)	536 (13.80)
R+D	480 (27.80)	543 (38.10)	592 (81.10)	1615 (41.60)
C	169 (9.80)	181 (12.70)	33 (4.50)	383 (9.90)
TOTAL	1729 (100.00)	1424 (100.00)	730 (100.00)	3883 (100.00)

* Number in parentheses indicates percentage (%)

It can be seen that Results and Discussions (41.60%), and Literature Review (27.80%) are the sections that the most reformulation markers are employed. This suggests that these two sections might be rather crucial in MA theses, considering the chief purpose of MA theses is to persuasively and legitimately present results and

propose a conclusion based on the research findings. As shown in Table 4.12, under the main discourse function Expansion, propositions are reformulated most frequently in Literature Review (36.70%), accounting for nearly two-fifths of the occurrences. Results and Discussions ranks the second (27.80%), constituting around one-third of the occurrence.

In addition, as for the main discourse function of Reduction (N=1424), reformulation markers are used frequently in Results and Discussions (38.10%) as well as Literature Review (27.60%), together constitute over 65.00%. Furthermore, in terms of Other function (N=730), it is Results and Discussions (81.10%) that nearly monopolizes the occurrence.

To examine in depth, Table 4.13 further reports the frequency of the subcategories of the main discourse functions in MA theses sections. As Table 4.13 reveals, Results and Discussions is the section with the most reformulation, in which Paraphrase (48.70%), Implication (38.00%), and Specification (30.50%) are performed most frequently.

On the other hand, in Literature Review the subcategories of Explanation (47.80%) and Presentation (35.10%) prevail other functions. In fact, these two sections can be regarded as dominating the occurrences of discourse functions, for either Literature Review or Results and Discussions rank as the top one under the domain of the main discourse functions as well as the subcategory ones.

Table 4.13

Frequency of Reformulation Markers of Subcategories of Discourse Functions in Sections

	Expansion		Reduction			Other
	Explanation	Implication	Presentation	Paraphrase	Specification	---
AB	4 (1.10)	1 (0.23)	24 (2.50)	8 (1.30)	19 (2.30)	4 (0.56)
AC	1 (0.27)	0 (0.00)	0 (0.00)	0 (0.00)	21 (2.50)	0 (0.00)
I	43 (11.90)	41 (3.33)	32 (3.40)	19 (3.20)	77 (9.30)	1 (0.14)
L	173 (47.80)	129 (30.64)	332 (35.10)	154 (25.80)	239 (28.90)	54 (7.40)
M	56 (15.50)	48 (11.40)	223 (23.60)	72 (12.00)	91 (11.00)	46 (6.30)
R+D	57 (15.70)	160 (38.00)	263 (27.80)	291 (48.70)	252 (30.50)	592 (81.10)
C	28 (7.73)	69 (16.40)	72 (7.60)	53 (8.90)	128 (15.50)	33 (4.50)
TOTAL	362 (100.00)	421 (100.00)	946 (100.00)	597 (100.00)	827 (100.00)	730 (100.00)

* Number in parentheses indicates percentage (%)

From the prevailing status of the two sections in terms of occurrences of reformulation markers, it is found that Literature Review is mainly elaborated by markers of Expansion function (i.e. Explanation, and Presentation). On the other hand, Results and Discussions is particularly embellished by markers of Reduction function (i.e. Paraphrase, and Specification) with one exception Implication (which is categorized in Expansion).

To a certain extent, as shown in Table 4.13, the dominant status of Literature Review as well as Results and Discussions may be attributed to the length, organization, and rhetorical realization in MA theses. Responding to Kwan (2006) analyzing the structure of Literature Review of Applied Linguistics in doctoral theses, Literature Review often depicts a structure of Introduction-Body-Conclusion. Specifically within the body part, several “thematic sections” (Kwan, 2006, p. 30) are created and the structures are presented similar to those revealed in Introduction. Namely, Literature Review can be regarded as a section that recursively elaborates the statements made in the Introduction while further situating the research gap covered in the study. Accordingly, with the core characteristic, or the main purpose of Literature Review in mind, it is assumed that a great amount of reformulation markers applied and diverse pragmatic discourse functions performed.

Regarding the notion of thematic sections as in Kwan (2006), it usually starts with proposing key ideas closely associated to the current research. That is, those key concepts relating to the study need to be thoroughly defined and explained based on previous literature; hence, a great deal of use of Explanation markers and Presentation markers must be necessary in order to construct a Literature Review to be thorough and sophisticated. Particularly in the present study, Explanation markers are reported to have nearly 50.00% proportion in Literature Review, which pragmatically speaking strengthens its structural tendency toward plain but sophisticated definitions or

expressions given in the process of maintaining and consolidating the research boundary. As building a research boundary while connecting those chosen thematic sections to the study is taken as the main goal achieved in the Literature Review, such notion is also echoed to the fact that the main discourse function Expansion is obviously performed the most in Literature Review.

On the other hand, the other main discourse function Reduction is completely outperformed in Results and Discussions. Bitchener and Basturkmen (2005, 2006) pointed out that Results section should include the interpretation of results, the summary and discussion of the results, the connection between the results and the literature, and the reconsideration of key concepts drawn from the previous studies and the current research. These required elements make Results and Discussions a section that not only to report the findings, but also to catch the specific points while connecting to previous research listed in the Literature Review. In other words, the communicative purpose of Results and Discussions lies to present and to interpret the findings unraveled, and to resonance those to the literature while bridging the research gap. Namely, from the view point of metadiscoursal pragmatic discourse function, Results and Discussions contains the tendency of presenting, clarifying, paraphrasing, and specifying, which are conformed to the considerably application of markers of Implication, Paraphrase as well as Specification. Within the realm of pragmatic realization in Results and Discussions, Implication is the only subcategory in Expansion, and such fact further reinforces the structural characteristic of Results and Discussions.

Moreover, it is found that in the present study over 80.00% (592 out of 730) of Other markers are performed in Results and Discussions. Such finding can also be related to the sectional feature of Results and Discussions that authors tend to employ plenty supporting numeral data with Other markers (except for Paraphrase ones) when

presenting results, *parentheses* in particular. The great amount of application of *parentheses* in Other, again, stands for the fact that authors of MA theses in the current study have preference for simple apposition reformulation marker as corresponded to Hyland (2007a).

Summary of Results

As observed in the present study, the tendency toward simple apposition reformulation marker *parentheses*, and fixed connectors or fixed markers are similar to the results of previous studies (Cuenca, 2003, 2007; Hyland, 2007a). However, marker *viz.* is considerably scarcely used in the present study and also in Hyland (2007a). It might be attributed to differences between disciplines, or even genres. Another possibility is that authors of MA theses may be unfamiliar with the application of *viz.* Moreover, the extremely high frequency of *parentheses* in the current study in fact corresponds to the tendency revealed in hard science fields (Hyland, 2007a). In addition, Specification markers are crucial, for *especially* and *particularly* rank in the top five both in the current study and in Hyland (2007a)

With regard to the main discourse functions, Expansion and Reduction together constitute almost 80.00%. The remaining 20.00% is Other, pinpointing the dynamic role contextual factor plays during reformulation, and further reinforce that manual coding is definitely necessary in such metadiscoursal research. Moreover, as compared to Hyland (2007a), it is found that Explanation, Implication, and Specification are less performed, while Paraphrase accounts for comparatively higher percentage of use. It could be attributed to the essential genre difference, or to the fact that authors of MA theses could be unfamiliar with performing certain metadiscoursal discourse functions.

With the notion of multifunctionality, it implies the dynamic relationship

between reformulation markers and the pragmatic discourse functions they perform. In the present study, it is *parentheses* and *namely* that are the most multifunctional, which in academic written communication reflects the importance and necessity of contextual analysis in metadiscoursal research. On the other hand, *that is (to say)* and its form variant *i.e.* can both perform Expansion and Reduction as revealed in the current study. However, it should be noted that Explanation can only be performed by *i.e.*, while Implication by *that is (to say)*. Such a discrepancy might result from their essential reformulating characteristics. Moreover, the multifunctionality of *that is (to say)* is in opposition to the claim Murillo (2004) presented, that is, “[it is] the only reformulation marker that introduces restrictions” (p. 2062).

In terms of sectional frequencies of reformulation markers in MA theses, Literature Review as well as Results and Discussions are reported to have highest occurrences. The occurrences of metadiscoursal discourse functions under these two sections corresponds to the progression of move, or discourse development in academic writing, especially for MA theses and RAs (Bitchener and Basturkmen, 2005, 2006; Kwan, 2006). In the present study, it is found that Expansion function (esp. Explanation, and Presentation) is performed most frequently in Literature Review section while Reduction function (i.e. Paraphrase, and Specification) along with Implication are used the most in section of Results and Discussions.

In this chapter results of the occurrences of reformulation markers and their pragmatic discourse functions in MA theses are discussed and compared with that of previous research. In the next chapter, the implications for EAP pedagogical application, and suggestions for further research are presented.

CHAPTER FIVE

CONCLUSION

The current study integrates learner corpora and contextual analysis to investigate metadiscoursal reformulation markers and their pragmatic discourse functions in academic writing, MA theses in particular. The results are further compared and contrasted with research concerning move analysis and genre research in academic writing in order to have a wider view and deeper understanding of the essence of the so-called successful persuasive academic writing.

Implications, Future Research, and Conclusion

It is found in the present study that reformulation markers are pervasively used in MA theses, and their dynamic pragmatic discourse functions could be a critical factor in successful persuasive academic writing.

In MA theses, having imagined readers in mind is essential while guiding readers toward the preferred understanding of discourse should be the prerequisite and also the ultimate goal. Accordingly, building reader awareness should be the first step in the teaching of MA thesis writing. The process of guiding readers toward writer's preferred understanding of discourse requires the employment of certain rhetorical devices, which in the current study refers to the metadiscoursal reformulation markers. The familiarity of such markers, thus, is necessary.

Both reader awareness and reformulation marker familiarity could be achieved via implicit and/ or explicit teaching. Previous studies have stated the positive relationship between metadiscourse employment and higher essay grades received (Intaraprawat & Steffensen, 1995), and also between explicit metadiscourse teaching and essay writing improvement (Cheng & Steffensen, 1996). On the one hand, it

could be implicitly taught by providing a great deal of references, and expecting learners would get the full picture as time gone by. On the other hand, it could also be explicitly instructed by introducing learners with reformulation markers and their potential discourse functions. More importantly, assisting learners to realize the purpose of using these markers, and to connect the pragmatic discourse functions to the generic characteristics of each MA thesis section is necessary. Explicit teaching in terms of reader awareness construction, together with building relationship between markers and potential discourse functions is accordingly highly recommended in EAP teaching.

On the contrary, the advantages of implicit teaching/learning (e.g. self-regulated learning for learners to monitor their own learning process, cognitive development during self-construct learning, etc.) should not be undervalued. Instead, explicit teaching should be combined with implicit teaching for learners to activate and maintain the input-intake-output learning circulation. Moreover, in EAP teaching, it would be a great help to web the relationship between reformulation markers and their pragmatic discourse functions with instruction of move (or discourse development) in different sections of MA theses. The linking between reformulation markers and discourse functions could even be stretched to disciplines (i.e. fields of study), and genres.

With regard to future studies, several research suggestions are presented. To begin with, more attention to metadiscourse research, specifically for reformulation markers is needed. Plenty of studies have focused on metadiscourse research such as stance, engagement, and hedge in academic writing, especially RAs, student essay writings, and textbooks. Little attention; however, has been given to reformulation markers, not to say selecting MA theses as target subject. MA theses are the cornerstone to enter the disciplinary discourse community, while metadiscoursal

devices, especially reformulation markers are fairly crucial.

On the other hand, with regard to research of reformulation markers, a modified model for decoding contextual manifestation (i.e. pragmatic discourse function) is necessary. In the present study, the coding scheme modified from Hyland (2007a) identifying the ambiguity among the main pragmatic discourse functions Expansion and Reduction, and also separating another subcategory Presentation under Expansion. However, it is worth wondering whether the discourse functions performed during reformulation can simply be dichotomized (or even tri-chotomized) into such categories. In other words, applying an alternative way to review these metadiscursive contextual manifestations might bring new insights to relevant metadiscourse research.

In addition to contextual analysis, it is suggested to conduct pre- or post-interview with target writers before/ after data analysis. It would help to illuminate the relationship among information provider (i.e. writer), discourse, and information receiver (i.e. reader). Namely, it would help to verify the effectiveness and appropriateness of the used of metadiscoursal reformulation markers. Such relevant findings might be a great inspiration in EAP writing curriculum design (as in the viewpoint of explicit teaching), or a great support in implicit teaching/ learning of EAP writing.

Furthermore, combining metadiscursive contextual analysis with genre analysis is greatly suggested. To possess solid genre awareness and knowledge while embodying it in actual production is the preliminary step toward successful effective written communication in disciplinary discourse community. With such prerequisite, metadiscoursal devices are the decisive catalyst activating and integrating the interaction between contextual manifestation and genre presentation. Therefore, it is encouraged to pay more attention to the integrated study concerning pragmatic

metadiscursive contextual analysis and genre analysis in research field of EAP writing.

The present study explores the metadiscoursal reformulation markers and their discourse functions in MA theses. However, such metadiscoursal reformulation markers research within EAP realm has been in its infancy that further relevant studies are of necessity. It is with great expectation that the current study can shed some light on EAP research and pedagogical application.



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Appendix A

Target Reformulation Markers

Reformulation Markers	Present Study	Hyland (2000)	Hyland (2005)	Hyland (2007a)
<i>as a matter of fact</i>	●		●	
<i>called</i>	●		●	●
<i>defined as</i>	●		●	
<i>especially</i>	●			●
<i>generally speaking</i>	●			
<i>i.e.</i>	●	●	●	●
<i>in other words</i>	●	●	●	●
<i>in particular</i>	●			●
<i>known as</i>	●		●	●
<i>namely</i>	●	●	●	●
<i>(or) more specifically</i>	●	●		●
<i>or X</i>	●	●	●	●
<i>parentheses</i>	●	●	●	●
<i>put another way</i>	●	●	●	●
<i>put it more specifically</i>	●			
<i>particularly</i>	●			●
<i>referred (to) as</i>	●			
<i>simply put</i>	●			
<i>so-called</i>	●			
<i>specifically</i>	●	●	●	●
<i>specifically speaking</i>	●			
<i>that is to say</i>	●	●	●	
<i>that is</i>	●	●	●	●
<i>that/this means</i>	●	●	●	●
<i>to say the thing differently</i>	●			●
<i>to be more precise</i>	●			●
<i>viz.</i>	●	●	●	
<i>which means</i>	●	●	●	●

Appendix B

Source of MA Theses

(Retrieved from National Digital Library of Theses and Dissertations in Taiwan)

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Comparison of Reformulation Markers between the Present Study and Hyland (2007a) by Disciplines

Reformulation Marker	Present study	Hyland's (2007a) Findings								
		Overall	Phy	Bio	ME	EE	Phil	Soc	AL	Mkt
<i>parentheses</i>	41.00	26.10	35.90	79.10	44.20	39.70	8.40	9.70	6.30	5.20
<i>i.e.</i>	9.71	25.50	30.60	7.00	22.40	24.80	28.40	11.90	30.00	40.10
<i>that is</i>	9.40	8.60	1.50	1.20	7.60	6.80	0.90	11.20	22.10	11.50
<i>especially</i>	7.31	6.40	2.10	4.20	4.30	4.70	4.40	17.30	6.30	6.70
<i>specifically</i>	6.00	3.90	0.30	0.60	1.40	1.30	3.40	4.00	4.50	11.50
<i>in other words</i>	5.74	5.30	3.30	0.90	3.20	2.60	7.50	7.90	7.70	7.10
<i>particularly</i>	4.89	8.90	12.40	1.50	2.50	6.40	9.10	16.70	9.50	10.60
<i>namely</i>	3.68	4.90	4.40	0.60	6.10	3.80	18.10	3.60	3.40	0.70
<i>in particular</i>	1.73	---	---	---	---	---	---	---	---	---
<i>that is to say</i>	1.11	---	---	---	---	---	---	---	---	---
<i>which means</i>	0.93	3.50	3.20	0.60	2.50	3.80	10.30	3.30	2.90	2.00
<i>or X</i>	0.36	3.60	3.20	1.20	3.60	0.90	5.00	8.80	3.60	2.70
<i>Others</i>	8.14	3.30	3.10	3.10	2.30	5.20	4.50	5.60	3.70	1.90
TOTAL	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Comparison of Discourse Functions between the Present Study and Hyland (2007a) by Disciplines

Discourse Function	Present study	Hyland's (2007a) Findings								
		Overall	Phy	Bio	ME	EE	Phil	Soc	AL	Mkt
Expansion	44.53	42.50	56.70	27.90	37.80	38.30	42.20	36.90	50.00	49.50
Explanation	9.33	24.70	43.30	22.00	20.80	25.50	15.60	16.90	26.00	27.50
Implication	10.84	17.70	13.40	5.90	17.00	12.80	26.60	20.00	24.00	22.00
Presentation	24.36	---	---	---	---	---	---	---	---	---
Reduction	36.67	57.60	43.30	72.10	62.20	61.70	57.80	63.10	50.00	50.50
Paraphrase	15.37	6.70	7.50	1.50	15.10	4.30	10.90	7.70	4.40	2.20
Specification	21.30	50.90	35.80	70.60	47.10	57.40	46.90	55.40	45.60	48.30
Other	18.80	---	---	---	---	---	---	---	---	---
TOTAL	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00