Teaching Grammatical Metaphor

Teaching Grammatical Metaphor:

Designing Pedagogical Interventions

By

Devo Yilmaz Devrim

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For my family

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PREFACE

This book is based on my PhD dissertation. It recounts a story regarding designing and implementing pedagogical interventions to teach grammatical metaphor (GM). The motivation for converting my PhD dissertation mainly resulted from the need to provide a discussion of the evolution of GM theory. GM has been theorized based on two notions in Systemic Functional Linguistics (SFL) theory: stratal tension and semantic junction. While the stratal tension notion helped researchers develop a framework theorizing GM based on interstratal tension between discourse semantics and lexicogrammar; the notion of semantic junction was helpful in theorizing GM based on intra-stratal junction between elemental semantic categories. Although these two notions possess fundamental differences, they are also closely related. The theorization of GM drawing on the notion of semantic junction might be regarded as a transference/transcategorization of GM instances suggested by the model that draws on the notion of stratal tension. In order to clarify the theoretical orientations to GM research, this book provides a detailed recount of the evolution of GM theory.

The other motivation for the book, which is closely related to the first motivation, is to show that it is also possible to retheorize GM drawing on both stratal tension and semantic junction notions. This theorization of GM includes more pedagogical reasons rather than theoretical. By theorizing GM based on these two notions, I aimed to come up with an "appliable" GM model, which is referred to as *an integrated model* throughout the book. The remodelling of GM is appliable to the teaching of GM to users of English as an additional language (EAL). Firstly, it provides a more appropriate framework for EAL contexts, and secondly, it identifies instances of GM with an objective to teach them.

The other equally important motivation for the book was to present how GM can be taught using action research (AR) as the methodology. During the three years of the research, AR was adopted as the methodology to teach GM to EAL users by providing field knowledge to the students who participated in the research, and by training tutors who provided online language support to those students. The research was conducted in three phases and each phase followed an AR cycle. The first phase was

observational, but the following two phases were interventionist in nature. In other words, Phase 2 and Phase 3 aimed to develop an approach to teaching GM. Although there are other ways of teaching GM to EAL users, this book follows AR as the methodology.

The third motivation for the book was to share the possibility of providing online language support in the form of written comments/feedback in relation to the proficiency level of EAL students. The research on written feedback is mostly related to corrective feedback, however, this book theorizes written feedback in relation to the notion of zone of proximal development (ZPD) and situates it within the genre pedagogy that originated from the Department of Linguistics at the University of Sydney. The chapters that report on the three phases of the research study present the ways in which the EAL students were supported by their tutors, who were based in Sydney, and categorize feedback in relation to its nature. To put it simply, the book also provides a framework for its readership regarding how written feedback might be cast according to the proficiency level of students, grounded in the quality of their writing, and structured in a more supportive way rather than being only corrective in nature.

Based on the light of the motivations outlined above, this book is a valuable resource for linguists, educational linguists, lecturers, and researchers as it provides a recount of the evolution of GM theory, and summarizes the research studies that explored the development of GM in language learning and language education contexts. Furthermore, the book is also a helpful resource for language programmers, unit/course designers, teacher educators, language teachers and higher degree research students.

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CHAPTER ONE

PREVIEWING THE RESEARCH

This book reports on an action research project that spanned a period of more than three years. The aims of this project were twofold; firstly, the project aimed to establish an approach to teaching grammatical metaphor (GM hereafter), which is one of the fundamental characteristics of academic registers as suggested by Halliday (1985a). Secondly, it aims to explore the role of online feedback in helping students improve their GM use.

The project applied the theoretical foundations of Systemic Functional Linguistics (SFL hereafter) to second language writing development. Therefore, the project is considered to be within the domain of "appliable linguistics", a term coined by Halliday (2006b). Halliday prefers to use the term "appliable linguistics" in an attempt to abolish the dichotomy between theoretical linguistics and applied linguistics. According to Halliday, applied linguistics functions in opposition to linguistics, implying theoretical or pure linguistics is superior to applied linguistics. He believes that there needs to be a single category of linguistics that is based on both theory and application, as application without theory or theory without application can be seen as inconsequential.

This action research project was part of a larger project titled the SLATE Project (Scaffolding Literacy in Adult and Tertiary Environments), which was a joint project between the University of Sydney (USYD hereafter) and City University of Hong Kong (CityU hereafter). The SLATE project was conducted within a genre-based pedagogy developed in the Department of Linguistics at USYD in the 1980s, an approach at times referred to as the Sydney School. The Sydney School integrates SFL genre theory (Martin & Rose 2008), sociology of education (Bernstein, 1975) and sociocultural theory (Vygotsky, 1978). The Sydney School's genre based-pedagogy aims to empower individuals from all socio-economic and cultural backgrounds through explicit teaching of genres, to help them succeed in social life (Rose & Martin, 2012).

Following the principles of the Sydney School's genre-based pedagogy, the SLATE project provided online literacy support to various student cohorts from biology, electronic engineering, applied physics, sociology and linguistics through training tutors who supported students at CityU. The support provided is based on a Teaching and Learning Cycle (TLC hereafter) suggested by Rothery (1994), where the students are scaffolded through *deconstruction*, *joint construction* and *independent construction* of genres. However, this framework of the TLC needed to be adapted to the nature of the online learning/teaching context, as well as the needs of students who were supported by the SLATE project. The initial stage of the cycle did not differ. The students who were supported by the SLATE project were provided with background knowledge on the purposes and staging of genres in which they were required to compose their assignments. This stage corresponds to the *deconstruction* stage of the TLC. The *deconstruction* stage was followed by an *independent construction* stage where the students were supported by online tutor feedback. Due to the nature of this online learning and teaching environment, the *joint construction* stage of the TLC was incorporated into the *independent construction* stage and strengthened by tutors' feedback. The tutors supported their students on content, genre, register, discourse semantics, lexicogrammar, graphology, punctuation and GM. In conjunction with the SLATE project, the action research project reported in here specifically focused on how students develop their GM use with the help of tutors' feedback and aims at developing an approach to teaching GM.

GM is one of the fundamental characteristics of adult language and it is widely used in bureaucratic, scientific and academic discourses that allow meaning making in more non-congruent and abstract ways (Halliday, 1985a). Throughout the academic genesis of individuals, GM becomes more important as individuals are required to make meaning in more abstract and technical ways. According to Halliday (1993), the language development of individuals follows a trajectory from common sense to uncommon sense, starting with generalization, continuing with abstraction and followed by GM. Hence, GM is a crucial linguistic aspect in first language development and research on the role of GM in first language development confirms its importance (Derewianka, 2003a; Painter, 2003; Torr & Simpson, 2003). Along similar lines, GM is also a crucial aspect in second language development (Mohan & Beckett, 2001; Schleppegrell, 2004; Colombi 2006; Byrnes 2009; Ryshina–Pankova 2010; Wang, 2010). The mastery of effective use of this linguistic aspect can lead to success in academic and educational environments for second language users.

Therefore, developing an approach to teaching GM to second language users is essential. The action research project reported in this book built on this understanding of GM and integrated it into the SLATE project, which will be described in more detail below.

Developing an approach to teaching GM to second language users is important for a number of reasons. Firstly, second language users need to identify GM to make meaning in their field of study. Students who are apprenticed in their community of practice are required to read within particular fields. The ability to read various texts within a field requires mastery of a technicalized shared language through which knowledge is shared. To put it simply, this requires the ability to read various texts. As Halliday (1985a) argues, GM is an essential component of bureaucratic, scientific and academic discourses. Students, who use English as a second language need to acquire some knowledge about GM. This will empower second language users, as they will be able to make meaning from their textbooks, journal articles, book chapters and books during their degrees. Therefore, identification of GM is quite empowering for second language users, as this will help them read various texts in their fields. Secondly, second language writers need to master GM formation, so that they are able to use GM effectively to compose texts similar to the ones that they were introduced to during their degree. Hence, GM needs to be taught to second language users so that they continue to develop their academic literacy skills, as they will be able to use GM in explanation, report, discussion and argumentation, which are the academic genre families required at undergraduate level. Thus an approach to teach GM to undergraduate level second language users is crucial. Accordingly, this book aims to fill a gap in GM research by developing an *appliable* method that results in effective GM use within the domain of an online learning and teaching environment.

To achieve the research aims, the project consisted of three phases. Phase 1 aimed to establish foundations to develop an approach to teaching GM by observing how students employed GM, and whether tutors supported students' GM use through open comments. That is, Phase 1 was explanatory and observational. It did not adopt an interventionist approach to train tutors or provide students with information regarding GM. The research questions that guided Phase 1 were as follows:

1. What types of GM do students use in their work?
2. What feedback do tutors provide on students' use of the GM?
3. Do students' develop their GM use across drafts?

Phase 2 and Phase 3, on the other hand, sought answers to the research questions through training tutors and providing students with background knowledge on types of GM and how to use them effectively, which was referred to as frontloading students in the SLATE project. In other words, Phase 2 and Phase 3 adopted an interventionist approach building on Phase 1. These two research phases were designed based on GM identification, GM formation and GM use. While Phase 2 focused on training tutors and frontloading students on GM identification and GM formation, Phase 3 focused on GM use in addition to GM identification and GM formation. In order to train tutors, "periodicity" was used (Martin & Rose, 2003). Periodicity is regarding the information flow in macro-Theme, macro-New, hyper-Theme and hyper-New. Macro-Theme previews the context of the texts, and then each point listed in macro-Theme is further previewed in hyper-Theme and summarized in hyper-New. Macro-New summarizes the points discussed in the conclusion. The research questions investigated during Phase 2 were as follows:

1. What are the effects of frontloading on students' GM use?
2. What are the effects of tutor training on tutors' feedback?
3. What are the effects of GM feedback on students' GM use?

The intervention in Phase 3 was built on Phase 2. Therefore, the research questions explored were:

1. What are the effects of frontloading based on periodicity on students' GM use?
2. What are the effects of tutor training on tutors' feedback?
3. What are the effects of GM feedback on students' GM use?
4. What role does language proficiency play in students' GM use?

Chapters 4, 5 and 6 will address these research questions by providing a detailed account of the specific research methods employed, of sampling and of data analysis procedures during Phase 1, Phase 2 and Phase 3.

The GM model adopted to explore the research questions of this action research project was an integrated model based on Halliday (1985a, 1988/1993, 1998), Martin (1992a, 1993b), Halliday and Martin (1993), and Halliday and Matthiessen (1999). Halliday and Martin theorize and exemplify GM based on stratal tension between discourse semantics and lexicogrammar. The concept of stratal tension suggests that the resetting of the relationship between discourse semantics and lexicogrammar leads to the formation of GM instances. On the other hand, Halliday and

Matthiessen (1999) theorize and exemplify GM based on semantic junction between semantic categories. Although there are theoretical differences between the two models, there are also similarities. Those similarities were used to retheorize GM using an integrated model. Theorization of GM based on stratal tension and semantic junction will be discussed in detail in Chapter 2.

Background to Research

The action research project reported in this book aimed to establish a method for teaching GM to undergraduate students who use English as a second language. As GM is one of the fundamental notions of SFL theory and is widely used in bureaucratic, scientific and academic contexts, this sub-section firstly provides an explication of the theorization of GM, and then summarizes key research studies in first, second language development, as well as the studies conducted in the Hong Kong context. The section concludes with the role of GM in educational contexts.

   The notion of GM requires an understanding of two key concepts suggested by Halliday (1985a): lexical metaphor and congruency. Halliday (1985a) commences his discussion of GM by contrasting it with lexical metaphor, which involves expressing a variation in meaning through the use of meaning transfer. Lexical metaphor seems to be realized with different uses of words. However, his discussion of GM requires an understanding of *unmarkedness* or *incongruency,* referring to atypical ways of saying things. Therefore, GM involves, as opposed to congruent expressions, atypical expressions caused by change in grammatical structures. Although GM includes change in lexemes, alteration in meaning is not simply due to lexical variation but to a change in grammar as well.

   One of the fundamental notions of Hallidayan linguistics is that language has three separate, but interrelated metafunctions, namely ideational, interpersonal and textual (Halliday, 1985a) The ideational metafunction refers to the field of text, the interpersonal metafunction refers to the social relationships between language users, and finally the textual metafunction refers to how text, written or spoken is organized. Meaning making through language use requires the interaction of these three metafunctions. The second crucial notion of SFL is stratification. Stratification suggests that language consists of interconnected strata: phonology/graphology, lexicogrammar and discourse semantics. The

relationship between these strata is based on how meanings in one stratum are realized by the neighbouring stratum. Specifically, the meanings in the semantic stratum are realized in the form of sentences, clauses, groups, phrases and words by the lexicogrammar stratum. Similarly, the meanings in lexicogrammar are realized by the phonology/graphology stratum in the form of sounds or graphic symbols.

Based on the fundamental notions of SFL, Halliday (1985a) suggests two kinds of GM: ideational and interpersonal. Ideational metaphor is considered non-congruent ways of meaning making which depend on how the world is experienced and how worldly events are logically perceived. Interpersonal metaphor, on the other hand, negotiates relationships between language users. It involves non-congruent ways to convey possibility and expresses speech functions such as requesting, ordering, suggesting and asserting. Furthermore, Martin (1992a) suggests experiential and logical metaphor as two major types of GM.

GM has been widely investigated in terms of its development and evolution in science, bureaucracy, language development and education. In terms of scientific discourses, Halliday (1988/1993) explores how GM has evolved in science registers spanning more than a period of six hundred years. Similarly, Martin (1992a) probes the use of GM in bureaucratic contexts in Australia. In terms of language development, studies might be categorized depending on their context, i.e. whether they investigate first or second language development. A review of the literature in the field will be presented in Chapter 2; here, I will introduce some of the key research in terms of how it relates to the current project.

Previous Research

This section contextualizes the research project within GM studies conducted in language development. Research on GM can be divided into two categories. The first category consists of studies with a focus on first language development (Derewianka, 2003a; Painter, 2003; Torr & Simpson, 2003). The second category includes research conducted in second language development contexts (Mohan & Beckett, 2001; Schleppegrell, 2004; Colombi, 2006; Byrnes, 2009; Ryshina–Pankova, 2010; Wang, 2010). The first category of language development studies on GM investigates and documents how native English-speaking children and adolescents use GM and how it becomes more advanced with language development. The studies conducted within the second language

development contexts focus on the written language development of tertiary students. Drawing on GM progression in second language development studies, the action research project reported here explores how tertiary level students use and develop their use of GM in their writing.

GM studies conducted within second language development contexts (Mohan & Beckett, 2001; Schleppegrell, 2004; Colombi, 2006; Byrnes, 2009; Ryshina–Pankova, 2010; Wang, 2010) have analysed how second language users employ GM in their writing. These studies focus on the importance of GM in second language writing in English, Spanish and German, and suggest that GM should be taught to second language users. Drawing on the findings from these research studies, this book focuses on establishing an approach to teaching GM to second language writers. In other words, not only does this study analyse how students deploy GM in their written work, but it also has a pedagogical agenda to develop a method to teach GM within the SLATE project.

Research Design

The method used in this project is action research. Action research can be understood as learning by doing. In action research, researchers identify a problem, plan action, take action and evaluate findings (Kemmis & McTaggart, 1988; Freebody, 2003; Burns, 2010). In the context of this action research project, my focus was to develop an approach to teaching GM (experiential and logical types) to English as a second language users. To manage this, three action research cycles were carried out. Each cycle consisted of the following phases: *planning* to consider alternative paths of action, *taking action* to select a path of action, *analysing results* to observe the impacts of action, and *reflecting on results* to study the consequences of an action. Action research cycle will be discussed in detail in Chapter 3.

The study was conducted over a period of three years within three phases. Phase 1, which took place between July and December 2008, concentrated on discussion sections of laboratory reports written by undergraduate students enrolled in Applied Physics. Students' reports and tutors' feedback from the first two assignments were analysed qualitatively. The analytical framework for the identification of GM was based on agnation. Agnation refers to the process of creating more congruent variants of original sentences. Based on agnation, instances of GM were identified. Phase 2, which took place between January and April 2009,

focused on the compositional reports written by Electronic Engineering
students enrolled in the Analogue Laboratory unit. Similar to the first
phase, students' use of GM was analysed using agnation. The third and
last phase, conducted between January and April 2010, explored the
assignments of undergraduate linguistics students enrolled in the unit
Introduction to Linguistics. Phase 3 was different from the first two phases
in the sense that it involved using a model to identify and analyse GM.
Table 1.1 provides an overview of the action research phases.

Context	Phase	Phase 2	Phase 3
Field	Applied Physics	Electronic Engineering	Linguistics
Genre	procedural recount	compositional reports	consequential explanation
Participants	48 students and 4 tutors	108 students and 12 tutors	39 students and 5 tutors
Number of drafts	128 drafts for GM analysis 352 for GM feedback analysis	44 drafts for GM analysis 432 for GM feedback analysis	78 drafts for GM analysis 46 drafts for GM feedback analysis
Goals	To explore how students used GM To explore whether tutors provided GM feedback	To explore students' GM use To train tutors on GM To analyse tutors' GM feedback	To investigate students' GM use To train tutors on GM To analyse tutors' GM feedback

Table 1.1 Overview of research phases

Phase 1 focused on lab reports written by students enrolled in the
Department of Applied Physics. The analysis of 126 drafts from 16
students, who have completed the TLC for each assignment, shows that
the students used experiential and logical metaphors in their assignments.
Experiential metaphor was the largest category with two sub-types:
process as noun and *quality as noun.* Experiential metaphor refers to
information packaging into nominal groups through the nominalization of
verbs and adjectives, e.g. "introduction", "accuracy". The students also
used technical terms in the form of nominalization. Logical metaphor was
also employed by the participating students. Logical metaphor refers to
non-congruent ways of construing causality within a clause rather than
between clauses. In-clause causality is managed through the employment
of verb, preposition, noun and adjective that creates stratal tension

between discourse semantics and lexicogrammar. There were three sub-types of logical metaphor identified in the data set: use of material processes such as "cause", which was referred to as *cause as verb*; prepositions such as "due to" and "by", which was named *cause as preposition*; and adjectives such as "useful", which was referred to as *cause as adjective*.

Of the 16 students' final drafts for assignment four were compared to their first drafts of the first assignment, and it was observed that students used experiential and logical metaphors more frequently in their very final drafts than in their first drafts. However, the frequency of students' technical term use decreased in their final drafts.

As for the tutors' feedback on GM, there were a total of five instances of GM feedback. Three of these targeted students' experiential metaphor use, and two focused on students' logical metaphor use. The number of drafts analysed in Phase 1 was 352. When the number of GM feedback instances is divided by the number of drafts, I find the ratio of feedback per draft, which was .014.

In terms of support provision, the tutors provided support on different types of GM within the texts. Furthermore, four out of five instances of GM feedback resulted in students' GM use. Although the tutors were not trained to identify and provide GM feedback, these were instances of GM feedback that helped students improve their written work. Therefore, I decided to continue the action research cycle with Phase 2, which focused on providing students with background knowledge on GM and on tutor training on GM identification and formation. The findings from Phase 1 will be discussed in detail in Chapter 4.

The second phase of the research was conducted between January and April 2009. The students who took part in the second phase were from the Department of Electronic Engineering at CityU, enrolled in a unit called Analogue Laboratory. As part of the project, the students were to prepare four compositional reports to explain parts of an electronic gadget such as a power adaptor. Their lecturer provided the students with a model text where a compositional report explained the components of a power adaptor. The second phase of the research was designed to provide students with background knowledge and to train teachers. Providing students with necessary information was referred to as "frontloading". A document was prepared to provide students with information about GM, which was posted on CityU's online learning medium. Secondly, the tutors

were trained on GM. Firstly, they were provided with a presentation on GM using examples from Phase 1's findings. This was followed by a workshop on identifying and forming GM with a focus on clause level.

The findings from Phase 2 suggest that there was a significantly higher frequency of experiential metaphor than of any of the other types. The students enrolled in the Electronics Laboratory unit predominantly employed experiential metaphor in the form of *process as noun* and *quality as noun*. Technical terms were also observed in the data set. Regarding logical metaphor, the students employed four sub-types of logical metaphor to construe in-clause causality. The first sub-type was *cause as verb*, which involved the use of material process such as "lead to", and the second sub-type was *cause as preposition*, which required the use of prepositions such as "by" and "through". The final sub-type was *cause as noun*, which necessitated the use of a noun to realize causality within a clause, such as "reason". There were only two instances of interpersonal metaphor used by the students.

Similar to the process undertaken during Phase 1, students' final submissions for the third assignment were analysed to explore whether the effects of the intervention increased the frequency of GM use. It was observed that the students used experiential and logical metaphors more frequently. Furthermore, the frequency of technical terms also increased, though only slightly. However, the rate of increase during Phase 2 was not significantly different from that during Phase 1.

The tutors who worked with this cohort supported their students' GM use. They did it by providing feedback at the beginning and end of student's drafts. This feedback type was referred to as *off-text* feedback where the focus was on the learning process and the students were encouraged and praised and directed to support materials. There were a total of 13 instances of *off-text* feedback. The tutors also provided open comments in-situ. This type of feedback was considered *in-text* feedback and there were 13 instances of in-text feedback in the data set. When the total number of feedback moves (26) is divided by the number of drafts (432), the ratio of GM feedback per draft is calculated as .06, which was more than four times higher than the ratio in Phase 1.

The training of the tutors and frontloading of the writing task were designed to be implemented based on GM identification and GM formation. That is, the tutors and students were provided with instances of GM at clause level. However, as GM involves both the discourse

semantics and the lexicogrammar strata, taking the text as the unit of analysis would mean to take Phase 2 one-step further. Therefore, Phase 3 was planned based on the concept of *periodicity* to target GM use as well. The findings from Phase 2 will be discussed in Chapter 5.

The third and last phase of the project was carried out between January and April 2010. The cohort in this phase consisted of students from the Department of Linguistics. The students were taking a unit called Introduction to Linguistics. The text type they were to write in their assignments was consequential explanation, where the students were to write about the effects of a linguistic process called nominalization. The students were provided with information about nominalization and the effects of nominalization on language. They were also provided with two texts describing the differences between spoken and written language. The students were required to use examples from the sample texts to explain the effects of nominalization on text. Different from the previous two phases, the students were to prepare only one assignment. Apart from frontloading the task, the tutors who worked with this cohort were trained in identifying GM and providing support on GM. There were 39 students who completed their first, second and third drafts and eight tutors who worked with this cohort. Five of these tutors attended the training workshops. The last phase of the research will be discussed in detail in Chapter 6.

The findings from Phase 3 suggest that the students used various sub-types of experiential and logical metaphors. Experiential metaphor was the most frequently used type with two sub-types: *process as noun* and *quality as noun*. Within *process as noun, nominalization* such as "introduction", and "removal"*, ING-nominalization* like "introducing", "removing" and *demonstratives* such as "this" and "these" were observed. *ING-nominalization* was the most frequently used experiential metaphor sub-type. Regarding students' logical metaphor use, they employed *cause as verb, cause as preposition, cause as adjective* and *cause as noun* as four sub-types of logical metaphor.

When students' GM use in their first drafts of the first assignment and final drafts of the final assignment were compared, it was noticed that the increase in the frequency of GM use was much higher than in the previous phases. This was mainly related to the intervention that was planned and implemented in relation to GM use based on *periodicity*.

The tutors supported their students' GM use based on the notion of periodicity at the whole text level. There were two types of feedback regarding experiential and logical metaphors. There were two types of GM feedback identified, off-text and in-text. The tutors who worked with this cohort placed open comments at the beginning and end of drafts to praise, encourage, listing strong points, points for further development and directing students to support materials. There were 36 instances of off-text feedback, and 60 instances of in-text feedback. When the number of feedback instances (96) is divided by the number of drafts that received GM feedback (46), then the resulting ratio was 2.1. This figure was much higher than the ratio observed during Phase 1 and Phase 2.

Finally, the question of how the students responded to GM feedback was considered. There were two major response types based on responsiveness to feedback, namely, uptake and avoidance. There were a total of 54 instances of uptake that resulted in revision through the use of GM. On the other hand, there were six instances of response where the students ignored the feedback without revising their text sections. These findings will be discussed in detail in Chapter 6.

Key Terms Used in this Project

The key terms used in this book are as follows: stratification, realization, metafunctions, transitivity, GM, transcategorization, agnation, periodicity, rank scale and genre. Each term will be defined below.

Stratification: Organization of language into different strata. These strata are phonology/graphology, lexicogrammar and discourse semantics. The strata of language interact within each other based on realization.

Realization: Expression of meanings in an upper stratum by meanings in a lower stratum. For example, the meanings in the discourse semantics stratum are realized by the meanings in lexicogrammar in the form of wordings.

Metafunctions: Various functions of language, namely, ideational, interpersonal and textual, which interact with each other in the creation of various meanings.

Grammatical metaphor: Remapping of discourse semantics onto lexicogrammar. Meaning extension due to change in lexicogrammatical structures rather than simply a change in lexeme. For example, the word

"money" in "time is money" is a lexical metaphor. On the other hand, "introduction" in "the introduction of new policies" is an instance of GM.

Transitivity: Lexicogrammatical structures within the ideational domain in lexicogrammar. Based on transitivity structures, clauses consist of grammatical constituents: actor, process, goal and circumstance. These constituents are given different names depending on process type.

Transcategorization: Changing of word classes with or without derivational morphology, e.g. introduce (verb) … introduction (noun); change (verb)… change (noun).

Agnation: The relation between more congruent and/or metaphorical versions of clauses. To illustrate, a congruent agnate for "our introduction of results" is "we introduced the results".

Periodicity: Organization of information structure of text as bigger and smaller waves in macro-Theme, macro-New, hyper-Theme and hyper-New. Macro-New is also known as thesis statement; hyper-New is also known as topic sentence.

Rank scale: Splitting any meaningful unit of one rank or level into smaller units at the rank below. The lexicogrammatical rank scale consists of clause, groups and phrases. The semantic rank scale, on the other hand, includes sequence, figure and elements.

Genre: Various text types. Genre has been characterized as involving a "staged, goal-oriented, social process" (Martin, Christie, & Rothery, 1987, p. 59).

Outline of Following Chapters

This chapter provided background information about this research study, study aims/objectives, previous research, methodology and principal findings. These were situated in relation to the larger study, the SLATE project, which was carried out between 2008 and 2010.

Chapter 2 provides a theoretical and empirical framework for the current study by reviewing literature on the development of GM in first and second language development contexts. Theoretical insights and development of Sydney School's genre-based pedagogy will also be presented following New Rhetoric (NR hereafter) and English for Specific Purposes (ESP hereafter).

The chapter concludes with a review of the literature on written feedback in Second Language Acquisition (SLA hereafter), Second Language Writing (SLW hereafter), and Sociocultural Theory (SCT hereafter).

Chapter 3 explains the methods that have been used to conduct the research and the analysis of the data used in this study. Using the action research cycle (Kemmis & McTaggart, 1988; Freebody, 2003; Burns, 2010), it describes the research context, participants, the procedures used for the larger project and for this study, the instruments for data collection, the selection of data for analysis, and the analytical framework for analysing the data in relation to action research phases.

Chapters 4, 5 and 6 present the results of each action research cycle by planning action, taking action, studying the consequences of action, and reflecting on findings. Chapter 4 reports the results from the text analysis of student assignments and tutors' online written feedback on GM between July and December 2008. Chapter 5 reports the results of the text analysis of student assignments and tutors' feedback between January and April 2009. The chapter also reports the impacts of student frontloading and tutor training on GM. Chapter 6 reports the results from the last phase of the action research, conducted between January and April 2010. The chapter discusses and documents the ways in which the students were provided with background knowledge and the tutors were trained. It analyses tutors' feedback on GM and students' response to feedback.

Chapter 7 summarizes the research findings, draws conclusions from those findings and indicates some pedagogical implications of the findings. First, the chapter discusses the advantages of using an integrated model to categorize and teach GM by presenting examples from the three phases of the project. The next section presents ways to categorize tutors' feedback on GM and students' response to GM feedback. The chapter then provides a broader picture of the relationship between the action research phases and the TLC, and concludes with a discussion of how GM and periodicity relate to each other within the context of this action research project.

Finally, Chapter 8 summarizes the previous chapters, discusses the limitations experienced during the progression of this action research project and provides suggestions for further research in the context of second language development.