GENRE ANALYSIS OF RESEARCH GRANT PROPOSALS

by

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ABSTRACT

Research grant proposals are a very important genre in many academic disciplines, and a window into which we are able to observe academic engagements and interactions. However, there has been little textual analysis of the genre and research on how successful scholars approach the writing task. Drawing on the social constructionist genre scholarship, this study collected and analyzed nine successful SSHRC (Social Sciences and Humanities Research Council of Canada) research grant proposals from nine professors in the field of education at a Canadian university. The proposals were examined in terms of three important textual features: generic structure, referential behavior, hedges and boosters. Semi-structured discourse-based interviews with the nine professors as insider informants were also conducted. The main findings of the study include the following: (1) A three-move scheme was developed in this study as reflecting the generic structure of research grant proposal summaries. In analyzing the main text of research grant proposals, I first recognized the ICMC pattern (Introduction-Context-Methodology-Communication of Results) as the overall structure; ten moves as the constitutive functional components were then identified under this pattern. (2) Non-integral (where the name of the cited author does not appear in the actual citing sentence), non-reporting (where no reporting verb such as show, establish, suggest is employed to introduce the cited work), and generalization (where the proposition is attributed to two or more sources) forms of citations were found to be predominantly used in the research grant proposals. Self-citation was also

used with a high frequency in this genre. 3) The use of boosters was found to exceed the use of hedges, and the distribution of hedges and boosters were found uneven across the rhetorical sections. Interviews with the nine professors further reveal how communicative purposes, institutional practice, and reader-writer relationship co-constructed the format as well as the stylistic features of grant writing. The study provides genre analysts as well as novice grant writers some useful insights into the research grant proposal writing.

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CHAPTER ONE

INTRODUCTION

1.1 The Genre of Research Grant Proposals

The research grant proposal is a very important academic genre in many disciplinary areas. It is the first step in the process of knowledge production (Berkenknotter & Huckin, 1995). As Myers pointed out, "the researchers must get money in the first place if they are to publish articles and popularizations, participate in controversies, and be of interest to journalists" (1990, p. 41). The research grant proposal is therefore a genre that many academics have to come to terms with at a certain point of their career (Connor & Mauranen, 1999).

The research grant proposal is a unique genre. It differs from other academic genres in terms of the communicative purposes it serves and the audience it addresses. Unlike other academic genres, it serves the promotional purpose of selling the proposed research as well as the researcher (Connor & Mauranen, 1999). It therefore exhibits a high degree of tension between originality and humility (Berkenknotter & Huckin, 1995; Myers, 1990). The research grant proposal is not written for a general audience; rather, it addresses two different groups of readers: peer reviewers who are highly informed about the immediate topic and grant committee members who might or might not be engaged in the same research area. Given that writers' linguistic as well as rhetorical choices would be consciously or unconsciously influenced by their understanding of both the communicative purposes of the genre and the nature of the reader-writer

relationship they are entering into (Connor & Wagner, 1999), it is important to examine the textual features of research grant proposals and in so doing, to look into the underlying social conventions and social interactions of this particular genre.

1.2 Statement of the research problem

1.2.1 An important but understudied genre

In spite of its importance and uniqueness, the research grant proposal has long been an understudied genre. Compared with the large amount of research on another important academic genre--research articles, little has been done on research grant proposals (see Connor, 2000; Connor & Mauranen, 1999; Connor & Wagner, 1999; Johns, 1993; Myers, 1990) except some tool-kit texts on grantsmanship (e.g., Locke, Spirduso, & Silverman, 2000). When Paltridge (2001) speculated about why very little analysis has been carried out of actual texts of the genre of thesis or dissertation, he listed three reasons: (a) the accessibility of the texts, (b) the size of the texts, and (c) the variations of the texts. It is interesting to note that these may also be the reasons why research grant proposals have received scant attention among genre analysts. It is hard to get copies of grant proposals because many grant writers feel reluctant to take the risks of releasing them. The size of the texts, though varied, is usually quite large in the case of national grants. For instance, the main text in SSHRC (The Social Sciences and Humanities Research Council of Canada) grant proposals is usually six pages long with font, paper size, and margin size set by the guidelines. The longer the text, the more complicated and flexible it is. Moreover, the requirements of the content and format

might differ greatly from one funding agency to another, and it even changes from year to year within one funding agency. Owing to these difficulties in data collection and data analysis, it is not surprising to see that research grant proposals remain an understudied genre.

1.2.2 Research gap in the literature

The small amount of literature on research grant proposals can be roughly categorized into two groups, one focusing on the description of the generic structure of the genre (e.g. Connor, 2000; Connor & Mauranen, 1999; Connor & Wagner, 1999), and the other examining the grant proposal writing process using ethnographic methods (e.g., Myers, 1990). No research has ever attempted to combine the analysis of different levels of textual features (see Bhatia, 1993); and no research has examined both textual features and contextual features of the genre simultaneously. The literature, therefore, seems far from adequate to offer a complete description of the textual as well as the social aspects of the genre.

1.3 Purpose of the study

The purpose of this thesis is to approach the study of research grant proposal writing from an integrated perspective by examining both textual and contextual aspects of the writing. More specifically, the study aims to describe three different levels of textual features of the genre: the generic rhetorical structure, the referential behavior, and the use of hedges(words and phrases such as *may, would, suggest, approximately*) and

boosters(words and phrases such as *obviously, clearly, of course, will, must, important, significant*). At the same time, the study investigates how successful grant writers interpret the above three textual features in their own writing, how they understand the grant application practice and the reader-writer relationship, how they learn to write research grant proposals, and the strategies they usually use in the writing process.

1.4 Significance of the study

Perhaps the most exciting contribution this research has made lies in the attention given to research grant proposals, a long-ignored genre. Since it is the first study that examines three different levels of textual features of the genre and combines the textual analysis with contextual analysis, it provides a better understanding of the genre and may thus hold some interest for those genre analysts who are concerned with the research grant writing.

Pedagogically, the study may benefit novice grant writers, and help them to learn not only the textual practice of research grant writing, but also the social practice of it. In recent years, fund raising has become increasingly important for individual researchers as well as research-oriented institutions. This present study could provide them some useful insights into how to write a successful grant proposal.

1.5 Overview of other chapters

Chapter 2 opens with the introduction of the genre scholarship as the theoretical framework of the study. It then reviews the literature on the genre of research grant

proposals and the literature on three textual devices, including cognitive 'move' structure, referential behavior, and hedges and boosters. Based on the literature review, research questions are raised. Chapter 3 discusses the research methodology employed in this study, particularly the sources of data and respective analytical methods. Chapter 4 reports and discusses the three textual features in turn based on both textual analysis and analysis of interview transcripts and follow-up e-mails. The perceptions of the participants about the grant proposal writing process and practice are also reported. The final chapter summarizes the findings of the study and discusses the strengths and the pedagogical implications of the study.

CHAPTER TWO

LITERATURE REVIEW

This chapter consists of three sections. The first section opens with the justification

for taking an integrated approach to the study of writing. Genre scholarship, a body of

research that employs such an integrated approach, is reviewed as the theoretical

framework of this study. Two key concepts "genre" and "context" are respectively

introduced and defined. The second section provides a general picture of the genre of

the grant proposal by examining its unique communicative purpose and by reviewing

the research on it. The last section concentrates on the literature on three textual features

that will be examined in the research grant proposals in this particular study. These

features are rhetorical structure, referential behavior, hedges and boosters.

2.1 An integrated approach to the study of writing

Writing is an important, multi-dimensional, socially constructed activity (Candlin &

Hyland, 1999). It is important because it "intrudes into every cranny of" our daily lives

(p. 3). It is the central means by which people communicate with each other, position

themselves, formulate and reformulate social conventions and power-relationship.

Writing serves a multitude of social roles and communicative purposes. It is

multi-dimensional in the sense that writing as text is itself meaningless if it is isolated

from and interpreted without an understanding of writing as process as well as practice.

Writing is socially situated, as it is believed to be "existing only in the social world of

humans" (Mauranen, 1993, p. 4). Its textual choices are "shaped by the social, political,

cultural and professional contexts within which they operate; and that these contexts largely determine what we include in a text and how we include it" (Sengupta, 2001). Therefore, as Candlin and Hyland (1999) argued, writing requires multiple perspectives for understanding it, which include "the description and analysis of texts, the interpretation of the processes involved in writing, and the exploration of the connections between writing and the institutional practices which in large measure are constituted and sustained through writing" (p. 1).

Genre scholarship is such a body of research that employs an integrated approach to the study of writing. In order to introduce the theoretical framework in which my study on genre of grant proposals is situated, the literature concerning the concept of "genre" and "context" is reviewed below.

2.1.1 The concept of "Genre"

Genre is a term which has wide but variable currency in such fields as folklore studies, literary studies, applied linguistics and rhetoric (Paltridge, 1997; Swales, 1990). In the field of writing, there are three research traditions within the current genre scholarship: (a) English for Specific Purposes (ESP), (b) North American New Rhetoric studies, and (c) Australian systemic functional linguistics (Hyon, 1996; Paltridge, 1997). Due to the different research contexts they are in, the different consumers of research they are faced with, and the different research goals they pursue, these three traditions "offer interesting variations in emphasis and each of which illuminates a different aspect of the evolving conception of genre" (Freedman & Medway, 1994).

ESP and Australian researchers give particular attention to the formal characteristics

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of genres. Australian genre theorists, for instance, under the framework of Halliday's register theory (Halliday, 1978; Halliday & Hasan, 1989), focus mainly on the analysis of the coherence and cohesion of texts, as well as the identification of statistically significant lexico-grammatical features of a linguistic variety (Martin, 1991, 1993; Martin & Rothery, 1980).

Swales(1981; 1986; 1990), a leading ESP scholar, focused his examination of research articles as well as other research-process genres on rhetorical structures, referential behavior, and other syntactic and lexical features, such as reporting verbs and their tenses. As Atkinson (2001) commented, Swales's work "has helped blaze a new and exciting trial for others to follow" (p. 393). The Swalesian *structural move analysis* later has been widely used by other ESP scholars to analyze the global organizational patterns of a multitude of written academic genres, such as research articles (Bhatia, 1993; Hyland, 2000; Samraj, 2002; Upton & Connor, 2001), medical abstracts (Salager-Meyer, 1990), medical research reports (Nwogu, 1991), business letters and legal discourse (Bhatia, 1993; Henry & Roseberry, 2001). Following him, some ESP scholars have also examined the discursive features of genres, such as citation types and reporting verbs, hedges and boosters, and metadiscoursal strategies (Hyland, 1996a, 1996b, 1998, 2000, 2001; Salager-Meyer, 1991, 1993, 1994, 1999; Vassileva, 2001).

The New Rhetoric tradition, however, claims that analyzing a genre involves not only examining linguistic forms, but also relating the linguistic features of a genre to the *actions* they perform (Miller 1984). Therefore, they have focused more on ethnographic description of the situational contexts in which genres occur. Berkenkotter and Huckin

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(1995), for instance, in their process of observing how a doctoral student came to learn the conventions and conversations of the social science community, shared an office with the doctoral student for a whole academic year and attended the student's required classes. They wrote field notes from their observations and conducted interviews with both the participant and his professors at each stage of the research program. They also met with the participant on a regular basis to discuss the self-reports written by the participant. Rich ethnographic data were thus collected to offer a thick description of the academic context in which the genre is situated.

Despite their different focuses, "there is considerable and important overlap" among these three traditions (Freedman & Medway, 1994, p. 9). They all explicitly recognize the primacy of the social in understanding genres and that of the role of 'context'. Researchers in ESP have framed genres as a highly structured and conventionalized communicative event (e.g., Swales, 1981, 1986, 1990). This can be understood from two aspects. On the one hand, genres are certain conventionalized text types or what Bhatia (1993, 1994) refers to as having *generic integrity*; on the other hand, the communicative purpose is the essential criterion to identify and distinguish genres and sub-genres. Based on this understanding, Bhatia (1993) argues for a form-function correlated genre-analysis model, "which is not seen as an extension of grammatical formalism but... exploits maximally the conventional aspects of language use" (p. 11). Similarly, Australian genre analysts, drawing on Halliday's register theory and schemes of linguistic analysis (Halliday, 1978; Halliday & Hasan, 1989), have also defined genre as structural forms that cultures use in certain contexts to achieve various purposes

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(Martin, Christie, & Rothery, 1987). New Rhetoric scholars, including Miller (1984) and her followers (Bazerman, 1988, 1994; Freedman & Medway, 1994; Schryer, 1993, 1994), have viewed genre as social action. Through the notion of action, they attempt to "encompasses both substance and form" (Miller 1984, p.151), and to consider textual regularities as well as extra-textual similarities in audience, rhetorical situation, or mode of thinking.

Genre is therefore considered in all these three traditions as a two-sided coin, with textual regularities on one side, and the ideological content, the rationale, or the social action on the other. The notion of genre, therefore, helps to extend the examination of writing beyond the boundary of text, providing a look into the complexity of social conventions and interactions that underlie various linguistic or discursive performances.

Genre is also a concept that owns the quality of being both static and dynamic. Martin et al. (1987), for instance, described genres as "semiotic systems [that] evolve in such a way that they introduce a kind of stability into a culture at the same time being flexible enough to participate in social change" (p. 59). Bakhtin (1986) argued that while genre involves regularities and typification, generic forms "are much more flexible, plastic, and free" (p. 79). He attributed this paradoxical nature to the tension between unifying (centripetal) forces and stratifying (centrifugal) forces (1981). Genres are static, because they are recurring responses to rhetorical situations (Bitzer, 1968; Miller, 1984). After having been socially approved by a particular discourse community, these recurrent rhetorical types become conventionalized communicative events which align with the community's norms, epistemology, ideology and social ontology. They

begin to impose a constraint on new responses. The centripetal forces take effect. At the same time, a genre evolves as a result of changing technological and demographic conditions (Yates & Orlikowski, 1992). Berkenkotter and Huckin (1995) argued that, "just as language itself has to accommodate both stability and change, genres... must also try to deal with the fact that recurring situations resemble each other only in certain ways and only to a certain degree. As the world changes, both in material conditions and in actors' collective and individual perceptions of it, the types produced by typification must themselves undergo constant incremental change" (p. 6). Based on this understanding, genres are "sites of contention between stability and change" (Berkenkotter & Huckin, 1995, p. 6). The dynamic nature of the genre makes it a theoretical construct that stays away from reductionism and determinism.

2.1.2 The concept of 'context'

The concept of 'context' is to justify the importance of analyzing the background in which the focal event--grant proposal writing takes place. 'Context', according to Duranti and Goodwin (1991), "has long been a key concept both in the field of pragmatics and in ethnographically oriented studies of language use as well as quantitative one" (p. 1), and it "stands at the cutting edge of much contemporary research into the relationship between language, culture, and social organization, as well as into the study of how language is structured in the way that it is" (p. 32).

What is "context" and how is it constituted? By juxtaposing a variety of perspectives on context, Duranti and Goodwin (1991) believe that it does not seem

possible to provide "a single, precise, technical definition of context", since "the terms means quite different things within alternative research paradigms". The work of the anthropologist Malinowski (1923, 1935) and his theory of context are worth mentioning, because it was Malinowski (1923) who in fact first extended the meaning of the word "context' from 'con-text' to refer to the total cultural and immediate environment, and coined the two terms *Context of Situation* and *Context of Culture*, both of which he considered important notions for the adequate understanding of text.

Based on Malinowski's notion of context, the linguist Firth (1957) outlined four concepts for describing the notion of context: the participants in the situation, the action of the participants, other relevant features of the situation, and the effects of the verbal action. The ethnographer Hymes (1967) also proposed a set of concepts under the rubric of "context", most of which overlap with Firth's concepts: the form and content of the message, the setting, the participants, the intent and effect of the communication, the key, the medium, the genre, and the norms of interaction. Halliday and Hasan (1985) followed up on Firth and Hymes's categorization of context by further developing the notion of *Context of Situation* into three components: *field*--the 'play', *tenor*--the 'players', and *mode*--the 'channel', corresponding to three metafunctions of a text: *ideational, interpersonal and textual.*

An important perspective on context also comes from ethnomethodologists, such as Cicourel (1992), who are interested in investigating how members of a society build the events they participate in. In a study examining particular verbal exchanges within a medical facility, Cicourel (1992) proposed two layers of contextual information--the

"narrow" ("context in the sense of locally organized an negotiated interaction", p. 295) and the "broad" ("the institutional context or framing of activities", p. 295), and argued the importance of integrating these two senses of context in interpreting everyday interaction.

Scholars from many other fields such as social philosophy and speech act theory provide their own understanding and interpretation of context (see Duranti and Goodwin, 1992). Based on a review of the contextual attributes noted by Ochs (1979), Duranti and Goodwin suggested four dimensions of contexts: setting, behavioral environment, language itself and extrasituational context.

The foregoing brief survey of how 'context' is perceived in different traditions indicates something of a common stance, that is, they all recognize 'context' as a multidimensional construct. The introduction of the concept thus helps to recognize the necessity of taking multiple contextual factors into consideration when examining the act of writing of a certain genre. In this study, it seems indeed necessary to situate grant writing within multiple dimensions of a context. The context includes not only the macro socio-cultural patterns such as the academic environment and literacy tradition in Canada and the institutional conventions of the funding agency, but also little "c" contexts (Candlin & Hyland, 1999, p. 14) like the beliefs, perceptions and expectations the individual writer brings into the writing task. It is concerned with not only physical settings, but also people (the grant writer, the grant reader, and the intricate power relationship between them), their shared purposes in grant writing, the process and the practice of their acts.

The notion of 'context' is used to guide this study not only because of its multiple dimensions, but also because of its dynamic and social-constitutive property as opposed to some stereotypical and static notion such as 'culture' in Contrastive Rhetoric. By citing Bateson's (1972, p. 459) metaphor of the blind man and his stick, Duranti and Goodwin (1992) attempted to pose some issues concerning the study of context. They discussed the importance of the participant/actor's perspective of context, and how what s/he treats as relevant context is shaped by the specific activities being performed at that moment. In view of this and other human agents and their interactions with the participant/actor as a key constituent of the context, "the dynamic, socially constitutive properties of context are inescapable" (p. 5). Foucault interpreted the dynamism of 'context' from another perspective. He argued that the conflict between the predetermined socio-historical and economic conditions of existence and its emergent, socially negotiated properties gave rise to the ever-changing nature of 'context'. In this thesis project, with a developing view to examining various contextual factors that might have a bearing on grant proposal writing, the researcher can avoid labeling regularities as static 'cultural patterns' and "becoming the same old psychological romanticism" (Luke, in Series Editor's Preface to Freedman & Medway, 1994).

The most important reason for introducing the construct of 'context' into the theoretical framework on which this study is based is its mutually reflexive relationship with text. On the one hand, linguistic and rhetorical choices are constrained by and therefore reflect the context within which the text is situated. For instance, systemic functional linguists have illustrated how lexico-grammatical choices correspond to

particular aspects of topic and writer-reader relationship; scholars in New Rhetoric have demonstrated how texts represent social interactions; ESP researchers have emphasized how the generic structure reflect the norms and conventions of a certain discourse community (Candlin & Hyland, 1999). However, the 'context' should not be viewed only as a set of variables that statically surround text (Duranti & Goodwin, 1991). Just as Halliday and Hasan (1985) argued, the relationship between text and context is a dialectical one: "the text creates the context as much as the context creates the text" (p. 47). They thus introduced *intertextuality* as another type of context besides *context of situation* and *context of culture*, referring to the relationships between texts, and to the assumptions that are carried over therefrom. Rhetoricians also acknowledge the dialectical reflexivity between text and context drawing on Bakhtin's insight that texts are sites of the centrifugal and centripetal forces at work (Miller, 1994; Schryer, 1994). However, because of the "fundamental *figure-ground* relationship" between the focal event-text and context as Duranti and Goodwin (1991, p. 9) realized, there is a tendency to focus on the description of texts while ignoring contexts which are more amorphous in many studies of writing. It is the recognition of the inter-reflexive relationship between text and context that leads me to adopt an integrated approach to the study of grant proposal writing.

There are several reasons for me to introduce 'context' instead of 'discourse community' as an important construct in this theoretical framework. While it is widely agreed that "particular discursive conventions are seen as 'authorized' and valued by social groups, institutional sites, or discourse communities" (Candlin & Hyland, 1999, p.

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7), there is still some debate about the nature of 'discourse community' (Swales, 1993). According to Swales's (1990) earlier conceptualization, a discourse community 1) has a broadly agreed set of common public goals, 2) has mechanisms of intercommunication among its members, 3) provides information and feedback using this participatory mechanisms, 4) utilizes and possesses one or more genres in the communicative furtherance of its aims, 5) owns some specific lexis, and 6) has a threshold level of members with a suitable degree of relevant content and discoursal expertise. This definition is obviously too restrictive, at least for the concept to be used in the analysis of grant proposals. While grant writers and grant readers in a certain context do have shared assumptions about what is appropriate in grant proposal writing, they do not have such close connections as having mechanisms of intercommunication. In addition, they might come from different disciplines or academic fields. It would be thus impossible for them to own specific lexis. In fact, it is even advised not to use jargon/technical term in grant writing. Moreover, with an emphasis on the participants' knowledge of conventions, the concept of 'discourse community' fails to address other contextual factors that might have an influence on writing. The multi-dimensional concept of 'context' therefore seems necessary to be introduced in analyzing grant proposal writing.

2.1.3 Summary

Since the main aim of this study is to offer a thick description of grant proposals, I draw upon the genre scholarship as the theoretical framework and make use of two key

concepts: genre and context. These are two closely inter-related concepts. Genre is a two-sided coin, with 'text' on one side and 'context' on the other side. When a writer engages in a particular genre, s/he is simultaneously drawing on interactional conventions of a particular context, adopting and reproducing social roles and relationships particular to that context. Textual features are an instantiation and reflection of contextual attributes while contextual information helps to interpret and explain textual realizations. The concept of 'genre' is therefore employed and the concept of 'context' is foregrounded in this study to offer a better description and explanation of research grant proposals.

2.2 The Genre of Research grant Proposals

Like other academic writing, research grant proposals are a very important genre in many disciplinary areas. They are the first step in the process of knowledge production (see Berkenknotter & Huckin, 1995, p. 62). As Myers (1990) pointed out, "the researchers must get money in the first place if they are to publish articles and popularizations, participate in controversies, and be of interest to journalists"(p. 41). Research grant proposals are therefore a genre that many academics have to come to terms with at a certain point of their career (Connor & Mauranen, 1999).

The visibility of the genre lies not only in its importance for individual academics, but also in its significance for research-oriented universities and institutions (Swales, 1990, p. 186). The participating university where I collected data for this study, for instance, has a special research office which offers workshops, seminars and panel

discussions on grantsmanship, finds internal reviewers for researchers, facilitates formation of interdisciplinary teams, and even writes letters of support for grant applications. A website to deliver up-to-date grant information has also been created and positions of coordinators have been established to help faculty apply for grants and to track down research projects of the community. Similar situations undoubtedly exist in other research-based universities (Swales, 1990). The major motatory force behind the universities' efforts to facilitate grant application is to boost and demonstrate their research strength, given the fact that the total amount of grants a university attracts has now become an important measure of a university's research competence.

What has aroused genre analysts' interest, however, is not just the visibility of the genre. The research grant proposal differs from other academic genres in terms of the communicative purposes it serves and the audience it addresses. Besides being an academic genre, it serves the promotional purpose to sell the proposed research as well as the researcher (Connor & Mauranen, 1999). The genre therefore exhibits a high degree of tension between self-promotion and humility (Berkenknotter & Huckin, 1995; Myers, 1990). In order to gain gatekeepers' attention, the writer needs to demonstrate the innovativeness of the proposed research and his/her commitment to it; at the same time s/he needs to contextualize the proposed research within the literature and takes on a certain degree of tentativeness in order to establish his/her professional ethos as a prudent and candid persona. Unlike research articles, a research grant proposal is not just written for a specific group of audience who are familiar with the research topic; rather, it addresses two different groups of readers: peer reviewers who are highly

informed about the immediate topic and grant committee members who might or might not be engaged in the same research area. In general, the most important reader it needs to address is the funding agency. Hence, the writing of a grant proposal is usually greatly influenced by its institutional force, represented by the grant guidelines. As "Guidelines for the format of proposals, even when intended only as general suggestions, often have an unfortunate influence on the writing process. Once committed to paper, such guidelines quickly tend to acquire the status of mandatory prescription" (Locke et al., 2000, p. 7). All these unique features of research grant proposals would make this genre different from other academic writing in textual formulation, given that writers' linguistic as well as rhetorical choices would be consciously or sub-consciously influenced by their understanding of both the communicative purposes of the genre and the nature of the reader-writer relationship they are entering into (Connor & Wagner, 1999).

It is therefore an important area of inquiry to examine the textual features of research grant proposals, the underlying social conventions and social interactions, and their dialectical inter-reflexive relationship as discussed earlier. However, compared with the considerable amount of literature on research articles, very few studies have been conducted on research grant proposals (see Connor, 2000; Connor & Mauranen, 1999; Connor & Wagner, 1999; Johns, 1993; Myers, 1990) except some tool-kit texts on grantsmanship (e.g. Locke et al., 1987). The body of literature on this genre can be roughly categorized into two groups, one focusing on the description of the generic structure of the genre, and the other investigating the grant proposal writing process.

Swales (1990) in his two-page sketchy review of the genre, discussed the typical parts of a research grant proposal:

The typical parts of a research proposal are:
1. Front Matter
2. Introduction
3. Background (typically a literature survey)
4. Description of proposed research (including methods, approaches, and evaluation instruments)
5. Back matter (p. 186)

As can be seen, the "typical parts" Swales suggested is obviously a reflection of typical grant application guidelines. The main body of grant proposals, like the main body of research articles, seems to follow some conventional patterns: Introduction-Context (Literature Review)-Methodology (ICM), though there might be some variation from one funding agency to another. Swales (1990) has also mentioned the 'frontedness' of the objective part in both the abstract and the main body of grant proposals, and attributed it to the need to serve the promotional purpose and to address the exoteric reader at the beginning.

Connor's studies (Connor & Mauranen, 1999; Connor, 2000) are among the few pioneering studies using structural move analysis to analyze research grant proposals. Connor and Mauranen (1999) offered a ten-move scheme based on a sample of 34 proposals from European Union (EU) research grant applications:

i.   Territory
ii.   Reporting previous research
iii.   Gap
iv.   Goals
v.   Means
vi.   Achievements
vii.   Benefits
viii.   Competence claim
ix.   Compliance claim

x.   Importance claim

Based on another set of data (14 grant proposals from 5 researchers), Connor (2000)

later analyzed the "variations" using this ten-move scheme. Their positivist inquiry

provides a useful provisional framework for much needed further work on the structure

of this genre(for detailed review on 'structural move analysis' as well as Connor's

studies which use 'structural move analysis', please refer to the next section).

Another group of literature focused on grant writing process. Myers (1990) in his

ethnographic case study examined two biologists' grant writing and repeated revising

processes and described how they negotiated their uses of tone as well as their

referential behavior according to the different situations they were in. There are some

interesting findings of his study. For instance, he noted that one of his subjects increased

the number of references from 57 to 195 through the review procedure (p. 91). He also

found that English researchers, when presenting their work as interesting and original,

clearly realize that words like *new, fundamental,* and *important* are all but forbidden,

and even *interesting* seems to provoke some readers. Connor and Wagner (1999)

examined seven grant proposals written by Latino personnel in six different Latino

nonprofit organizations in the United States and conducted interviews with the writers.

By doing this, they intended to look into the processes of grant writing and the

representation of the Latino identity in the proposals. However, it seems that to

investigate the writing process only through interview would not be as revealing as

investigating through an ethnographic study.

As can be seen from the above discussion, the literature on research grant proposals

is far from enough to give this genre a comprehensive description of its prototypical

textual features, and to explain the underlying social conventions and interactions that might be reflected and revealed by textual features. It therefore seems necessary to examine some linguistic devices that are typical in serving the communicative purposes of research grant writing, as a point of departure to look into the social conventions and interactions of contexts. In the following section, I will review the literature on three such linguistic/discursive features: Swalesian cognitive structure, referential behavior, and hedges and boosters.

2.3 Literature on three textual features

2.3.1 Cognitive "move" structure

Genre-based approach to the analysis of the rhetorical organization of texts has obviously borrowed some ideas from the schema theory. Swales (1990), the initiator of *structural move analysis*, used one chapter to discuss the close intrinsic relationship between schema theory and move analysis. According to him, the concept of schema, which was first introduced by Bartlett as early as 1932, and later developed by English as a Second Language (ESL) researchers like Carrell (1983, 1987), "supports the common sense expectancies that when content and form are familiar the texts will be relatively accessible, whereas when neither content nor form is familiar the text will be relatively inaccessible" (p. 87). Schema theory therefore provides useful evidence for the benefits of teaching text-structure. ESP scholars hold a similar rationale. They also believe that the analysis of structural organization of a genre could help reveal the preferred ways of communicating intention in specific discourse communities because

specialist writers observe a fairly consistent way of organizing their overall messages in a genre (e.g., Bhatia, 1993). The critical difference between schema theory and 'move' analysis is that "schema theorist's emphasis on cognition has tended to isolate the text from its communicative purpose and from its environment" (Swales, 1990) while genre analysts think of a genre as consisting of a series of moves to achieve an overall communicative purpose.

Swales, in his seminal work (1981), first used the term 'move' and proposed that the overall communicative purpose of research article introductions was usually accomplished through a four-move structure. According to him, a "move" is part of a text serving a particular communicative intention which helps to fulfill the overall communicative purpose; a "step" is thought of a smaller rhetorical unit under the unit of a "move" to help realize the communicative intention of the move. Bhatia (1993) developed the move analysis by proposing the notion of non-discriminative strategies and by introducing an interactive move structure. The notion of *"strategy"*, similar to the notion of 'step', is "non-discriminative" in the sense that it does not change the essential communicative purpose. But while the notion of 'step' indicates a prototypical order, the notion of "strategy" does not (Henry & Roseberry, 2001). By leaving more space for individual strategic choices, the notion of *"strategy"* helps ESP scholars justify "genre" as well as "move analysis" as being more flexible, rather than reductive concepts. The introduction of the non-linear move-structure also has the same effect. Bhatia offered a legislative example, in which move-structure is not linear as in most genres but interactive, with the "qualifications" move specifying the main

"provisionary" move.

As mentioned earlier in Section 2.1.1, there have been quite a number of studies using *structural move analysis* to analyze the global organizational patterns of written academic or professional genres. However, most of the studies focus either on the genres with short texts, such as business letters (e.g. Bhatia, 1993; Pinto dos Santos, 2002), medical abstracts (Salager-Meyer, 1990), acknowledgement texts (Giannoni, 2002), or on sub-genres, such as research article introductions (e.g. Bhatia, 1993; Samraj, 2002; Swales, 1981, 1990; Taylor & Chen), research article results (e.g. Brett, 1994; Tompson, 1993), and research article discussions (Hopkins & Dudley-Evans, 1988). This makes us consider whether the unit of 'move' is a unit more suitable for the analysis of short texts.

Swales, the initiator of the term of "moves", has never addressed this problem directly. However, in analyzing research articles he recognized the enormous size of the genre and conceded "the considerable difficulty in making well-validated decisions about how that whole should be divided up"(2000, p. 110). He used the term 'sections' rather than 'moves' to label the IMRD (Introduction-Method-Results-Discussion) pattern of research articles, and examined the structural moves only within the sections. In discussing grant proposals, he also used the word 'parts' rather than 'moves' in naming the first layer of organizational components. It seems that he has good reason to do this. The sections/parts are the results of academic conventions or institutional forces. They are divided up more from a 'content' perspective than from a 'functional' perspective. If we label these sections/parts as 'moves', it might be at odds with the

definition of a "move", which is a functional unit used for a specific overall communicative purpose (Swales, 1981; 1990). But if we ignore the original section boundaries and go directly to identify rhetorical units that serve specific communicative purposes-the 'moves', as Connor's studies (Connor, 2000; Connor & Mauranen, 1999) did on grant proposals, we might be unable to see clearly the overall organization of the genre because of the frequent recurrence as well as the reordering of the moves. In addition, we might thus ignore the institutional influence on the format, the result of which could mislead apprentice writers.

In Connor and Mauranen's (1999) study, they did not address the variations of the moves they identified, so we are unable to know whether in texts with considerable length, like in grant proposals[1], the situation of frequent reoccurrence and reordering of the "moves" would exist as anticipated. Connor (2000) later, by using another set of data (14 grant proposals from 5 researchers), analyzed the "variations" of the "moves". These "variations", however, were restricted to the occurrence or non-occurrence of moves, and length variations of each move. She did not discuss how well the ten-move structure corresponded to the original section divisions of the texts; she also failed to inform her readers if there were some *generic variations* (Hyland, 2000, p. 69). That is to say, she only identified the basic functional components of the genre; she did not describe how these functional components were organized. As readers, we are thus unable to get an overall picture of the rhetorical structure of the genre. Connor's studies

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[1] Connor and Mauranen did not mention the length of their sample grant proposals; however, Connor (2000) did mention the proposal length, which ranges from 57 lines to 1,326 lines, with an average length of 432 lines.

are among the few studies that used structural move analysis to examine the texts with considerable length. The problem reflected in her studies of when and how to use move analysis indicates the need for further research in this direction.

Since move analysis is still at its embryonic stage, we can often see debates in the literature concerning the identification or recognition of certain moves in related genres. For instance, in Connor's studies (Connor & Mauranen, 1999; Connor & Wagner, 1999; Connor, 2000) on grant proposals, 'reporting previous research' was assigned an independent move. In Swales's studies on research article introductions, we can see a change from his initial proposition (1981) of assigning 'reviewing items of previous research' an independent move to later a step (a smaller rhetorical unit under 'move') only in his 1990's book. Still, criticisms exist. Some genre analysts raise the problem of whether 'reviewing items of previous research' should be assigned a separate rhetorical unit, whether a move or a step. Samjar (2002), for instance, has argued that it is arbitrary to distinguish topic generalizations from reviews of previous research simply by the level of specificity and presence of citations. Besides, reviews of previous research might spread over all moves (Crookes, 1986; Hopkins & Dudley-Evans, 1988), and carry different "discoursal values" (Bhatia, 1993). Here is an example of 'Reporting previous research' given by Connor (2000), from which we can see that it is not a homogenous chunk at all:

> Of course, there are general histories of Indianapolis, but all are *deficient* as reference works in one way or another. Berry Sulgrove's century-old History of Indianapolis and Marion County (1984), while containing much useful materials on the city's early years, is *dated* in both style and interpretation. Jacob Piatt Dunn's Greater Indianapolis (2 vols, 1910) is still the most widely cited general history of the city, and it contains a wealth of information on the capital

city up to 1910.[2]

The discourse cited above is obviously only part of a whole literature review. But even in this short paragraph, at least two rhetorical 'moves' exist according to Connor and Mauranen (1999)'s own definitions. One is the establishment of the research territory, and the other is the indication of the research gaps (see *italicized* words). It seems inappropriate that 'reporting previous research' was assigned an independent move while establishing a 'territory' and indicating a 'gap', which were achieved by 'reporting previous research', were also considered as moves. Therefore, we can see that the attempt to identify "reporting previous research" as a separate move or step might result in the difficulty to distinguish it from other rhetorical units.

However, the complexity comes from the fact that literature review "has conventionally acquired an independent status in research writing" (Bhatia, 1993, p. 85). Without an independent section or even a chapter for literature review,[3] a research article would be considered incomplete; furthermore, researchers need to demonstrate their familiarity with the field by reviewing the relevant literature. That is also the case in writing grant proposals. Thus whether 'reporting previous research' should be assigned a separate move/step in academic genres is a question worth consideration.

Debates concerning the identification or recognition of certain moves remain, nevertheless, within the move-analysis structure. Move analysis could be more seriously challenged in situations when a move-scheme identified by some genre analysts for a certain genre is claimed to be inapplicable in other studies (see Hyland, 2000). It could

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[2] Note: words that indicate the gaps are italicized based on Connor and Mauranen's (1999) definition
[3] Here "section" and "chapter" refer to constitutive components of a text recognized by original typographical boundaries.

be a problem with the validity or reliability of individual studies. However, it could also be a problem with move analysis, if a positivist attitude is taken to search for a "universal 'ideal' of information structuring" (Hyland, 2000, p. 68) while moves identification is after all an act of subjectivity. Move analysis without doubt needs to go beyond the mere textual analysis. Some scholars have attempted to offer an interpretative analysis by combining interview techniques. Connor (2000), for instance, interviewed the five grant writers she collected grant proposals from to determine the accuracy of the move identification. Hyland (2000), in examining the move structure of research article abstracts, also conducted text-based interviews to further explore how "writers construct their abstracts using the functional moves which best position both their research and themselves"(p.75).

To sum up the foregoing discussions, while move analysis is admittedly a good way to explore the conventional rhetorical structure of a genre, it still needs further development in both theory and empirical trial studies to prove its usefulness in analyzing long texts, to sharpen its move identification criteria and most important, to justify its validity.

2.3.2 Referential behavior

The behavior of embedding arguments in networks of literature is an important part of academic writing. It is a strong indicator of how a text relies on its background knowledge. It has aroused the interest of scholars from a multitude of fields with various motivations. Historians analyze citations to trace the origin and distribution of

particular ideas and discoveries. Workers in mathematical traditions are interested in validating and refining certain statistical laws that can be applied to bibliographical data, such as citation decay curves and citation half-lives. One major motivation behind citation analysis is to search for methods of assessment, evaluation, and ranking of the quality of the research produced by a country, an institution, or an individual (Swales, 1986). For applied discourse analysts, particularly people in language education, the process of searching for the rationale behind the citation features could help to sensitize the novice writers' awareness of where and why citational support for their statements may be advisable (Swales, 1990; Thompson & Tribble, 2001), and help them to see the underlying social conventions and interactions of disciplinary communities (Hyland, 1999, 2000).

With different purposes and motivations, researchers approach citations using different methods and come up with different typologies. According to Swales (1986), before 1975, citation analysis used simple reference-citation counts to account for the quality of research; in 1975 two papers extended the analysis to the "content citation", that is, to analyze citations occurring in textual context. Moravcsik and Murugesan (1975) developed in their paper a four-parameter featural classification: conceptual/operational, evolutionary/juxtapositional, organic/perfunctory, confirmative/negational. Based on their typology, Chubin and Moitra (1975) proposed a set of mutually exclusive categories.

Swales's (1981, 1986, 1990) studies are worth mentioning, because they marked the second leap in this field of study from 'content citation analysis' (CCA) to

'discourse citation analysis'. His 1981 paper furthered Moravcsik and Murgesan's categorization from two aspects. First, he situated the examination of whether a citation is a real negational citation or a pseudo one into the analysis of the textual information by using the four-move scheme. Secondly, he proposed three orientations of citations: reporting/authorial, reporting/parenthetical, finding/parenthetical, which later in his 1990 book developed into distinctions between integral and non-integral, reporting and non-reporting forms of citation (Swales, 1990, p. 146).

In his 1986 paper, Swales proposed a featural classification derived from Moravcsik and Murugesan's model. He dropped their first two dichotomies, based on the reason that the first dichotomy of conceptual/operational "does not in any case contribute to an estimate of the quality or weight of the citation" while the second category proved to be very hard to operate due to its intrinsic subjectivity. He thus came up with a three-dimension scheme: short/extensive, evolutionary/juxtapositional/zero, and confirmative/negational/zero. He applied this scheme to a corpus of citations of Munby's book *Communicative Syllabus Design* (CSD). His findings reveal some significant treads in citational features over the six-year period, but since what he examined was the citations of one scholar's work (Munby, 1978), the scheme he illustrated seems to have the implications only for the assessment of the quality of individual research. Besides, as Swales (1986) also mentioned himself, since he knew Munby's work quite well, he could make judgments on whether one citation form was evolutionary (the referring paper is built on the foundations provided by the reference) or juxtapositional (the referring paper is an alternative to the reference), confirmative or

negational. In this case, it has similar problems as classifications in CCA, that is, as Peritz (1983) discussed, it involves a high degree of subjectivity and requires an in-depth knowledge of the subject matter.

The integral/non-integral (whether the name of the researcher occurs in the actual citing sentence), and reporting/non-reporting (whether a 'reporting verb' is used) dichotomies Swales discussed in his 1990 book seem more applicable, however. By combining the analysis of tense and aspect usage of the reporting verbs, he examined the citations more from an applied discourse analyst's perspective. He has attempted to search for a rationale behind the usage of certain citation forms. For instance, to use or not to use reporting verbs, and what kind of reporting verbs to use can, according to him, reveal the author's commitment to the proposition.

Swales' study later has been followed up by many other ESP scholars with different focuses. Hyland (2000), for instance, agreed that, "two important attribution features of interest to researchers have been the distinction between integral and non-integral structures and the role of different reporting verbs" (p. 22). In examining mainly these two citation features, he reported the disciplinary differences in the way they refer to prior work. According to him, generally, writers in the "soft" disciplines "were more likely to use integral structures and to place the author in subject position, to employ direct quotes and discourse reporting verbs, and to attribute a stance to cited authors." By interviewing specialist informants, he attributed these differences to different traditions of knowledge construction, and different disciplinary dispositions to functions of agency in knowledge construction. While Swales (1986) believed that "it

would seem dangerous to assume that *parenthetical* (non-integral) is 'perfunctory' and *authorial* (integral) is not" because the orientational form that a citation takes might be influenced by stylistic concerns(p. 47), Hyland, by using corpus analysis and interview techniques, more definitely argued for the correlation between integral/non-integral and working of agency.

Different from Hyland (2000) who examined the disciplinary differences in referential behavior, Salager-Meyer (1999) examined the diachronic evolution of referential behavior in English medical prose between 1810 and 1995. Based mainly on Swales' integral/non-integral dichotomy and Valle's (1995) typology, he classified the reference patterns in his data into the following types: general references, specific references, verbatim quotes, self-reference, footnotes and end-lists. The results of his research showed that in different blocks of time, different referential patterns were preferred, and that there was a conceptual shift from a non-professionalized individually-based medicine to a technology-oriented and specialized medicine within the medical community.

The analysis of citation forms and patterns is however far from enough for genre analysts. They also need to look into the rationale of why genre texts have taken on certain referential forms. As we have just discussed before, Hyland (2000) used interviews to explore the disciplinary conventions. Berkenkotter and Huckin (1995), by presenting a case study of how a biologist came to orchestrate citations for novelty in his process of revising an experimental article, focused their discussion on how citation as a rhetorical strategy helped the biologist to contextualize the local (laboratory)

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knowledge within an ongoing history of knowledge making and thereby create a research space for the study.

Self-citation has long been neglected or even purposely excluded from the discussion of other-citation. The reason, according to Hyland (2000), is that self-citation is "far less central to academic argument than other-citation", and it differs greatly from other-citation in terms of motivation and disciplinary distribution. However, in his 2001 paper, Hyland investigated the extent, the forms and the functions of self-citation in a corpus of 240 research articles in eight disciplines in an attempt to "unravel some of the myths and misperceptions about this topic" (p. 208). The result of his study shows that about 70% of the papers in the study contained a self-reference and these comprised 8% of total references. In the sciences and engineering, self-reference made up as high as 11% of all references compared with only 5% in the "soft" fields. Hyland (2001) argued that, there are various rationales behind self-reference, "involving psychological, rhetorical and social factors that contain elements of confidence, experience and self-promotion" (pp. 213-214). Most importantly, self-reference is an essential means to demonstrate the writer's research credentials and credibility by engaging his/her own work in a common literature. Hyland also attempted to offer an explanation for the disciplinary variations in the frequency of self-citation. According to him, research in fields such as sociology usually ranges over a wide territory and has diverse topics, therefore there is little opportunity for self-citation; while in hard disciplines such as physics or mathematics, the linear progression of the research allows the researchers to draw on their own work more

frequently.

Salager-Meyer's (1999) examination of the diachronic evolution of self-reference in medical English seems to be consistent with Hyland's finding. In the whole corpus, self-references constitute about 11% of total number of references. And it "has been used quite constantly and regularly over the 185 years studied". The average number of self-reference has been increasing all over the four year-blocks and has exhibited an important rise in the second half of the 20th century. However, it has not increased in the same proportion as the total number of references has. Another interesting finding of Salager-Meyer's study is that the frequency of self-references in medical English written by Japanese or Chinese researchers is comparatively much lower than that in papers written by British and/or American counterparts. As Salager-meyer pointed out, it is worthy of further investigation to see the cultural, ideological and political issues in various academic referencing practices.

Up till now, there has been no research examining the relative importance and rhetorical realizations of citation in the genre of grant proposal. Referential behavior in grant proposals might have different motivations and rationale from that in other academic genres. The weight of self-citations might also differ due to the self-promotional nature of grant proposals. Therefore it is an avenue worthy of further research.

2.3.3 Hedges and boosters

Hedges (words and phrases such as *may, would, suggest, approximately*) and boosters (words and phrases such as *obviously, clearly, of course, will, must, important, significant*), according to Hyland (1998), are "communicative strategies for increasing or reducing the force of statements"(p. 350). They have received a great deal of attention in recent decades, with their characteristics analyzed in various written academic genres: textbooks (Myers, 1992), science digests (Fahnestock, 1986), abstracts (Rounds, 1982), medical discourse (Salager-Meyer, 1991, 1993, 1994), articles by molecular geneticists (Myers, 1989), research articles (Hyland, 1996a, 1996b, 1998), and scientific letters (Hyland, 2000).

The functions of hedges and boosters in academic discourse have been widely discussed. Myers (1989), based on Brown & Levinson's (1978) and Lakoff's (1972) work, stressed the interactive function of these two linguistic devices, claiming that they are part of a wider politeness system. Salager-Meyer (1993, 1994), however, interpreted the use of the hedges as an attempt to negotiate a more precise representation of the state of knowledge. What he focused on is the content-oriented function.

Hyland (1996a, 1996b, 1998, 2000) has also critiqued Myers's politeness proposition, pinpointing that it underplays "the importance of authority and conformity in academic discourse communities" (1996a, p. 434). He argued that hedges and boosters are multi-functional, polypragmatic, and socially situated. They contribute to "an appropriate rhetorical and interactive tenor, conveying both epistemic and affective

meanings" (2000, p. 84). Through hedges and boosters, a writer is not only able to express his commitment to a proposition (Skelton 1988, 1997), but also his sensitivity to the views of his readers (Myers, 1989).

Different scholars have also come up with different categorizations of hedges and boosters. Salager-Meyer (1994) classified hedges into five types: "shield", including modal verbs and semi-auxiliaries; "approximators", words like "approximately", "roughly"; expressions such as "I believe", "to our knowledge", which express the "author's personal doubt and direct involvement"; "emotionally-charged intensifiers", comment words such as "extremely difficult/interesting"; and compound hedges (hedges combining the use of above types of hedges). His analysis of hedges seems to be focused on the lexical level.

Hyland (1996) noticed that "the choice of a particular device does not always permit a single, unequivocal pragmatic interpretation" (p. 437). Because of the *indeterminacy*, when hedges and boosters are examined, they should not be simply counted and categorized according to their static syntactic or semantic meanings; rather, they should be interpreted in the context of a particular genre taking the social and institutional influences as well as the writer's purposes and personal characteristics into consideration (Hyland, 1998a). Based on Zadeh's (1972) "fuzzy theory", Hyland (1996a) proposed a fuzzy category model of scientific hedges, which is employed with graded membership, seeking to offer a better explanation than those analyses based on discrete semantic categories. In his model, hedging devices are divided into attribute hedge, reliability hedge, writer-oriented hedge and reader-oriented hedge. The principal role of

an *attribute hedge* is to specify the extent to which a term accurately describes the reported phenomena, such as "generally", "essentially", "viewed in this way"; a *reliability hedge* serves to convey the writer's evaluation of the certainty of the truth of a proposition, such as "may", "could", "possibly", "probably"; a *writer-oriented hedge* performs the function of concealing the writer's rhetorical identity and responsibility, such as "These data indicate..."; a *reader-oriented hedge* is used to establish an interactive relationship with the reader by acknowledging personal responsibility in preposition-claiming, such as "we propose", "I believe". The first three types are also labeled as content-oriented hedges, because they all serve to negotiate the relationship between the writer and the proposition, whereas the reader-oriented hedge is concerned with the relation between the writer and the reader.

In another paper (1996b), Hyland discusses in detail the typical realization of hedging based on a corpus of 26 research articles in molecular biology. Compared with Salager-Meyer's (1994) categorization of hedges, he has moved a step further because his new analytical approach is concerned not only with the lexical hedges, but also with the strategic discourse-based hedges.

In comparison with hedging, which has been frequently defined and discussed, boosting comparatively has attracted much less attention. Despite this, the significance of boosters as a major rhetorical feature of academic genres should not be ignored, for it helps writers to present their work with assurance while strategically engaging with readers (Hyland 1998, 2000). In some marginalized academic genres, for instance, in the genre of the scientific letter (Hyland, 2000), the cases of boosters are 50% more than

in a similar sized corpus of research articles. In many cases, boosters also work together with hedges to form "modally harmonic" combinations (Lyon, 1977, p. 807). Further analyses of boosters need to be done to examine their classifications and uses in various kinds of genres.

In analyzing hedges and boosters, different scholars have also displayed their different focus in empirical studies. Salager-Meyer (1993, 1994) examined the hedging across genres and rhetorical sections, holding the idea that variations of the use of hedging can be attributed to different communicative purposes. Different from Salager-Meyer, Hyland focused his attention on variations that are due to the different disciplinary norms and conventions. Therefore in his study, Hyland (1998) compared disciplinary differences based on a corpus of 56 published research articles from seven leading journals in eight disciplines as well as interview data with specialist informants. The quantitative results show that both hedges and boosters in the humanities/social science papers outnumbered those in science and engineering papers and explanations are given in light of the interview data.

Vassileva's (2001) is one of the few studies that compare and contrast the use of hedges and boosters in different languages. In the study, Vassileva examined the similarities and differences in the use of hedging and boosting in English, Bulgarian, and Bulgarian English research articles. Based mainly on Salager-Meyer's (1994) and Hyland's (1996) categorization of hedges and Chafe's (1985) classification of boosters, the study calculated the different frequencies and distributions of hedges and boosters in three main rhetorical sections of research articles in these three groups of texts. It

was found that the degree of detachment (hedging) was the highest in English and the lowest in Bulgarian English, while Bulgarian came somewhere in between. Furthermore, by assuming hedges and boosters as two counteracting illocutionary effects on texts, the author presented the fluctuations of their uses in different sections along a scale of commitment/detachment. The results showed that in English, the highest degree of detachment occurred in the discussion part whereas more commitment was expressed in the conclusion; in Bulgarian, the same level of commitment remained throughout all three rhetorical sections; in Bulgarian English, the fluctuation of the curve was just the opposite to that of English. Vassileva (2001) attempted to look into the cultural differences as well as the influences of intertextuality through the examination of hedges and boosters used in different language groups. Explanations were offered, but without referring to the writers' view, they can only remain as speculation.

To sum up, the literature on hedges and boosters is rich, especially in the investigation of written academic genres. Different scholars hold different views about the functions of hedges and boosters, and have proposed different categorizations of these two linguistics devices. Through the examination of hedges and boosters, scholars investigate into the underlying disciplinary conventions, cultural differences and genre differences. Surprisingly, no research has ever been conducted to systematically examine the use of hedges and boosters in the genre of grant proposals. It is actually a worthwhile area of study, given the fact that the binary communicative purpose of the genre to sell and claim knowledge imposes a paradoxical requirement on the use of tone

to be assertive and non-assertive at the same time (Connor & Mauranen, 1999; Myers, 1990).

2.4 Research questions of the present study

Based on a descriptive and interpretative framework provided by the genre scholarship, this study seeks to examine the linguistic/discursive features as well as the contextual attributes of research grant proposals in the field of education in the Canadian context. The small amount of literature on research grant proposals seems far from enough to offer a thick description of the textual and the social aspects of the genre. No research has ever attempted to combine the analysis of different levels of textual features of the genre, and no research has examined both textual features and contextual features of the genre simultaneously. Drawing on the literature on the three textual devices discussed above, the present study aims to offer a better understanding of the textual features of research grant proposals as well as the underlying rationale in grant writing.

The specific research questions of this study are thus as follows:

1. What is the generic rhetorical structure of the grant proposal summary? What is the generic rhetorical structure of the main text of research grant proposals?

2. What are the referential patterns used and favored by grant writers? Do the referential patterns used and preferred in the genre of research grant proposals differ in quality and quantity from those used and favored in other academic genres based on the findings of previous research?

3. How are hedges and boosters used in the genre of research grant proposals? Are there any differences between the use of hedges and boosters in this genre and their use in other academic genres based on the findings of relevant previous research?

4. What is the rationale behind successful grant writers' textual choices? How do successful grant writers perceive the grant writing practice in the Canadian context? How did they learn to write grant proposals? What are the strategies they usually employ in achieving the communicative purpose of the genre and in addressing the reader?

CHAPTER THREE

METHODOLOGY

The methodology I employed is consistent with the theoretical framework as well as the research objective of this study outlined in Chapter Two. Since my goal has been to achieve a better understanding of the textual features of research grant proposals and of the underlying social conventions and interactions in grant writing, a multi-method approach (Cohen et al., 2000, p. 112) was employed by incorporating both quantitative textual analysis and qualitative techniques into the study. In this chapter, I first provide some contextual information about the SSHRC funding agency and the participating university where I collected data. Then the participants and the sources of data are discussed. After that, the methods of analyzing three textual features, the interview data, and the follow-up e-mails are introduced in turn. The last section of the chapter attempts to summarize the methodology by discussing its validity and reliability in data gathering, data analysis and data reporting.

3.1 Contextual information

What is SSHRC? By checking the website of the participating university, I found a particular web-page introducing the funding organization of SSHRC:

> The Social Sciences and Humanities Research Council of Canada is Canada's federal funding agency for university-based research and graduate training in the social sciences and humanities. Created as an independent body by Parliament in 1977, it reports to Parliament through the Minister of Industry. As a key national research funding agency, SSHRC helps to continually build the human knowledge and skills Canada needs to improve the quality of its social, economic and cultural life.[4]

I chose to solicit SSHRC Standard Research Proposals mainly for two reasons: first,

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[4] The source is not cited for reasons of institutional anonymity.

SSHRC is a national funding agency, and the analysis of its research grant proposals might be of use for novice grant writers on a larger scale; second, since I am in the field of education, my background knowledge might to some extent guarantee a more accurate interpretation and analysis of the research grant proposals in this field.

As I have mentioned in Section 2.2, the participating university is a research-orientated Canadian university where considerable attention has been paid to fund raising. As one of my specialist informants pointed out, it has become a culture in this university to encourage and support academics to obtain research funding:

> "The reason why... [the participating university] gets more of that [SSHRC], is that we are a research institution that pretty much tells the assistants [assistant professors] they need to apply for them, and there are support mechanisms in place to help with that. There is a culture that says, get SSHRCs, get SSHRCs, get SSHRCs! So they are more up to do a good job, and they are more up to get them." (P3)

Hence, the participating university is a research site where rich data concerning the grant proposal writing can be collected.

3.2 Participants

The participants in this study were nine professors in the Faculty of Education at the participating university. They all have had successful experience obtaining SSHRC Standard Research Grants. To preserve confidentiality, these professors as well as their proposals were renamed and numbered according to the alphabetical order of their last names (see Table I).

Table I: Participants

ID	Gender	Academic status at the time of interview	Applied as a:[5]	Year of the proposal
P1	Female	Professor	Regular scholar	99
P2	Male	Assistant Prof.	New scholar	98
P3	Female	Professor	Regular scholar	99
P4	Female	Associate Prof.	New scholar	99
P5	Female	Professor	Regular scholar	99
P6	Female	Professor	Regular scholar	99
P7	Female	Professor	Regular scholar	99
P8	Male	Professor	Regular scholar	99
P9	Male	Professor	Regular scholar	99

In the Faculty of Education of the participating university, there is a research center from which I gained a name list of all the SSHRC recipients in this faculty. I contacted each professor individually by e-mail, and nine of them offered to participate in my research by sharing with me their successful grant proposals and giving me one-hour of interview time. In order to abide by ethical tenets--non-traceabililty, anonymity and non-identifiability, no specific characteristics of individual professors will be included and addressed. Nevertheless, as successful grant obtainers, they are believed to be the most desirable informants (Palys, 1997), who are familiar with the process and practice of grant writing; and their successful grant proposals are believed to be able to reflect the prototypical features of the genre to a great extent. Swales (2000, pp.129-130) cautioned against over-reliance on specialist informants, because of the danger of

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[5] Note: Applicants requesting consideration as a new scholar must demonstrate that they have not been the principal investigator on a previous Standard Research Grant and meet one of the following categories: 1. have completed their highest degree less than five years before the competition deadline; 2. have held tenure-track appointments in a university for less than five years; 3. have been a university appointee but never in a tenure-track position; 4. have had their careers significantly interrupted or delayed for family reasons.

'misreading' the texts by informants who are not the original author. In my study, since the informants are the actual authors of the texts, this danger could be avoided (Huckin & Olsen, 1984, p. 129).

3.3 Sources of Data

Three sources of data were collected to ensure the triangulation of the results. Nine research grant proposals consisting of a total of 39,814 running words were collected. They were chosen because they were considered to have "gained legitimacy in the eyes of community gatekeepers" (Hyland, 2000, p. 139), and thus were representative samples of the genre.

Oral data were also collected through semi-structured (Cohen & Manion, 1994), discourse-based interviews (Odell et al., 1983) with the nine participants. Questions were generally made up of two parts. Part one was mainly focused on participants' previous experiences of grant proposal writing, their understanding of the institutional conventions, and their views of the grant reader-writer relationship. Part two involved detailed discussions about the participants' own work. Participants were asked about the rationale behind their conscious or sub-conscious linguistic or rhetorical choices in grant writing. (The interview questions are found in Appendix A). Each interview lasted approximately one hour. All interviews were audio taped and transcribed.

The third source of data came from the follow-up e-mails. After the final results of textual analyses were obtained, e-mail was sent to each professor and questions were asked concerning how they understood and interpreted the meanings of certain generic

as well as individual textual features found in the corpus, and whether they agreed with some of my analyses. Some professors were also asked about why they employed some rhetorical strategies that differed from observed trends.

3.4 Textual Data Analysis

3.4.1 Generic structure of grant proposal summaries and grant proposal main texts

Structural move analysis was performed on two main parts of the genre: the summary, and the main text. I deem grant proposal summaries to be a sub-genre worthy of independent examination. The grant proposal summary is "the first real rhetorical test" (Swales, 1990, p.187) in grant proposal writing. It serves to promote the proposed research project at the first stage, and to persuade the selective committee that the accompanying main text of grant proposal is worth further attention. Although it is called a "summary", unlike research article abstracts, it does not necessarily offer a proportional and faithful representation of the full text (Bhatia, 1993, p.78); rather, it rhetorically maneuvers to attract the attention of its readers *prima facie,* and to win a positive judification in this first page of the grant proposal.

By interviewing SSHRC grant winners and attending SSHRC grant writing workshops at the participating university, I learned that it is a general audience rather than expert readers that grant writers need to address in grant proposal summaries. This is consistent with Swales's (1990) opinion that "it is only in part 3 (background) and 4 (description of proposed research) that the writers tend to assume that the reader-evaluators will be members of their discourse community" (p. 187). With a

different readership, and a greater promotional communicative function, the grant proposal summary should be considered as a sub-genre to be examined separately.

Identification criteria of the Moves

The notion of 'move', which was first developed by Swales (1981, 1990), refers to a functional unit in a text used for some identifiable purpose. Its idea is "to interpret regularities of organization in order to understand the rationale for the genre" (Bhatia, 1993, p. 32). Their definition and interpretation of 'move' was drawn upon in this study in identifying the moves that constituted the research grant proposals.

There are two sources of information that were useful in helping me establish an identification framework. One is the literature on the generic structure of grant proposals (e.g., Connor & Mauranen, 1999, 2000; Swales, 1990) as well as the literature on 'move' analyses of related academic genres such as research articles (e.g., Bhatia, 1993; Hyland, 2000; Samjar, 2000; Swales, 1990). The other is the SSHRC guidelines which are available on its website (www.sshrc.ca). It is a very detailed guideline; for instance, it specifies the titles of each section, the content each section should cover, and the length of the summary as well as the main text. As I have discussed in 2.2, the guidelines of funding agencies often have a great influence on the writing process as mandatory prescription (Locke et al., 2000). Thus, the guidelines could help us to see more clearly the overall rhetorical structure of the texts and its underlying rationale.

Following Connor and Mauranen (1999), I also looked at some textual indicators and used them as a means to identify the moves. Typographic indicators such as the grant writers' explicit text division devices were carefully examined; linguistic devices

such as connecting words, tense and modality changes (Connor & Mauranen, 1999) were also frequently utilized.

Identifying the Moves

In identifying the moves, I first read through each grant proposal several times to get a feel of the generic structure of both the grant proposal summary and the main text. I then marked the moves in pencil, which is convenient for later changes. After that, help from a fellow graduate-student was solicited. She was first asked to familiarize herself with the Swalesean move analysis approach, and then asked to analyze five proposals (from five different professors) independently and to mark the moves in the way I did. Then we reviewed each other's analyses and refined and reformulated the moves through the discussion until complete agreement was reached for purposes of inter-rater reliability. Then I applied the moves to the other four grant proposals. The process of developing moves was the same in analyzing both the summary and the main text.

In establishing an operable coding-scheme and applying it to all the texts and in soliciting help from a second rater, I attempted to increase the construct validity and ensure the reliability of the analysis (Yin, 1984). However, as Taylor and Chen (1991) argued, "textual interpretation can never approach absolute precision and that complete validity while an ideal to be aimed for" (p. 324). The moves finally identified in the summaries and the main texts of the research grant proposals, which would be discussed in the Results section, could therefore only be considered as appropriate for the present data.

3.4.2 Referential behavior

As I have discussed in the literature review, researchers with different purposes and motivations approached citations using different methods and came up with different typologies. In analyzing the referential behavior in grant writing, one important thing was to find effective and viable citational typologies. They should be effective in the sense that they would be able to reflect the characteristic features of research grant proposals. Hyland (2000) argued, "research is never totally open-ended and undirected but always, at the very least, guided by an intention to understand the workings of some aspect of language" (p. 141). In this study, citational typologies employed were directed to understanding the prototypical referential behavior in grant proposals, and how that referential behavior might serve the promotional communicative purpose of the genre. When I chose the typologies, I also selected those that are operable. As I have reviewed in Section 2.3.2, some typologies, such as Moravcsik and Murugesan (1975)'s four-parameter featural classification, and even Swalesean three-dimensional scheme (1986), involve a high degree of subjectivity and require an in-depth knowledge of the subject matter in applying them to the analysis of citations.

Believing that citational categorizations should be effective as well as operable, I selected the following three typologies and examined them in my corpus. One is integral versus non-integral form of citation. According to Swales (1990), "an integral citation is one in which the name of the researcher occurs in the actual citing sentence as some sentence-element; in a non-integral citation, the researcher occurs either in parenthesis or is referred to elsewhere by superscript number or via some other device"

(p. 148). The second is reporting versus non-reporting forms of citation. In reporting citations, a 'reporting' verb such as *show, establish, suggest* is employed to introduce the cited work while in non-reporting form, no reporting verb is used. The third typology selected (Dubois, 1988; Hyland, 2000; Thompson, 1996) shows how writers choose to incorporate cited work into their own argument. Choices are short direct quotes (up to six or eight words), block quotes (extensive use of original wording), summary from a single source or generalization, where the proposition is attributed to two or more sources. Self-citations were also calculated as an independent category. All these categories of citations were examined and calculated within the textual context and crosschecked with a second rater to ensure the reliability of the results. The density of the citations, and the distribution of the citations across the sections were also calculated and examined.

3.4.3 Hedges and boosters

In order to discover the use of hedges and boosters in the research grant proposals, the eleven texts were first read repeatedly in order to get a feel of how commitment and detachment were expressed in these texts. Then Hyland's list of 180 lexical expressions of hedging and boosting (Hyland, 2000, Appendix 2) was utilized to help with the identification on the computer. After that, a rigorous contextual analysis (Salager-Meyer, 1994; Hyland, 2000) was carried out on the basis of the idea that "meanings do not reside in the items themselves but are assigned to utterances that contain them" (Hyland, 2000, p. 89). A new sub-category of boosters was identified in the process. For example,

the word "will" was further divided into two groups with different shades of meaning, the details of which are discussed in the next chapter. The assistance of another rater was solicited in this process of ascribing linguistic forms to hedges or boosters. The rater and I worked together on all the nine grant proposals, discussing again and again, until complete agreement was finally reached on the identification of all the hedges and boosters. Examples cited from the proposals were then sent back to the participants and their opinions as specialist informants were solicited on how they look at my identification of hedges and boosters. In this case, a high reliability rate could be guaranteed.

The distribution of hedges and boosters across sections was also examined. The results were analyzed by means of chi-square tests. The results were also compared with the findings coming from the literature concerning the hedges and boosters used in other genres such as research articles.

3.5 Analyses of interview data and follow-up e-mail questions

All the interviews were first transcribed. I then read each of them several times trying to make a good sense of the data (Hycner, 1985). As a graduate student who has no experience writing grant proposals myself and thus has no direct feelings about this genre ('cultural blindness'), I realized the necessity to make changes to the interview questions every time after I interviewed a professor and noticed some new themes coming up. Therefore, the collection of the interview data was rendered in an exploratory, reflexive manner. In data analysis, accordingly, it seemed unwise to take a

positivist approach to count frequencies of occurrences of ideas or themes, although I did look for the themes common to most of the interviews as well as the individual variations.

In coding the interviews, I combined pre-coding with post-coding methods, that is, I utilized some common sets of interview questions as the predetermined coding categories while at the same time I also attempted to generate natural units of meaning and construct categories according to these units. The codes were finally grouped into two major categories, one concerning the participants' perceptions of the grant writing process and practice, and the other concerning their reading and interpretation of the textual features of their own proposals. The categories were constructed to ensure that they reflect the purpose of the research and they are exhaustive and mutually exclusive (Brenner, Brown & Canter, 1985). The coding categories were also verified by soliciting help from an inter-rater to carry out the above procedures.

Since all the e-mail questions were concerned with the participants' understanding of textual devices they used in their proposals, the answers were grouped and analyzed together with the results of the textual analysis (see Sections 4.1, 4.2 and 4.3).

3.6 Validity and Reliability of the Study

From the formulation of the research plan, up to the stages of data collection and data analysis, and then to the final stage of data interpretation, I made a careful attempt to establish a valid analysis. Genre scholarship, which takes an integrated, social approach to the study of writing, was used as the theoretical construct of the study to

ensure that my study is context-bounded, socially saturated, and therefore able to offer a better understanding of the genre. Three different levels of textual features were selected as appropriate foci to answer the research questions. A representative group of participants was solicited and data were collected from three main sources to ensure triangulation. The categories used in the research, including the move categories, the categories of citations, and the categories of hedges and boosters were shown to the participants to make sure that the categories are meaningful to them. Data were all coded with a second rater in order to ensure the inter-rater reliability. In reporting the results, parameters of the research in the data collection and treatment as well as the degree of confidence were all reported without hiding the muddiness. The typicality of the situation, including the participants and the setting, were described so as to show the reader the comparability/transferability of the study.

However, as Cohen et al. (2000) argued, "it is unwise to think that threats to validity and reliability can ever be erased completely" (p. 105). That was also the case with my study. For instance, there were quite a few problems with the interview data collection. Since this was an exploratory study about grant writing, and I, the researcher, was an outsider to this writing practice, I decided to structure the interview in a more open-ended way in the first interview, leaving space for the interviewee to talk about the conventions and interactions of the grant writing. It was not as fruitful as I expected, however. Obviously, although the interviewees were successful grant winners, their understanding of the conventions and interactions was mostly sub-conscious. It is really hard for them to answer without specific prompts. Therefore I changed my interview to

a more structured format starting from the second interview.

Besides, as Neal (1995) also noted in her study, being a low status female research student, I felt really nervous when interviewing senior professors. Cohen et al. (2000) pointed out that this kind of interview "might turn out to be very different from an interview with the same person if conducted by a male university professor where it is perceived by the interviewee to be more of a dialogue between equals" (p.123). The situation might have been even worse because of the fact that I am a second language speaker of English. The interview transcripts truly recorded some embarrassing moments. In one interview, a professor corrected my pronunciation of a word several times, but I did not realize it at the time because I focused my attention on the interview content; and in another case, we misunderstood each other by using the same term but expressing different meaning, though later we both realized the problem. Since some of the interview questions were quite sensitive, for instance, questions were asked concerning whether the participants would agree that there was 'incestuous buddy system' in grant application and whether that might influence their grant writing, it was possible that any inappropriate use of words (which for a second language speaker is most likely to happen), would sound offensive and the professors might thus have felt unwilling to talk at length. In addition, professors might have tended to show themselves in a good light especially when facing a junior graduate student from another country. All these factors could have to some extent influenced the validity of the research.

CHAPTER FOUR

RESULTS AND DISCUSSION

I have divided this chapter into several sections. Section 4.1 to 4.4 analyze and discuss each of the three textual features in the research grant proposals in turn, based on the textual analysis as well as the analysis of interview data and follow-up e-mails. Section 4.5 reports how the grant writers perceive the grant application practice and the reader-writer relationship, how they learn to write grant proposals, and what strategies they usually take in grant writing. Limited by the sample size, conclusions must at present be considered tentative.

4.1 Generic structure of grant proposal summaries

As I have discussed in the previous chapter, I deem grant proposal summaries to be a sub-genre worthy of independent examination of its generic structure because it has a different readership, performs a greater promotional function, and most importantly, it does not necessarily offer a proportional representation of the full text. Following the method Swales (1981; 1990) used in identifying the functional components--the "moves" of research article introductions, and other researchers' move analysis approach (e.g., Bhatia, 1993; Connor & Mauranen, 1996; Taylor & Chen, 1991), I identified three moves, which seem to appear regularly in the summary part of the SSHRC grant proposals (see Figure 1.1). In this section, I will first introduce the move-step scheme. I will then discuss some issues of debate concerning the muddiness in the identification and delineation of

the moves and the steps. I will report the moves variations as well as the space each move constitutes based on the moves analysis. After that I will discuss some of the moves strategies the grant writers employed in the grant writing. Finally, all the findings will be summarized.

4.1.1 A move-step scheme for grant proposal summaries

In developing this move-step scheme, I follow the tradition of the moves analysis approach thinking of moves as functional rhetorical units constituting a genre with allowable order. Steps are smaller units helping to realize the communicative purpose of the moves. Similar to moves, the order of steps could vary to some extent. In introducing this move-step scheme (see Figure 1.1), definitions and examples of each move and step will be given.

Figure 1.1   A Move-Step Analysis Model for Grant Proposal Summaries

Move 1	**Justifying a research need**
Step 1	Establishing a territory
	and/or
Step 2	Indicating a niche
	and/or
Step 3	Reporting proposers' own previous research
Move 2	**Meeting the research need**
Step 1	Outlining research objectives
	and/or
Step 2	Describing research means
Move 3	**Claiming potential contributions**
Step 1	Importance claim
	and/or
Step 2	Achievements claim
	and/or
Step 3	Benefits claim

Move 1: Justifying a research need

The move serves to highlight and justify the need to carry out the proposed research at the beginning of the text by creating a research space and by indicating its real-world importance. There are usually three steps to accomplish this move: "Establishing a territory", "Indicating a niche", and/or "Reporting proposers' previous research".

Example:

> Tomorrow's adults will rarely need routine mathematical skills, such as arithmetic, nor, increasingly, the more complex but mechanical skills such as integration. Such work is increasingly being taken over by calculators and computers. Indeed we are not presently able to conceive the mathematics that *will* be needed and we therefore need to prepare students to solve as yet unformulated problems. Problem solving has now been generally accepted as part of learning what it will mean to do mathematics, but the solution of complex problems lies in the ability to ask the right questions in a new situation.
> "Problem posing" refers to both …. Teaching problem-posing could be a powerful way to prepare

students for the ...,//(**Establishing a territory**) and yet, over the past two decades, problem posing has received very little attention. There has been little systematic research focused on the actual activity of students posing problems and none of it addresses questions concerning the cognitive actions called forth in problem posing contexts. This research project is proposed because until we better understand the phenomenon of mathematical problem posing, we will be unable to assess its potential influence on learning and doing mathematics.//(**Indicating a niche**)

Since 1987 P and K have been collaborating on the construction, testing and refining of a dynamical model for .... There is clear evidence from our data (and that of many others) of a disconnected mental leap that many students are required to make. This occurs as.... // (**Reporting proposers' previous research**) This transition between levels of understanding is not well understood by the mathematics education community.//(**Indicating a niche**) Nonetheless, in the future it will not be the ability to perform context-dependent, rituals, that students will need, but that of innovatively applying general mathematical principles and this will be dependent on having understood the structure and roots that gave rise to those generalisations.//(**Establishing a territory**)   (Cited from P5)

Step 1 Establishing a territory

The step serves to establish a territory in which the proposed study is situated. In this step, contextual information of the topic (real-world territory) is provided, and/or, current knowledge or practice (research territory) is stated, and centrality of the topic issue is thus claimed.

Example:

Classroom teachers who work with beginning teachers in practicum settings play one of the most critical roles in pre-service teacher education. As school-based teacher educators, these classroom teachers are involved in the development of the teaching profession, or as Lave and Wenger (199 1) argue "the generative process of producing their own future" (p. 57).//(**Real-world territory**) Despite an extensive literature on 'training' programs for advisors and numerous accounts of advisor shortcomings...// (**Research territory**)   (Cited from P2)

Step 2 Indicating a niche

Comparable to Swales's (1990) move of 'establishing a niche' and Connor and

Mauranen's (1999) move 'Gap', this step serves to indicate a research space due to a gap

in current knowledge or a real-world problem in territory.

Example A (Research gap):

> There are a number of social skills development programs in place in schools but, as yet, we have no firm knowledge of their effectiveness. When they are judged effective, it is hard to know what program component is most important in accounting for development. (Cited from P6)

Example B (Real-world problem):

> The more I thought about them, the more I realized it was not just the bishop who had such ideas. The same assumption underlies much of what we read in the popular press about Aboriginal women and we, all too easily, accept uncritically as everyday knowledge. Putting on my historian's hat, I was reminded of similar portrayals of Aboriginal women encountered while writing a general history of British Columbia and while researching families originating with Aboriginal women and newcomer men in nineteenth-century British Columbia. .... For my peace of mind, I had to go back in time to understand how it was that the bishop and so many others have come to believe as they do. (Cited from P1)

Step 3: Reporting proposers' previous research

The step reports and evaluates the proposers' own previous related research.

Example A:

> The resulting paper was presented at two scholarly conferences and shared with a number of Aboriginal women I have come to know over the years whose judgment I respect. The support I received buoyed me to revise the paper for publication in ....
> The success of the article, including its receiving a major award in the United States, prompts this application for... (Cited from P1)

Example B:

> Our first SSHRC funded examination of YRS[Year Round Schooling] permitted us to study several Canadian schools.... In general, we have found that administrators, teachers, and parents report similar advantages and disadvantages related to alternate calendars. Overall, satisfaction and support for the innovation seem to be dependent upon implementation strategies and ongoing support rather than on the chosen form of calendar. We have also found that the structural change of school-year calendar often acts as a catalyst for cultural and pedagogical change. (Cited from P7)

Move 2: Meeting the research need

With this move, the writer outlines the objectives the proposed study is going to achieve and the methods it is going to use. To put it simply, this move presents both "what to do" and "how to do it", seeking to address the research need raised in the first move.

Step 1 Outlining research objectives

The step outlines the general as well as specific objectives of the proposed research. In some cases, it could be in the form of research questions.

Example A:

> The purpose of the proposed research agenda is to begin to determine the relationships between changing to a form of year-round calendar and issues of equity and social justice. We plan to begin a systematic inquiry, guided by questions such as the following: Who is advantaged and who might be disadvantaged by a move to a year-round or modified calendar? What can we learn by disaggregating student achievement data? In what ways do educators take advantage of a calendar change to increase the educational opportunities and outcomes of at-risk or ethnically diverse students? To what extent are minority parents (ethnicity, class, socio-economic) included or excluded from decision-making processes? What are the implications of these questions for school leadership? (Cited from P7)

Example B:

> This study, which investigates the response of female adolescents to teen magazines, seeks to.... ....
> The specific goals of the study are as follows: First, the study takes seriously the importance of ...and seeks to understand.... Second, the study is centrally concerned with.... In this regard, the study investigates.... Third, the study investigates.... Finally, the research.... (Cited from P4)

Step 2 Describing research means

The step discusses the research methodology the proposed research will use. It may describe the research design, the research sites, the participants, the methods of data collection and data analysis, the research procedures and the timelines.

Example:

> To explore the cognitive nature of problem posing in depth, we need to focus on students' mental mathematical growth within a class setting that is deliberately structured to elicit student questioning. To this end, we intend to work closely with teachers on the planning and implementing of units of mathematics teaching that will be built around students responding to their own initial questions concerning a mathematical topic, through the posing of problems that are shaped by class discussion. Groups of students will be video taped as their questions emerge, and as they pose, refine and solve appropriate mathematical problems. Video-stimulated recall and clinical interviewing techniques will be used to delve deeper into the thinking of the students and teachers, with a view to eliciting and illuminating the complexity of actions and interactions that are played out during mathematical problem posing. The ... model will be used as an analytic tool to trace students' developing understanding and the impact of problem posing on the transition from specific mental images to formalism. (Cite from P5)

Move 3 Claiming potential contributions

The move is specific to the genre of grant proposal. It comprises the claiming of the importance, the discussion of achievements and benefits. The move is usually assigned a separate paragraph or section at the end of text.

Step 1 Importance claim

The step claims the importance of the proposed research with respect to either the real world or to the research field. It can be in the form of emphasizing the real world needs or restating the research gap.

Example A:

> In this way, the Public Knowledge Project speaks to the urgent need for research on the potential of these new structures, even as scholarly organizations and publishers increasingly turn to the web. (Cited from P8)

Example B:

> Despite the wide-spread implementation of YRS, there is still considerable controversy about the

potential of alternative school calendars to offer either fiscal or educational benefits. This research will help to.... (Cited from P7)

Step 2 Achievements claim

It is a step with which the writer discusses the anticipated results or findings, thus to some extent echoes the discussion of 'objectives' in Move 2.

Example A:

It is not enough to celebrate the pleasure girls derive from teen magazines; this study seeks to understand to what extent teen magazines promote or limit possibilities for young women and how schools can address the challenges posed by mass media. (Cited from P4)

Example B:

Essential to the analysis of the data emerging from the study will be the way in which school advisors frame and reframe their practice (Schon, 1983) and the practical reasoning (Donmoyer, 1995) they exhibit in their interactions with student teachers. (Cited from P2)

Step 3 Benefits claim

The step discusses the value of the research findings to the real world and/or to the advance of knowledge.

Example A:

The study contributes to research on young children's prosocial development and instructional approaches to teaching social understanding. (Cited from P6)

Example B:

This research will help to address concerns in two ways. First, continued analysis of stakeholder perceptions and student achievement data will assist politicians and educators with policy and decision making. Second, the proposed research will be the first major educational study to examine equity issues related to school-year calendar changes. (Cited from P7)

4.1.2 Issues of debate concerning the identification and delineation of moves/steps

Though always with an ambitious intention to offer a clean and clear pattern as a "rule of thumb" for novice writers, it seems necessary to offer a faithful description of the complexity of the data, the muddiness in the identifcation and delineatin of the move and steps, and raise issues that might be the focus of debates.

4.1.2.1 The multi-function of "reporting items of previous research"

As I have discussed earlier, in Swales's (1990) study on research article introductions, he distinguished "reporting items of previous research" from "topic generalization", with the former referring to the specific references to previous studies while the latter referring to general statements about the research field. In Connor and Mauranen's (1999) study on grant proposals, they also identified "reporting previous research" (with specific references) as a separate move. However, in this study on grant proposal summaries, review of specific previous studies was not distinguished from "establishing a territory"; rather, it was considered to help realize "establishing a territory". From the textual data of this study, we can clearly see that 'reporting previous research' is after all an act that a writer might perform to serve various communicative purposes. For instance, previous studies can be cited when the writer outlines the objectives:

> Third, the study investigates to what extent teen magazines can serve to build relationships between girls of different sociolinguistic backgrounds, a need identified by recent SSHRC-sponsored research in Vancouver (Duff & Early, 1999). (Cited from P4)

Or when talking about the potential contributions:

> If, as Luke (in press) has argued, the project of critical literacy is one of access and equity, then a study of teen magazines and adolescent girls is an important contribution to the research. (Cited

from P4)

Reviews of literature can serve not only to establish a territory:

> Classroom teachers who work with beginning teachers in practicum settings play one of the most critical roles in pre-service teacher education. As school-based teacher educators, these classroom teachers are involved in the development of the teaching profession, or as Lave and Wenger (1991) argue "the generative process of producing their own future". (Cited from P2)

It can also serve to indicate a gap:

> Despite an extensive literature on 'training' programs for advisors and numerous accounts of advisor shortcomings we know remarkably little about the people who take on this work or the pedagogy they employ in their interaction with student teachers (Wideen, Mayer-Smith, and Moon, 1998). (Cited from P2)

Reviewing the writer's own previous research can even serve the function of establishing

the writer's credentials:

> This stage is informed by a theoretical model of social expertise in young children developed in my previous SSHRC-funded research, "Developmental Pathways to Social Expertise in Early Childhood." This approach of studying experts is well recognized for its ability to inform the kind of strategies that will help children without such expertise to develop. (Cited from P6)

It thus seems appropriate to think of "reporting items of previous research" as a constitutive part of "establishing a territory" in this study of grant proposals summaries. Nevertheless, the heated debates among genre analysts concerning this issue indicate the necessity for further investigation.

4.1.2.2"Establishing a territory" or "Indicating a niche"?

For those literature reviews or statements of current knowledge with a negative evaluation, I assign them to the step of 'indicating a niche', as in the following case:

> Very little is known about the effects of European colonization upon the arts and crafts of indigenous peoples in Canada and Australia. (Cited from P2)

However, it seems that sometimes the act of 'indicating a niche' is at the same time also

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part of 'establishing a territory'. To compare the above example with the following two examples given by Swales (1990) as illustrations of 'Topic generalization' (which is considered as a step within the move of 'establishing a territory'):

> The ...properties of... are still not completely understood.
> Education core courses are often criticized for...

We can see it is hard to tell the difference between the sentence I identified as "indicating a niche" and the sentences Swales gave as examples of "establishing a territory". Actually if we pick out some examples Swales offered as illustrations of "Indicating a niche", it is also not easy to distinguish them from the examples Swales gave as "establishing a territory":

> However, it is not clear whether the use of...can be modified to reduce spherical aberration to acceptable levels. (1990, p.142)

Therefore, how to distinguish 'establishing a territory' and 'indicating a niche' is a problem in those occasions when 'topic generalization'/'research territory' discusses the negative aspects of the previous research.

4.1.2.2 Where to put self-reference?

From Figure 1.2 below, we can see that the places where self-reference appears are quite flexible. It might appear after or before the indication of gap, after or before the statement of the objective. It sometimes depends on the writer's self-evaluation. If s/he plans to point out their previous research's limitations, s/he would put it before the 'gap', or even before the 'objective', as in the case of P7. In this case, self-reference also serves the function of forming part of the research territory. However, in most cases, the grant

writers choose to give their own previous research a positive evaluation, therefore placing the self-reference after the indication of the 'gap', or not relating their research to the 'gap'. In these occasions, self-reference does not only serve as part of a research territory, but serves the purpose of partly fulfilling the research space or research need. Consequently, it is hard to decide whether to assign self-reference to the first move of 'justifying the research need' or to the second move of 'meeting the research need'.

Considering the importance of self-reference in grant writing and the considerable space it constitutes in grant proposal summaries contrasted with the little space other-reference has occupied, I assign "reporting proposers' own previous research" a separate step. However, it obviously has the same problem as assigning "reporting items of previous research" as a separate step as Swales (1990) did in his study owing to the multi-functions of literature review. This is a question worthy of further investigation.

Figure 1.2 Reporting proposers' own previous research

GP summaries	Length of self-reference (words)/length of the GP summary	Places of occurrence	Self-evaluations
P1	81/677	After the 'gap', before the 'objective'	Positive: "the success", "receive a major award"
P2	N/A		
P3	N/A		
P4	N/A		
P5	103/644	After the 'gap', before the 'objective'	Positive: Their findings are reported in detail.
P6	54/535	After the 'objective', embedded in the discussion of 'methods' for the proposed study	Positive: "is informed by", "is well recognized for..."

P7	104/890	Before 'gap', before 'objective'.	Positive + negative: Findings are reported in detail, showing the continuation of the research; limitations are also pointed out.
P8	N/A		
P9	75+19/755	After the 'objective' Not related to the 'gap'.	Positive: The background information of the whole research project in which the proposed study is embedded is introduced, and the continuation is demonstrated.

4.1.2.3 The merging of objectives and methods

Sometimes it is hard to distinguish the description of methods from the statement of specific objectives, since they are inter-embedded as in the following case:

> The Public Knowledge Project uses an iterative and participatory design model that will involve educators, researchers, policy makers, and the public in building and evaluating a collaborative knowledge management website prototype. This prototype will be used to learn more about how interface design, data architecture, and software tools affect the professional and public engagement with educational research. It will be field-tested in conjunction with professional-development courses, research publications, and policy reviews. In each case, the project will investigate participants' understanding of research as a form of knowledge and how its value is affected by these new online environments. (Cited from P8)

In the above example, the statements of objectives are underlined. As we can see the research method was described along with the objectives. In some cases, they were even mixed together:

> There are three distinct phases to the research:
>
> Phase I The construction of a comprehensive profile of the 1400 school advisors that the University of... draws upon each year to work with their elementary, middle school, and secondary student teachers,
>
> Phase II An in-depth analysis of the pedagogy of 10 (University name) school advisors through the use of advisor-led stimulated video recall sessions as they work with student teachers over the course of a 13-week extended practicum and
>
> Phase III The development of professional development framework that will facilitate and support the work of school advisors. (Cited from P2)

The merging of Objectives and Methods was actually also noticed by Hyland (2000) in

his analysis of research article abstracts. He argued that the merging of Objectives and Methods was not only a "rational response to the space constraints", also "performs a useful rhetorical function", that is, to "insinuate the appropriacy of the technique by strategically linking the approach in a unproblematic and reasonable way to accomplishing the research objective" (pp. 73-74).

4.1.3 Moves variations

Based on the move-step scheme I developed, I examined the order variations and the length variations of the moves. As shown by the following two figures, most grant proposal summaries conform to the three-move structure, though there are some reordering and omission of some moves:

Figure 1.3: Outline structures of the nine grant proposal summaries

GP summaries	Outline structures
P1	1(1)+1(2)→1(3) →2(1) →3(1)→3(3)
P2	1(1)→1(2)→1(1)→1(2)→2(1+2) →3(2) →3(3)
P3	2(1)→2(2)→2(1)→2(1)+2(2)→3(3)+2(2) →3(1) →3(3)
P4	1(1)→1(2)+2(1)→2(1)→2(2)→3(3)→3(2)
P5	1(1)→1(2)→1(3)→1(2)→1(1)→2(1)→2(2)
P6	2(1)→2(2)+1(3)→2(2)→1(1)→1(2)→2(2)→1(1)→2(2)+1(2)→2(2) →3(3)→3(1)
P7	1(1)→1(3)→1(2)→1(1)→1(2)→2(1)→2(2)→3(1) →3(3)
P8	2(1) →2(1)+2(2) →3(1) →3(2) →3(3)
P9	2(1)→1(1)→1(2)→2(1)→1(3)→2(1)+2(2)→2(1)+2(2) →3(2)+3(1)

Figure 1.4: Structure variations of the nine grant proposal summaries

Structure variations	Instances
1→2→3	P1, P2, P4, P7
2→1→2→3	P9
2→3	P3, P8
1→2	P5
2(+1)→3	P6

Table 1.1 and Figure 1.5 below show the respective length of each move. The second move which describes the research objectives and research means existed in all the grant proposal summaries and the average length of it constituted up to 49% of the average total length. Move 1 and Move 3 which serve similar purposes to justify why the proposed research is worth funding, together constituted 51% of the total length.

Table 1.1: Length of three moves in the nine grant proposal summaries

GP summaries	Length of M1	M1/TL	Length of M2	M2/TL	Length of M3	M3/TL	Length of M1+M3	M13/TL	Total length
P1	310	0.46	306	0.45	61	0.09	371	0.55	677
P2	209	0.50	97	0.23	114	0.27	323	0.77	420
P3	0	0.00	291	0.65	155	0.35	155	0.35	446
P4	24	0.03	591	0.86	75	0.11	99	0.14	690
P5	380	0.59	262	0.41	0	0.00	380	0.59	642
P6	220	0.41	282	0.53	32	0.06	252	0.47	534
P7	538	0.60	248	0.28	104	0.12	642	0.72	890
P8	0	0.00	201	0.74	70	0.26	70	0.26	271
P9	270	0.36	337	0.45	148	0.20	418	0.55	755
Average length	216.78	0.37	290.56	0.49	84.33	0.14	301.11	0.51	591.67

Note: M1=Move 1(Justifying a research need), M2=Move 2 (Meeting the research need), M3=Move 3(Claiming potential contributions), M13=Move 1+Move 3, TL=Total length

Figure 1.5 Respective lengths of three Moves in the nine grant proposal summaries
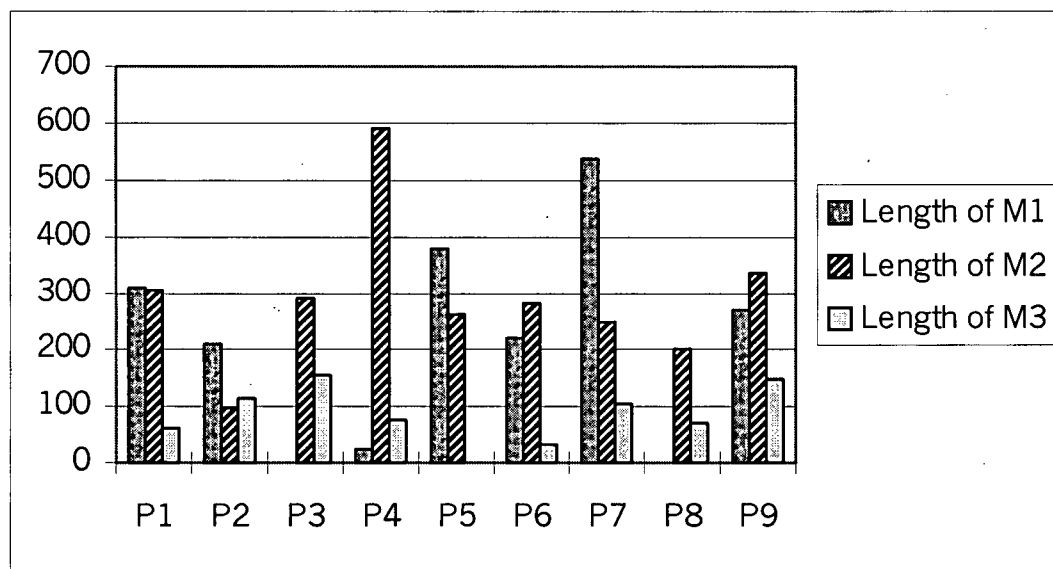
4.1.4 The moves strategies in grant proposal summaries

There are some interesting trends in moves arrangement revealed by the moves analysis. And these trends could also be considered as the strategies grant writers tend to employ in order to achieve the promotional communicative purpose and to address the audience of the funding agency.

4.1.4.1Emphasizing real-world relevance

Connor and Mauranen(1999) argued that "many grant programs emphasize research with applications for the real world". Their claim was confirmed by the heavy weight the nine SSHRC grant proposal summaries put on the establishment of the real-world territory and the discussion of the related real-world problem. Actually eight out of nine proposals in my corpus established a real-world territory and asserted the centrality of the

proposed research in terms of its importance with respect to the real world. Here are some examples:

> Each year the (Participating University) Teacher Education Office arranges for 1400 teachers to act as school advisors for their student teachers. Given that the student teachers regard the practicum as the most important phase of their professional year(s) in teacher education, and school advisors as the most important element of that phase, it is incumbent upon the faculty of education to know more about our school-based partners in preservice teacher education. The imperative for this research is even more urgent as pre-service teacher education reform efforts gain momentum across the country and the increased emphasis being placed on extended practicum placements and school/university partnerships. (Cited from P2)

> Interest in the mass media has emerged as central to language arts curricula, not only in British Columbia but in other provinces in Canada. (Cited from P4)

The underlying motivation was revealed quite clearly by the participating professors' comments:

> …you know, "I publish or perish" was something that has been passed. Actually the head of the SSHRC a couple of years ago, he used a new phrase, "go public or perish'. So it's the idea that, we have to be out there, people have to know what we are doing, why we are doing, and it's having an impact, and not just on us, here, in our own, little place, it's actually having ripple effect, or it's having a direct effect to our profession and to the society. So the way I understand promotion is that kind of, in my word, matters to society. This is how it matters. So I am willing to do this in this kind of academic way, but I am actually helping society. (P3)

> In terms of drawing in the reader, because I write for the SSHRC audience,…, I always look to the link between theory and practice. So how important this research both from the theoretical point of view, but also from the point of view of informing what we do in schools. (P6)

> In a way, it's what they (SSHRC) are asking for. In a way, I think it is to show where the significant lies, then that's certainly part of getting funding. They want to know, who's going to be affected, who's going to look at, who might use it and then in what ways… (P7)

All of them mentioned that the major reason they chose to emphasize the practical relevance and the urgency of the proposed research in terms of the real-world need is to address the SSHRC audience. It is their intention to relate their research to the real-world

needs and finally to communicate their findings to the wider community; however it is the SSHRC that pushed them to reflect it in grant writing.

4.1.4.2 Deemphasizing reporting previous research

In Swales' (1990) study on research article introductions, reporting previous research either in terms of general statements or in terms of specific references is a very important part in creating a research space. He termed the general statement of previous research as 'topic generalization' and specific references as 'reporting items of previous research'. Two of them were identified as two independent steps in the first move of 'establishing a territory'. Interestingly, only one grant proposal summary in my corpus has comparable content. In most cases, statements about the current knowledge are very brief as in the following two examples, the purpose of which is to introduce the research gap:

> There has been little systematic research focused on the actual activity of students posing problems and none of it addresses questions concerning the cognitive actions called forth in problem posing contexts. (Cited from P5)

> Despite an extensive literature on 'training' programs for advisors and numerous accounts of advisor shortcomings we know remarkably little about the people who take on this work or the pedagogy they employ in their interaction with student teachers (Wideen, Mayer-Smith, and Moon, 1998). (Cited from P2)

It seems that the grant writers tended to give little weight to the summarization of previous research in the first page of summary whether specific (with specific citations) or non-specific. In addition, they were inclined to directly point out the research gap and give a general negative evaluation of previous research as a whole. This might be a result of the emphasis on the real-world concerns. It could also be a strategy that grant writers

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employ to achieve the promotional purpose in the limited one-page space. At the same time, without explicit and lengthy discussion of the literature, they address the reader who might not be a spcialist of the proposed research field.

4.1.4.3 Foregrounding the proposers' own previous research

Reporting the grant writer's own previous research was identified as an independent step because it seems to be a very important strategy in writing grant proposal summaries. Different from research articles, grant proposals are a promotional genre in which the writer needs to sell the research as well as him/herself as the researcher. Reporting his/her own previous research is a good way to demonstrate his/her research record, and establish his/her research credentials. Compared to the limited space given to the 'topic generalization/research territory' (only 1 out of 11 proposals has the 'topic generalization'), reporting the proposers' own previous research obviously has been placed into a much more important position as reflected in its frequent appearance and considerable length in the grant proposal summaries (see Figure 1.2). The grant writers in this study especially preferred to mention their previous SSHRC-funded projects.

4.1.4.4 Different types of objectives

Unlike in the research articles, the objectives stated in grant proposal summaries are not just the objectives of the research itself. There are some other interesting types of objectives which are related to the supplementary outcomes or benefits of the research

that the writer expects to reap, for instance, the training of students:

> The project's second, complementary objective is to use the opportunity presented by the need to conduct extensive primary research to train several graduate students, if possible members of the upcoming generation of First Nations students at the University of ... in historical methods. Their involvement will, hopefully, secure each of them a student- or co-authored journal publication and/or paper presentation. In doing so, I build on extensive experience supervising Aboriginal graduate students at (name of the participating university) and mentoring young Aboriginal scholars to publication. (Cited from P1)

Or the communication of results:

> Finally, the research has a very practical, classroom-based focus. We wish to draw on research findings to develop a resource booklet that can help language arts teachers in ... to engage the mass media strand of the language arts curriculum in a creative and critical way. Once the booklet has been piloted, we plan to publish it in Canada so that teachers nationwide can have access to our research. (Cited from P4)

Though these objectives seemed to be discussing the anticipated benefits of the research, I still identify them as 'objectives' for the reason that writers list them as one of their research goals. Training of students and communication of results are two important factors that SSHRC selective committee would consider and pay great attention to in the process of judication. It may be for the reason that some grant writers foreground them as objectives of the proposed research in order to demonstrate the value of their research.

4.1.4.5 Fronting objectives

There are four grant proposal summaries in this corpus of nine placing the step of 'objectives' at the beginning of the text. Two of them omitted the first move of 'justifying a research need'; one of them wove the first move into the process of discussing objectives and methods; and the other one returned to discuss the research need after claiming the general objective. Swales claimed that grant proposal summaries "usually

begin with the objective or purpose of the study, move on the methodology (procedures and design) and close with a modest but precise statement of the project's significance" (1990, p. 187). It seems that the result of the moves analysis in this study confirmed Swales's claim to some extent. From the SSHRC guidelines, we can see that like other funding agencies, SSHRC has an "expectation in research grant applications that there should be *early* indications of what will be done" (Swales, 1990, p.165). However, with only half of the proposal summaries have 'fronted' objectives, the phenomena needs further examination in future studies.

4.1.4.6 Giving considerable space to "describing research means"

In grant proposal summaries, Move 2 is a very important move, which can be seen from the fact that all the grant proposal summaries in this corpus had this move with considerable length (see Table 1.1 and Figure 1.3). While the Method section in research articles or research article abstracts might be 'de-emphasized' or 'downgraded' (Swales, 1990, p.169), in the grant proposal summaries in this corpus, it constituted a most important step. Although this high percentage can be partly attributed to the disciplinary influence since all the data were collected from the educational field where "a demonstrably adequate methodology is deemed necessary" (Swales, 1990, p. 170), it could also be a unique feature of the genre as well as a response to the requirements of the funding agency, as many participants mentioned in their interviews. In order to persuade the reader-evaluators to make a positive justification, grant writers need to tell them

through this step that the proposed study is a well prepared, carefully designed study. In the method section of published research articles or research article abstracts, the writer's credibility as well as the 'methodological appropriacy and rigor' are often taken for granted whereas in that of grant proposal summaries, it is the right time for the grant writer to explain his/her plans of action, and thereby demonstrate their familiarity with the research approach of the field, and establish their credibility as a serious, prudent scholar.

4.1.4.7 Highlighting potential contributions

The communicative purpose of the last move is quite similar to that of Move 1, both of which is to justify the reason *why* the proposed research should be conducted. I identify it as a separate move, rather a supplementary step of Move 1, because eight out of nine grant proposal summaries discussed the potential contributions separately at the end of the text, in most cases in a separate paragraph, or titled with a separate sub-heading. It is a more "boosterish" than Move 1 with direct boosting words and phrases. Only P5's grant proposal summary, which had an elaborate Move 1, omitted this last move.

4.1.5 Summary

In this section, I identified and described a move-step scheme for grant proposal summaries, based mainly on Swales's (1981, 1990) move analysis theories and Connor and Mauranen (1999)'s pioneering research on grant proposals. Grant proposal

summaries share some observed similarities with other related genres, such as research article abstracts or research article introductions, therefore we are able to borrow quite a few terms from Swales's (1990) CARS model. Nevertheless, there are many features that distinguish grant proposal summaries as a recognizable genre.

First, compared with the research article introductions, grant proposal summaries gave much more weight to the establishment of the real-world territory and much less space to the establishment of the research territory and the review of the relevant literature. Only one grant proposal summary (P7) has comparable content of 'topic generalization', and only P2 and P4 have respectively four and two explicit citations in discussing real-world concerns. Second, in most cases when previous literature is reviewed, it is reviewed in a general sense, and the final purpose is to indicate a niche or a research space. In other words, most of them are negational. Interestingly, over half of the grant proposal summaries have reported the proposers' own previous research at comparatively great length, especially those previous SSHRC-funded research. And most of these previous studies were given an affirmative evaluation. Third, while there is a tendency to de-emphasize the methods part in research articles and research article introductions, the move of "means" was given a considerable space which constituted about half of the total space.

All the above-mentioned features in the move structure of grant proposal summaries reflect the promotional function of this sub-genre. As far as I am aware, no research has ever been done to examine the rhetorical structures of this sub-genre, therefore my

identifications of the moves as well as interpretations based on the interview data might

help to offer future researchers as well as novice grant writers some useful insights.

4.2 Generic structure of the main text of research grant proposals

The generic structure of the main text of research grant proposals has received scant attention among genre analysts except in Connor's studies (Connor, 2000; Connor & Mauranen, 1999; Connor & Wagner, 1999). As discussed earlier, Connor's studies employed the move analysis approach as the only tool to analyze the full text, which may result in the blurred overall structure. To draw an analogy, the "moves" Connor described in her studies are only the atoms of a substance; how these atoms are patterned or organized to constitute a substance is still unknown. In this section, I attempt to offer a description of both the overall organization and the local arrangement of the genre. The complexity of the data as well as my own choices in dealing with it is described in detail, so as to construct an ecological validity of the study (Duranti & Goodwin, 1992, p. 292).

4.2.1 ICMC pattern as the overall structure of SSHRC research grant proposals

As I have discussed earlier, the guidelines of a funding agency often have a great influence on the writing of proposals, and sometimes even acquire a mandatory status. Considering that all the grant proposals I collected come from one funding agency—SSHRC, its guidelines on writing of the main text were carefully examined (see www.sshrc.ca):

Program of Research
Using the following headings, describe the program in enough detail, without reference to supporting documents, to allow informed assessment by qualified assessors.

Objectives

- Briefly state the explicit objectives of your proposed research program.

Context

- Situate the proposed research in context of the relevant scholarly literature.
- Explain the relationship/relevance of the proposed research to your ongoing research. If the proposal represents a significant change of direction from your previous research, describe how it relates to experiences and insights gained from earlier research achievements.
- Explain the importance, originality and anticipated contribution to knowledge of the proposed research.
- Describe the theoretical approach or framework (if applicable).

Methodology

- Describe the proposed research strategies/key activities, including methodological approaches and procedures for data collection and analysis, that will be used to achieve the stated objectives.
- Justify the choice of methodology and explain the specific instruments or procedures to be used. For example, if you plan to conduct interviews, specify the type of interview to be conducted, the nature of the questions, etc. It is equally important to explain how the data will be analyzed (i.e. techniques to be used and why these techniques are appropriate) so that the committee can clearly understand what real contribution will be made to the advancement of knowledge and is not left with the impression that the proposal is essentially a data-gathering exercise.

Communication of Results
Outline plans for communicating research results:

- within the academic community (peers, through refereed journals and other appropriate channels); and
- outside the academic community (practitioners, policy makers, etc.).

Reading the nine grant proposals against the background of this guideline, we can clearly see the writers' "eager compliance" (Connor & Mauranen, 1999, p. 51) with the requirements of the funding agency. In all proposals, specified headings are used, and the

contents asked for are covered. Therefore, I propose that the overall organization of the

main text of SSHRC grant proposals be as follows:

Part 1: Introduction (Statement of Objectives)

↓

Part 2: Context (1.Establishing the territory by reviewing the scholarly literature in the field as well as the researcher's own previous studies. 2. Importance/contribution claim)

↓

Part 3: Description of research means

↓

Part 4: Communication of the results
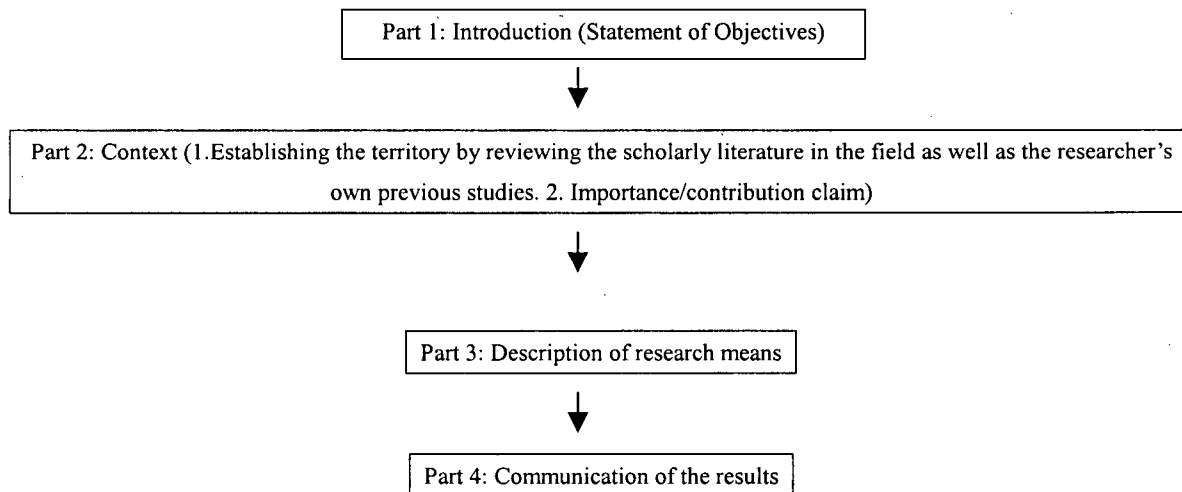
Figure 2.1 The overall organization of the main texts of SSHRC grant proposals

I have discussed in section 2.2 that Swales (1990) offered an overall prototypical

structure of research grant proposals in his two-page brief review of the genre:

> The typical parts of a research proposal are:
> 1. Front Matter
> 2. Introduction
> 3. Background (typically a literature survey)
> 4. Description of proposed research (including methods, approaches, and evaluation instruments)
> 5. Back matter   (Swales, 1990, p.186)

As can be seen, to put aside the front matters and back matters, the overall organization of

the main text of SSHRC grant proposals corresponds quite well to the typical parts

Swales suggested, except for the adding of the last part on "the communication of results".

It therefore shows that the Introduction-Context-Methodology (ICM) as a basic pattern

could be most probably applied to grant proposals written for various funding agencies.

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Based on my corpus, the pattern is extended to ICMC, with the last "C" standing for "communication of the results".

Under this pattern, I analyzed each part of the main texts using structural move analysis. In the ensuing sub-section 4.2.2, I will first report the moves identified in the whole main texts. Definitions and examples will be given. In 4.2.3, I will report the results of the moves analysis based on the moves identified. The implications of the results for both genre analysts and novice grant writers will be discussed respectively. Two moves strategies the successful grant writers seemed to have used in their grant writing will be discussed in detail. In presenting the findings this way, I seek to offer a comparatively comprehensive description of both the overall structure and the local arrangement of the main text of the genre.

4.2.2 Description and discussion of the move scheme

Based mainly on Connor and Mauranen's (1999) move scheme, I identified ten moves in the main texts of SSHRC research grant proposals. Following the tradition of structural move analysis, I consider a "move" as a constitutive component of a text serving a specific communicative purpose. Some moves are obligatory, and some are optional (e.g., Henry & Roseberry, 2001). The order of moves can vary to some extent (e.g., Connor & Mauranen, 1999). In the corpus of this thesis research, due to the frequent recurrence of the moves, we are unable to see a regular order. Thus the order in which the moves are presented here is random. Here I will first present the moves identified, and

then I will discuss the difference between Connor and Mauranen's move scheme and my identification. I will also discuss the muddiness in the identification.

4.2.2.1 The ten moves

Territory

Combining the characteristic features of Connor and Mauranen's (1999) move of "territory" and Swales's (1990) move of "establishing a territory", this move serves to establish a real-world territory and/or a research territory in which the proposed research is situated, either in the form of general statement or in the form of specific reference to previous research.

Example A (real-world territory):

> One of the stated goals of the Grade 8-12 language Arts curriculum in British Columbia is as follows: "The English Language Arts 8 to 10 curriculum focuses on using mass media as well as analysing its impact on society. As students use electronic communications and examine the nature of information conveyed to the public in newspapers, magazines, radio, television programs, and other media, they learn [inter alia] messages surrounding them; [and] comprehend the role of mass media in society and their personal lives." [http://www.bced.gov.bc.ca/irp/] Such interest in the mass media is found in ministry documents in other parts of Canada. In Ontario, for example, Media Studies is one of the strands of the Grade 9 and 10 Language Arts Curriculum, in which students are encouraged "to demonstrate critical thinking skills by identifying the differences between explicit and implicit messages in media works" and "to compare and explain their own and their peers' reactions to a variety of media works" [http://www.edu.gov.on.ca]. Likewise, in Alberta, the English Language Arts curriculum asserts that "Discriminating enjoyment of literature, live theatre, public speaking, films and other mass media can lead to an enriched use of leisure time [http://ednet.cdc.gov.ab.ca/teaching].
> (Cited from P4)

Example B (research territory):

> Much of the current literature on education reform focuses on structures. As many writers point out (Bear & Boyd, 1993; Walberg, 1997), some educators emphasize the need for increased

centralization and accountability; others call for decentralization and a concomitant empowerment of teachers and parents through enhanced opportunities for professionalism (Darling-Hammond, 1997; Lichtenstein et al., 1992), for choice (Brown, 1998) or for voice (Murphy, 1992).
(Cited from P7)

Niche

Comparable to Connor and Mauranen's (1999) move of "gap" and Swales's (1990)

move of "establishing a niche", the move serves to indicate either a real-world problem or

a research gap.

Example A (real-world):

The impoverished state of professional development opportunities for many school advisors highlights the need to understand better who they are and how they make sense of their work with student teachers.
(Cited from P2)

Example B (research gap):

Given the central role that school advisors play in practicum settings it is curious that the work of school advisors languishes as a research area. While some authors (e.g., Zimpher and Howey, 1987) commend the attention directed at specific advisory approaches and training practices --clinical supervision commentaries abound--the majority of teacher educators lament the absence of a more extensive research literature.
(Cited from P2)

Objective

The move serves to state the general as well as the specific objectives of the proposed

research. In some cases, it can be in the form of research questions. Therefore, it

combines the move of "goal" and the move of "research questions" in Connor and

Wagner's (1999) study.

Example A:

Aim:
*   to better understand the nature and potential power of mathematical problem posing as a classroom activity.

Objectives:
*   to investigate the cognitive mathematical activities exhibited by students as they pose mathematical problems for their own or peer solution.
*   to explore in depth any evidence of the cognitive shift from working with action-based mental images to formalised, generalised mathematical thinking during the problem posing sessions, and thereby to illustrate and enable further refinement of the characterisation of the intermediate level of understanding at which distinctions and commonalties among various images are perceived.
*   to generate hypotheses concerning relationships between regular engagement in problem posing activities and the abilities of students to solve non-routine mathematical problems, these hypotheses to be tested in future research. (Cited from P5)

Example B:

The objective of the proposed research project is twofold. The first and principal objective is to research and write a book-length manuscript exploring attitudes and actions toward Aboriginal sexuality in…in the century between the arrival of the first permanent newcomers, or about 1850, to the end of legalized discrimination toward Aboriginal people, or about 1950. …. The second, complementary objective of the project is to use the opportunity presented by the needed research for the manuscript to train several graduate students, if possible members of the upcoming generation of First Nations students at …, in historical research methods. Their involvement in the project will, hopefully, secure them each of them a student or co-authored journal publication and/or paper presentation. (Cited from P1)

Example C:

The specific purposes of this research, and related research questions, are:
(a) to examine and describe the family career development project as a means of facilitating family involvement in the career development of adolescents in economically disadvantaged families (What are the family career development projects in disadvantaged families? How are these constructed, steered and maintained?)
(b) to extend the understanding of the family career development project as related to, and embedded in, a number of other on-going family projects (How does the family career development project relate to other projects that the family undertakes?)
. (c) to examine how urban and rural economically disadvantaged families as well as professionals represent and construct change (in work, employment, opportunities, occupations, and occupational structures, work) at the interpersonal and familial level (How do families and others construct the social meaning of parent-adolescent career conversations in families in light of social and economic

change?),

(d) to extend the investigation of individual and family identity and possible selves as it relates to the family career development project (How does the family career development project relate to individual and family identity?),

(e) to continue to refine and extend both the action theory of career and the qualitative research method that we have generated to date.

Means

The move describes the methodology of the proposed research, including the research design, the participants, the research setting, data collection and data analysis, as well as timeline. In addition, the move also includes the justification of the methods used. The move is very similar to the move of "means" in Connor and Mauranen's (1999) study.

Example A (underlined sentences are the justification of the method):

> To accomplish this objective, microgenetic analysis of children's responses during an intensive instructional program will be undertaken. <u>A microgenetic approach examines changes while they occur during instruction. It facilitates the tracking of developmental processes from "specifiable beginnings" through increasingly competent approximations to a more sophisticated understanding (Catan, 1986). It provides a means to account for the influences of individual differences, culture, and social context on thinking (Catan, 1986; McKeough & Sanderson, 1996).</u>
> (Cited from P5)

Example B

> In the regional study, each university-based researcher will facilitate one action research site. In doing so, grade level groupings of teachers and artists will design, implement, reflect upon changes and plan for continuous inquiry into their own professional development while examining their understandings of how children learn. At the regular LTTA schools, the planned LTTA program will be delivered whereby grade level teachers work with artists to implement units of activities. This will begin at the end of year one of the LTTA implementation schedule and continue for three years: one year beyond the completion of the LTTA sponsored program. Both models will be studied through audio-taped and transcribed group interviews of teachers and artists, as well as selected individual interviews. One semi-structured audio-taped group

(grade level) interview/meeting per month will occur at all sites. Observations of classroom practice will be conducted with interested teachers and artists (three times per year). The methodological underpinnings of the research are constructivist and interpretive in nature involving all participants in the LTTA community.

Achievement

Comparable to Connor and Mauranen's (1999) move of "achievement", the move claims anticipated results, findings or outcomes of the proposed research.

Example:

> The research will result in (i) profiles of internet-based knowledge use, current and potential, among communities with an interest in education (ii) proto-type website designs for collaborative knowledge management that demonstrates the integration of research with other knowledge domains and collaborative tools that support the needs of a variety of communities of interest, (iii) design recommendations and proposed publication standards for improving the public and professional value of social science research, from the initial conception to the final archiving of research, through its integration with other knowledge domains in web-based environments, (iv) an analysis of research's contribution to public and professional understanding and action, (v) a corresponding analysis of public and professional interests in knowledge and learning in collaborative online knowledge-management settings, and (vi) an analysis of knowledge's potential online role in democratic processes affecting public and professionals.
> (Cited from P8)

Benefits

The move discusses the value of the proposed research in terms of epistemic benefits (the usefulness to the advance of the knowledge) and/or social benefits (the usefulness to the real world). Again, the move is very close to Connor and Mauranen's (1999) move of "benefits".

Example (The first half paragraph states the social benefits and then the second half states the epistemic benefits):

This study will not only benefit professional practitioners, but also policy-makers, teacher educators, artists and researchers. Studying two collaborative artist and teacher professional development models are important because they will help educators understand how to improve arts education practices for generalist elementary teachers. Policy-makers and school administrators will benefit from specific findings from an arts-infused curriculum and the professional benefits for teachers. This is a unique study where the role of the artist in pedagogical change will be documented and analyzed. Given the rising interest in artist-in-
-residence programs across Canada, this study will undoubtedly contribute valuable insights into the beliefs, practices, and issues surrounding such programs. This study is also unique in that it integrates image-based research with qualitative methodology. By dovetailing the regional project with a national study examining the effects of arts-infused instruction on language and mathematics achievement, as well as teachers and principals perceptions toward arts-based changes, the regional study will contribute to a growing body of literature in several domains: transfer of knowledge, professional development schools, teacher change, and arts education.
(Cited from P3)

Competence claim

By reporting the proposers' track record, the move serves to demonstrate the proposers' qualification and competence to carry out the research. The move is similar to Connor and Mauranen's (1999) move of "competence claim".

Example A:

Since my arrival at (the name of the university) in 1995, I have been working with local teachers, both as mentors of pre-service teachers enrolled in the innovative Secondary Integrated Mathematics Programme that I have instigated at (the name of the university), and as collaborators on my research connected with mathematical problem solving in schools. Through this work I have established strong links with the R... and V... School Districts and with individual mathematics teachers....
(Cited from P5)

Example B:

Since 1991, when Dr. S took a position as assistant professor of educational administration at the University of U, she has been involved in one way or another with YRS. In U, many of her graduate students were employed as teachers and administrators in YRS. Subsequently, following her move to the University of ... in 1994, she and a colleague were hired by the ... Ministry of Education to conduct a review of extant YRS research and to assess the consultative pilot project

under way in .... As the pilot investigation drew to a close with a great deal of negative press and little substantive interest in ... in YRS, Dr. S, with the assistance of a former MEd student, then an administrator in a U... YRS, began a small longitudinal study of the impact of YRS on student academic and non-academic outcomes, and of parent, teacher, and administrator perceptions. The generally positive findings of that study led, in 1996, to a funded SSHRC proposal designed to examine, in more depth, the impact of YRS in both Canada and the United States. ....
(Cited from P7)

Importance claim

The move claims the importance or the centrality of the topic issue, with respect to either the real world or to the research field. The move is similar to Connor and Mauranen's move of "importance claim".

Example A (with respect to the real-world):

Given the increasing emphasis on extended practicum placements and school/university partnerships (both in ...and across Canada) it is incumbent upon ... (the name of the university is omitted here to ensure confidentiality) to know more about the school advisors upon whom we rely for practicum placements. This information is critical for preparing student teachers for practicum experiences, for providing relevant and appropriate support to the school advisors, and for ensuring program coherence (both intellectual and practical) between schools and universities.
(Cited from P2)

Example B (with respect to the research field):

The direct outcome of the research will be a detailed and deeper understanding of a potentially valuable phenomenon-student problem posing-that has received scant attention by the mathematics education community.
(Cited from P5)

Communication of Results

The move serves to report the anticipated audience/beneficiary of the proposed research and the means by which the results of the project will be communicated to the audience/beneficiary.

Example:

Our results will be communicated to three primary audiences: teachers in greater Vancouver; the Canadian educational community; and the international research community of applied linguists and language educators. With regard to the first group, we plan to run workshops during teacher professional development days and at local teacher education conferences. In the Canadian educational community, we will present our work at national CSSE conferences. In the international community, we will present our work at the American Association of Applied Linguistics (AAAL) conference and the American Educational Research Association (AERA) conference. We will submit papers to the following journals: Applied Linguistics, Journal of Adolescent and Adult Literacy, Harvard Educational Review, Gender and Education, Language and Education, Curriculum Inquiry.
(Cited from P4)

Metadiscourse

The move serves to introduce the organization or the content of the ensuing discourse.

Example A:

The literature related to the impact of various school calendars on students, parents, and educators continues to be of relevance and importance here. However, because this literature has been thoroughly reviewed elsewhere and has been developed in both published articles and our forthcoming book, it will be mentioned here only as it pertains to the focus of this proposal - the relationship of calendar change to educational equity and excellence. The following discussion will focus on literature concerning structural change, equity, and leadership as the basis for this research project on issues of social justice in year-round schooling.

Example B:

The way we intend to conduct the study and collect the data for analysis is best described chronologically.

4.2.2.2 The differences between the two move schemes

There are some differences between the ten moves I identified based on the corpus of the nine SSHRC grant proposals and the ten moves Connor and Mauranen (1999) identified in their study. First, the move of "compliance claim", which states the relevance of the proposal to the set of goals of the funding agency, was not present in my corpus. Second, I do not include a move of "reporting previous research". As I have discussed in the literature review as well as in the foregoing section, I believe "reporting previous research" is part of a text labeled more from a content perspective than from a functional perspective. Although "reporting previous research" is assigned almost a Section (Section Two) in SSHRC grant proposals, it is not a homogeneous chunk; rather, it serves several rhetorical functions. I assigned discourses of "reporting previous research" to different moves according to their different communicative purposes. Third, I added in a move of "communication of results", which might be specific to SSHRC. But it is also possible that other funding agencies might also have similar requirements on the discussion of how results of the proposed research will be communicated to the potential audience or beneficiary with an increasing emphasis on real-world usefulness nowadays. Fourth, I included a move of "meta-discourse". Although it appeared only twice in a corpus of nine, it cannot be assigned to any other move categories. It serves a particular function to introduce and justify the structure or the content of the ensuing discourse. It is very important in sections where lengthy discussion might result in the need for the writer to make explicit to the reader the structure or the content of what s/he is going to say. By

all means "meta-discourse" deserves an independent move.

4.2.2.3 Muddiness in the identification

As is known by genre analysts, there is always muddiness in moves recognition and identification. While it is pedagogically useful to think of a genre as consisting of a series of moves, it is worth rethinking whether it is always so clear-cut that we can assign a piece of discourse to a certain move without any doubt. The muddiness in the identification of the moves in this study raised the problem that it could be dangerous to assume that a piece of discourse only serves one particular purpose at one time.

In the identification, I sometimes hesitated, for instance, in deciding whether a piece of discourse should be assigned to "territory" or to "competence claim". Look at the following example:

> Y, V and C (1996) have proposed an approach to career development based on action theory. This approach is based on the understanding of the goal-directedness and intentionality of human behaviour. It is particularly heuristic for the study of career because the latter is based on reflective communicative and symbolic action. This theory represents a significant advance in the field by establishing a sound conceptual framework for career development research and practice from a social constructionist perspective.

This is the opening paragraph of P9's Section Two. Considering that Y is the principal investigator of the proposed research, the whole paragraph has reported the proposer's own previous research. From the evaluative phrases such as "particularly heuristic for", "a significant advance", and "establishing a sound conceptual framework", it seems very obvious that the writer intended to boost his own previous work and thus achieve the purpose to demonstrate his track record and research competence. Nevertheless, since the

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paragraph introduced an approach to career development that the proposed research would draw upon, and it set a scene for the reader about the research field, it could also be considered as a move of establishing the "Territory". I finally assigned the paragraph to the move of "Territory". I decided to assign only those pieces of discourse that directly discussed the proposer's past research experiences to the move of "Competence claim" and kept the criteria consistent throughout the identification process. I temporarily solved the problem by adding in another identification criterion: the content.

In dealing with other instances of ambiguity, I also add in other criteria to help with the identification. For instance, in the following paragraph cited from P4, I found it hard to decide whether it should be assigned to the move of "objective" or to the move of anticipated "achievement":

> Our concern is to create a critical literacy curriculum that provides girls with opportunities to explore teen magazines in ways that respects both their opinions and the pleasures they derive from their reading of such magazines, while simultaneously challenging them to deconstruct such investments.
> (Cited from P4)

Similarly, it is hard to decide whether the ensuing paragraph cited from P1 should be categorized as "Objective" or "Benefits":

> The second, complementary objective of the project is to use the opportunity presented by the needed research for the manuscript to train several graduate students, if possible members of the upcoming generation of First Nations students at ..., in historical research methods. Their involvement in the project will, hopefully, secure them each of them a student or co-authored journal publication and/or paper presentation.
> (Cited from P1)

I used linguistic exponents to help with the identification. In the P4's example, the word "concern" was used while in the P1's example, the writer directly said that to train

and support several graduate students was one "objective" of her proposed research. Thus I categorized both of them as the statement of the "Objectives". However, if the example cited from P4 changed into "The study will help create a critical literacy curriculum ..., and it will benefit teenager girls in ...", and if the example cited from P1 changed into "the study provides an excellent opportunity to train several graduate students and secure each of them a student or co-authored journal publication and/or paper presentation...", I would most probably assign them to the move of "achievement" or "benefit". Linguistic exponents seemed to have played an important role in the identification process. The problem is, incorporating the linguistic and content criteria into the identification may change the definition and the connotation of the notion of "move" which is defined as a functional unit and should be identified mainly by its function.

To sum up, the muddiness in the identification of moves brings us to think whether it is only a problem that we should sharpen identification criteria as Bhatia (1993) suggested, or the notion of the "move" itself could be a problem. It is beyond the scope of this study to investigate into this topic, but it would be an interesting area for further discussion.

4.2.3 Occurrences of the moves

Despite the muddiness, there are some interesting findings of the moves analysis. In Table 2.1, we can see that six moves appeared consistently across the sample set: "Territory", "Niche", "Objective", "Importance claim", "Means" and "Communication of

results". "Benefit", "Achievement" and "Competence claim" appeared in over half of the proposals. Thus it seems that all the moves except "meta-discourse" appeared consistently in the corpus.

In the mid-column of Table 2.1, we can see that "Territory", "Objective", "Importance claim" and "Competence claim" can be found in all the four parts. "Niche" and "Means" can be found in the first three parts and "Benefit" and "Achievement" can be found in the last three parts. "Communication of results" and "Meta-discourse" are the only two moves that did not seem to appear frequently across parts. In Table 2.2A, 2.2B, 2.2C and 2.2D, by comparing the figures in the mid-column and those in the right column in these Tables, we can also see the frequency of the recurrences of the moves within each part.

Table 2.1 Moves in a corpus of nine SSHRC research grant proposals

Move	The parts in which the move was present	No. of proposals in which the move was present in a corpus of 9 proposals
Territory	Part I, Part II, Part III, Part IV	9
Objective	Part I, Part II, Part III, Part IV	9
Importance claim	Part I, Part II, Part III, Part IV	9
Competence claim	Part I, Part II, Part III, Part IV	6
Niche	Part I, Part II, Part III	9
Means	Part I, Part II, Part III	9
Benefits	Part II, Part III, Part IV	8
Achievement	Part II, Part III, Part IV	6
Communication of results	Part IV	9
Meta-discourse	Part II, Part III	2

Table 2.2A Occurrences of moves in Part One

Move that was present in Part One	No. of proposals in which the move was present in Part One	Total frequency of the move in Part One
Objective	9	12
Territory	7	12
Niche	6	7
Importance claim	2	2
Means	1	2
Competence claim	1	1

Table 2.2B: Occurrences of moves in Part Two

Move that was present in Part Two	No. of proposals in which the move was present in Part Two	Total frequency of the move in Part Two
Territory	9	55
Niche	9	39
Objective	8	21
Benefits	7	10
Competence claim	5	10
Importance claim	5	10
Means	4	5
Achievement	3	5
Metadiscourse	1	1

Table 2.2C: Occurrences of moves in Part Three

Move that was present in Part Three	No. of proposals in which the move was present in Part Three	Total frequency of the move in Part Three
Means	9	17
Objective	5	8
Benefits	3	4
Competence claim	2	3
Territory	2	5
Achievement	2	2
Niche	1	1
Importance claim	1	1
Meta-discourse	1	1

Table 2.2D: Occurrences of moves in Part Four

Move that was present in Part Four	No. of proposals in which the move was present in Part Four	Total frequency of the move in Part Four
Communication of results	9	10
Competence claim	2	2
Importance claim	2	2
Territory	1	1
Achievement	1	1
Benefit	1	1
Objective	1	1

The moves analysis indicates that all moves except "meta-discourse" were obligatory in the nine SSHRC grant proposals; and the moves recurred frequently across the parts as well as within each part. The result has thus confirmed my conjecture about the frequent repetitions of moves in texts with large size and the resulting irregular order of the moves. In the following, I will first discuss the implications of the results for genre analysts, and then I will discuss the implications for novice grant writers by describing how successful grant writers maneuver the moves to address the reader and to achieve the promotional purpose.

4.2.3.1 Implications for genre analysts

The result of the moves analysis has raised two questions for genre analysts that are worthy of further discussion. The first is, to what extent the variations of the order could be considered allowable, when the term of "move" itself implies the importance of the order. In furtherance of the first question, the second concerns whether the functional unit of "move" is an appropriate unit in analyzing texts with considerable length.

The main purpose of structural move analysis is to provide learner writers the prototypical structure of a genre that they can follow in their own writing. If the frequent and flexible recurrences of the moves make us unable to describe a prototypical order, the identification and description of the moves alone would be of doubtful use for novice writers. In Connor's studies (Connor, 2000; Connor & Mauranen, 1999; Connor & Wagner, 1999), structural move analysis was the only method used in analyzing the main text of grant proposals. Since the move-scheme developed in this study was mainly based on the move scheme of Connor's studies, the frequent recurrences of moves would very likely also exist in Connor's corpuses. In this case, even though the space each move occupied was calculated (see Connor, 2000), the Connor's studies would not be able to provide much useful information for learner writers. It therefore seems to prove that to provide an overall structural pattern based on the original section boundaries and then analyze the move structure under this pattern as this study did would be a better way to describe the generic structure of academic genres with considerable length. In the following 4.2.3.2, I will discuss what this type of move analysis (by examining the moves within each part and comparing the moves across the parts) revealed about the moves strategies successful grant writers usually take in addressing the reader and in achieving the promotional purpose.

4.2.3.2 Implications for novice grant writers

Move strategy one: setting the scene for the reader

In Table 2.2A, 2.2B, 2.2C and 2.2D, we can see that six proposals in a corpus of nine

had "Territory" and "Niche" repeatedly appear in the first two parts. "Territory" can be

found in all the four parts while "Niche" can be found in the first three parts. It seems that

grant writers tended to establish the territory and indicate the gap repeatedly in different

parts of the main text in order to set the scene for the reader.

Let's first take a look at Part One. It is interesting to note that although the SSHRC

guidelines prescribe that this first part should '*briefly*' state '*explicit*' objectives of the

proposed research, only two grant proposals, P1 and P5 wrote to meet the SSHRC

requirement perfectly. All the other proposals, either with the help of an additional

introductory section or within the section of 'Objective' itself, attempted to create a

research space first. Here is a skeletalized example from P2:

Classroom teachers who work with beginning teachers in practicum settings play one of the most critical roles in pre-service teacher education. As school-based teacher educators, these classroom	Real-world territory
teachers are involved in the development of the teaching profession, or	↓
as Lave and Wenger (1991) argue "the generative process of	Research territory
producing their own future" (p. 57). Despite an extensive literature	↓
on …and numerous accounts of …we know remarkably little about….	Niche
The objective of the study is to extend the research on…. The study	↓
has three phases. The first two phases are…. The third phase is…. The	General objective
objectives for each phase are as follows:	↓
Phase I To construct a profile of…. The profile will address….	Specific objectives

Phase II To analyze the pedagogy that…. The object of this phase will be to….
Phase III To develop a professional development framework to facilitate and
support…, this phase will encompass….

As a new scholar who applied for SSHRC for the first time, P2 was obviously eager to

comply with the guidelines. The headings and sub-headings of the main text of his proposal perfectly conformed to the requirements. However, the objectives were not stated until the real world and the research territory had been established and the niche had been indicated.

This finding is quite unexpected because the 'fronted' objective is required by the SSHRC guidelines, and many genre analysts (e.g., Swales, 1990) discussed the 'fronted' objective as an important feature of this promotional genre. However, the unexpected finding at the same time is also expected insomuch as "writers in the soft knowledge domains saw a greater need to situate their discourse with an Introduction" for the reason that the soft disciplines "are characterized by the relative absence of well-defined sets of problems and a definitive direction in which to follow them" (Hyland, 2000, p.71). Setting the scene for the reader is thus a very important rhetorical act in the social sciences' academic writing. His assertion was confirmed by the textual data of this study which all come from the field of education. It was also confirmed by the comments from the specialist informants of this study, for instance:

> SSHRC guidelines prescribe "the first part"; this doesn't mean that the objectives need to or should be stated immediately. It is good research practice to set the context first. (P6)

Part Two is, rhetorically speaking, the most complicated part. As can be seen from Table 2.2B, the move of "territory" and "niche" appeared in all the nine proposals, and the frequency of the occurrences were 55 and 39 respectively. The appearance of the two moves in Part One did not seem to prevent them from appearing again in this second part; in fact the two moves recurred at a high frequency within this part. In those proposals

where this second part was further into two or more sections so as to strictly follow the SSHRC guidelines, we can see the recurrence(s) of these two moves even in these different sections. In P5's proposal for instance, each of the three sections in its Part 2 owns the two moves: 'Territory' and 'Niche', even in the section of "Importance and originality". It may be because the writer believes that the claim of importance can only be convincing after the creation of the research space.

Part Three and Part Four are two comparatively homogeneous parts. Even in these two parts, we can see the existence of "Territory". Part Three, according to Swales (1990, p. 168), is a part that "often reads like checklists". However, "Territory" still existed in two proposals and "niche" existed in one proposal (see Table 2.2C). The following are three continuous paragraphs cited from the third part of P3's proposal in which "Territory" was established and "Niche" was indicated:

"Does experience in the arts boost academic achievement?" *is* the title of a recent article written by ...(1998). He *asserts* that "..." (p.8). At the Center for Arts Education Research, ...University, ... have been studying the question of transfer as it relates to learning in and through the arts (1999). They *write*: "..." (p.30). ...would seem to agree that...

Review of literature to establish the research "Territory"

National principal investigators along with co-investigators at each site *will* meet annually to determine appropriate data analysis. .... The data collected *will be analyzed and reported* in terms of.... Individual students, teachers, principals, schools and regions *will not be isolated or identified* for the purposes of this study. The data collected *will allow for* a number of comparisons across time: .... Findings from the study *may* also be correlated with other national studies currently using the... tests.

Means

While recent American studies *have attempted* to illustrate the transfer of arts learning to other academic subjects (specific citations), none *have attempted* to..., *nor have* many *implemented* quantitative and qualitative data collection techniques as a way of.... This *is* particularly evident in Canada where few national studies of arts teaching and learning have been conducted (specific citations). The current national study *is* the first study of its kind in Canada. The results of the quantitative data *will* highlight the.... Although the national study data *will* undoubtedly contribute greatly to..., it *will* not be able to.... To provide the kind of data needed to do this, qualitative studies *need* to occur at the regional sites across Canada.

Territory
↓
Niche
↓
Importance claim
↓
Niche

As I have discussed earlier, Hyland (2000) believed that writers in "soft" disciplines saw a greater need to set the scene for readers at the beginning of the text because of the non-linear research progress and not clearly defined research problems. For grant writers in soft disciplines, this need seems to be even greater. As we can see, creating a research space and setting a scene does not only occur at the first part of the proposals; rather, the two moves of "territory" and "niche" recycled throughout the main text of the research grant proposals. It indicates the grant writers' considerable concern to address the reader who might or might not be the experts in the proposed research field.

Move strategy two: A niche-centered tide-like structure

Another interesting finding of the moves analysis is a unique niche-centered tide-like structure. It appeared in the literature review of three proposals. Let's first look at an example of such structure cited from P2:

School advisors play an important role in training student teachers, but many studies show that they are poorly prepared. (Specific studies are cited)
(Established a **real-world territory**/claimed the centrality of the topic)

Niche 1: "the work of school advisors *languishes* as a research area."
"...the majority of teacher educators lament the absence of a more extensive research literature."
"...highlight the need to attend to this oversight..."
(Literature was cited)

Exception 1 (Territory): Report the literature on the many "training" programs to facilitate the work of school advisors and the "effects" of these programs. "These are useful sources..."

Niche 2:
"a surprisingly omission from virtually all these studies is any substantive consideration of..."
"Again these results are informative but connecting the results to an understanding of...is conspicuous by its absence."
(Literature with this gap was reviewed)

Exception 2 (Territory): "The most comprehensive examination of...is located within two more...U.S. research initiatives."
"The first is..."
"The second ...is..."

Niche 3: "Recent U.S. initiatives ...demonstrate the value of this approach and highlight the need for a similar research agenda in Canada."
(**Continuing a tradition**: need for further study)

Figure 2.2 An example of niche-centered tide-like structure from P2

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As can be seen from the above flow-chart, in this particular structure, the recurrences of the 'territory' and 'niche' should not be considered simply as "recycling of moves". Rather, the running of the text is like the tide, one wave after another, washing up, washing back, and ensuing with washing up again, pushing the discussion of the topic forward. In this cited part, each niche is not just a simple repetition of the previous niche. The first niche states the general lack of research within the topic-related field; based on the first washback discussing some of the studies in the field, the second niche raises the issue that all these studies fail to consider from a certain perspective; then the text washes back again, discussing two large U.S. projects that paid attention to these aspects mentioned in niche 2; based on this washback, the writer comes to the third niche, that is, the necessity to continue the study in the Canadian context.

Similar movement can also be found in P4's Part 2:

Real-world territory: the popularity of teen publications. (Specific works were cited).

Research territory: "In recent years, there has indeed been increasing interest in popular cultural texts for young people..." (Literature was reviewed).

Niche 1(research gap): "However, while all of these studies provide some insights into..., none of them address.... In addition, none of them explores.... Furthermore, few of the studies..."

"...we have found research on critical literacy valuable in addressing pedagogical concerns....in studying texts as sites of struggle, negotiation, and change..."

Review of Critical Literacy and how it can be used as a theoretical framework in the proposed study to occupy Niche 1.

Niche 2: "The basic premise of this study is that critical literacy needs to be moved to the forefront of our educational agenda."

"However, the actual design and implementation of a media literacy curriculum has been left largely to the classroom teacher."

"...little else, including resources, has been made available to teachers to aid them to..."

(Literature was reviewed pointing out **the real-world need to bring critical literacy into the media literacy curriculum design.**)

"Notwithstanding the lack of resources for classroom teachers, there is a growing body of research that seeks to integrate classroom practices and popular cultures.

(Relevant literature was reviewed.)

Niche 3 (problem-raising): "Incorporating popular cultural texts in the classroom is not without attendant risks, however." The risks for students and for teachers were respectively discussed by citing literature.

Objective of the proposed study: "Our concern is to create a critical literacy curriculum that...while simultaneously..."

(Claim to fill the niche 3.)

Figure 2.3 An example of niche-centered tide-like structure from P4

The presenting of the three niches is just like the tide, with one wave rising higher and further than the previous one. The raising of the first niche is accompanied by the partly filling of it--the employment of Critical Literacy as the theoretical framework; it ensues with the second niche--the lack of application of Critical Literacy to the media literacy curriculum and the lack of resources for classroom teachers; the second niche is partly occupied by the reviewing the few studies that integrate classroom practices and popular culture; this comes to the third niche raising some further practical problems which result from the incorporation of popular cultural texts in the classroom; and the objectives of the proposed study are finally raised to address these problems. This kind of niche-centered tide-like structure can also be found in P5's proposal:

Territory: The initiation of the subject of mathematical problem-posing.

Niche 1: "Very little attention has been paid to...".(general gap)

Exception 1: Silver "reporting on research studies seeking to examine various aspects of problem-posing.

Niche 2: "no attention to address cognitive activity as revealed by the students' behaviors and talk."

Niche 3: "Almost all scant research on problem posing has been concerned with students at the elementary grades creating 'stories' and posing word problems that are not centrally about engaging in questioning the mathematical concepts."

"An exception to this trend is..."

Niche 4: "What is lacking from almost all of these studies is a focus on the cognitive side of problem posing.

Exception again: "Cudmore (1999) is currently working at...and is concerned...with cognitive processes..."

Niche 5: "although he, like many of the writers in this area, ..., expressly excludes purely mathematical problems..."...
"None of this work, however, was interested in the problem posing per se."
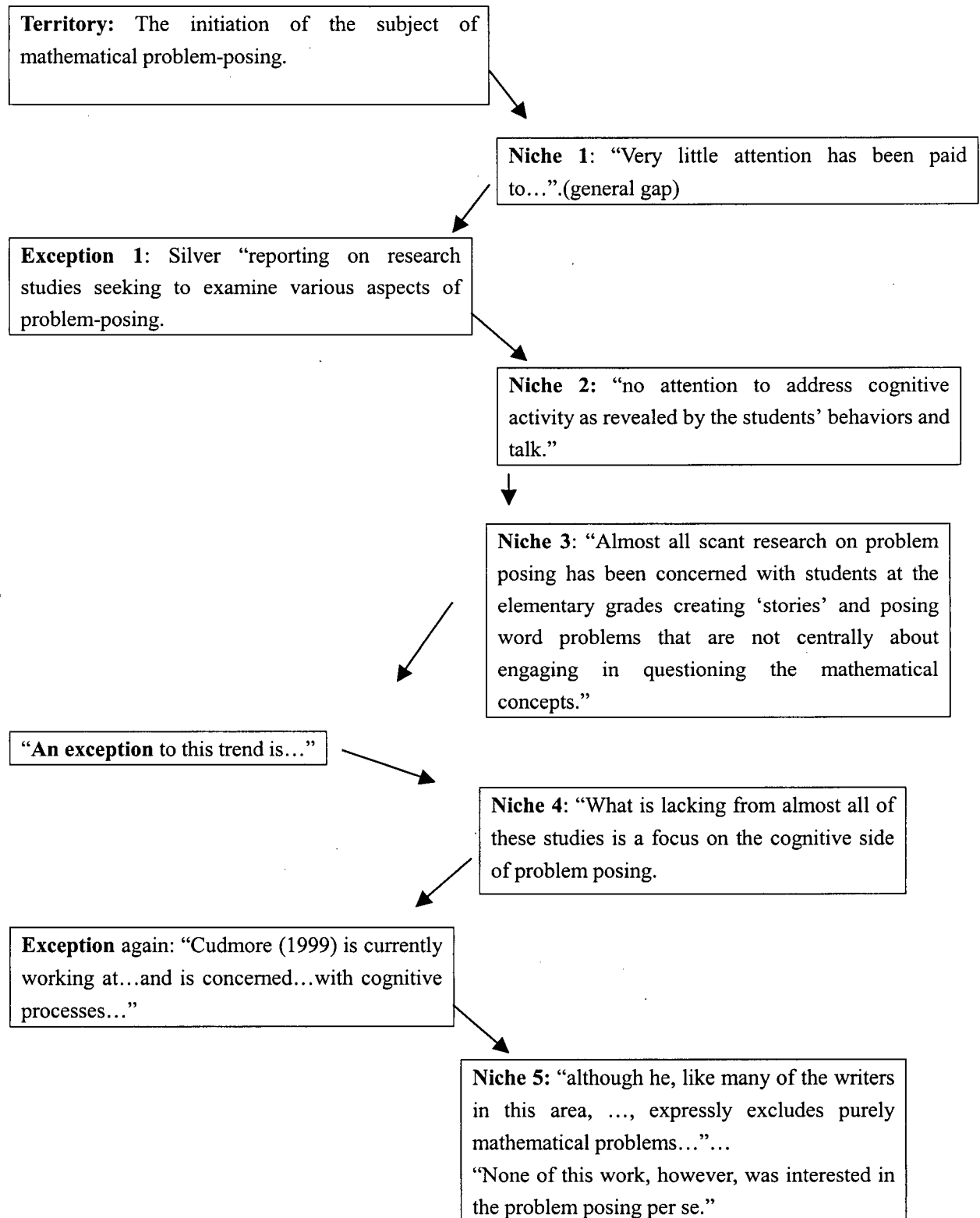
Figure 2.4 An example of niche-centred tide-like structure from P5

The frequent occurrence of this structure in my corpus suggests that it might be a strategy that grant writers often employ in literature review. It helps to contribute to the promotional purpose of the genre and at the same time has important interpersonal consequences. In order to demonstrate the importance and the originality of the proposed research, grant writers are in pressing need to point out the niche in the literature. Accordingly, they usually employ a niche-centered structure and tend to give previous research negative evaluations. However, it might thus sound too blunt and fail to facilitate solidarity with the reader. By strategically using the "multiple wave" approach, the writer could tone down the negative evaluation of the literature, mitigate the effects of criticism and head off possible objections.

This tide-like structure is not simply a promotional plus politeness device. It also reflects and reports the spiral development of research and the advancement of knowledge. In this sense, it could also be a strategy used in the literature review of other academic writing, such as research articles. But since this rhetorical structure/strategy has never been mentioned in the literature, it calls for further examination of its appearance in other academic genres.

4.2.4 Summary

Up to date, there have been very few studies using structural "moves" to analyze texts with considerable length. Connor's pioneering studies (Connor, 2000; Connor & Mauranen, 1999; Connor & Wagner, 1999) on the genre of grant proposals suggested a

ten-move scheme, which provides a useful provisional framework for later research.

Mainly based on this ten-move scheme, I identified ten moves in a corpus of nine SSHRC grant proposals. The ten moves identified in this study differed to some extent from the ten moves identified in Connor's studies. But the recurrences of the moves in this study suggested a similar situation in Connor's corpuses. If the moves analysis were applied as the only tool to examine the generic structure of a genre with large size, the frequent recurrences of the moves would most probably blur the overall organization of the genre. Fortunately, in this study, I first recognized the "Introduction-Context-Methodology-(Communication of Results)" (ICMC) pattern as the overall structure of the main texts in light of both Swales's analysis (2000, p.186) and the SSHRC guidelines. The moves analysis was then applied to examine the occurrences of the rhetorical moves within each part as well as across the parts. In so doing, we are able to provide a clear description of both overall structure and local arrangements. This approach might have some implications for genre analysts in investigating genres of considerable length.

As the results of the moves analysis, we have also identified two interesting moves strategies: to set the scene for the reader throughout the main text and to review the literature in a niche-centered tide-like structure. Novice grant writers might benefit from following these strategies.

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4.3 Referential Behavior

Appropriate reference to prior work is an important feature of most academic writing. To answer the second research question, this section reports and discusses how referential patterns used and preferred in the genre of grant proposals differ in quality and quantity from those used and favored in other academic genres.

4.3.1 The density of citations

The results show that the genre of grant proposals differs from other academic writing markedly in terms of the degree of use of citations. Figure 3.1 shows the frequency of citations used in the nine successful SSHRC research grant proposals collected from nine professors from the field of Education. As can be seen from Figure3.1, the density of citations in research grant proposals is much higher than that in other academic genres. Hyland (1999) and Thompson (2000) are two recent studies that investigated the citation practice in academic texts[4]. In Hyland's corpus of 80 research articles from 8 different disciplines, the average number of citations per 1000 words is 10.7, while in Thompson's corpus of 16 doctoral theses from 2 disciplines the average number of citations per 1000 words is 7.1. With an average number of 17.05 per 1000 words in my corpus, the density of citations in grant proposals is approximately 59.3% higher than that of research articles, and 140.1% higher than that of doctoral theses.

Since the nine grant proposals in my corpus are collected from the field of education,

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[4] Data discussed in the section concerning the citational features of research articles all come from Hyland (1999, 2000); data concerning the citational features of doctoral theses come from Thompson (2000) and Thompson and Tribble (2001).

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I also compared the frequency of their citation use with that of research articles from

closely related fields such as sociology and applied linguistics. According to Hyland

(1999), research articles in sociology on average use 12.5 instances of citations per 1000

words while research articles in applied linguistics have an average number of 10.8

citations per 1000 words. Although the numbers in these two fields are a little bit higher

than the average number of research articles, they are still substantially lower than the

average number of grant proposals.

Figure 3.1 Citations Per 1,000 Words
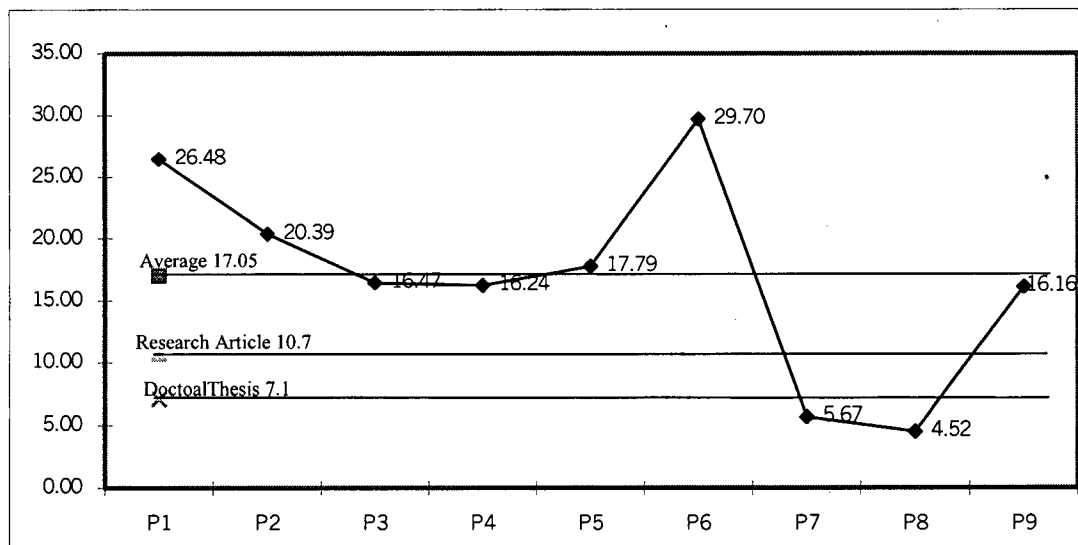
Thompson and Tribble (2001) attributed the differences in density of citations to the

different lengths of texts. According to him, when texts are shorter, there is a need for a

more condensed style of writing. However, in my corpus of 11 grant proposals, the length

ranges from 2655 to 5288 words, with an average length of 3744 words per paper.

Compared with research articles that average between 2000 and 5000 words (Thompson

& Tribble, 2001), there is no significant length difference between these two genres.

What can account, then, for the high density of citations in the genre of research grant

proposals? Most of the professors in my study mentioned the use of citation as a way to show their familiarity with the field. They believed that only when their knowledge of the field had been demonstrated would they be able to make the claim that their research would make a contribution. P1 and P7 also attributed the frequent citations to the requirements of the funding agency:

> They seem to be looking for that [frequent citation] as well. They want to know that you know some of their research traditions so as to be working with them. (P7)

> I think there is an understanding with SSHRC, that we should be familiar with the published work, and if you look at the instructions, they actually tell you to do this. So I think what we are doing in large part is responding to the requirement, because they want you to do a version of literature review. So they are depending on your being familiar with other people's written work. So I think it's not so much we decide what we are gonna do independently, but I think probably responding to the same set of instructions. (P1)

P1 further explained that the inclusion of a long list of references might reflect the disciplinary practice, which confirmed Hyland's (1999) claim about the citational difference between "soft" disciplines and "hard" disciplines:

> The other thing to add to that, I think also maybe in some areas more than others, there are more materials being written in Education, there is a lot that has been written, so there is a lot to cite. (P1)

Interestingly, P1 even considered it a kind of strategy to use additional spaces (since the length of references is not restricted) to demonstrate her relation to the community:

> I wanted to make sure also I was citing as strategically as I could people who are likely to read the proposal in the peer review process.

P5, a professor from Great Britain, believed that the frequent use of citations reflected the culture of North America:

> I cited much more in North American journals and in the North American grant applications than I would in British journals and grant applications, because their attitude towards scholarship is different, you know. In Europe, not just Britain, the notion is that, you can be genius and you can have original ideas, ... In North America, the notion is much more...the scholarship has to be, I called it, building on the shoulders of giants. And I don't trust you to know those giants unless you tell me who they are and that you know their work. And that's a very different approach, ...,

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it's been very interesting to me to come to a culture that I haven't realized, a more academically
different culture. I've been very alert and alive to all these changes.

P5 said she would stick to her principle that she only cited relevant and key work in her

field. But she also admitted that it was one of those rules of the game that we need to

follow if we want to play the game in North America.

However, as P6 (the professor who used citations most frequently in her proposal, see

Figure 3.1) argued, the high density of citations does not at all mean being unselective:

I have actually never thought of it in terms of numbers. I'd rather think of it in terms of
demonstrating how informed I am about the field in which I work. So in fact... what I tend to do
is actually be fairly selective when I am choosing my references, so again there are space
constraints in writing a grant proposal. What you want to be doing is to support the statement....
Fundamentally I make decisions about what my audience is going to know about this area, who
they are going to recognize as being important researchers. And I am going to choose those
references to support my argument.

All these comments provide an interesting look into underlying motivations of frequent

citations in research grant proposals. Frequent citations could be a result of cultural,

disciplinary, as well as institutional influences. Most important, it is a response to the

requirements of the funding agency, and a response to the communicative purpose of the

genre to demonstrate the proposers' research competence by showing his/her knowledge

of the field.

4.3.2 Distribution of citations

Table 3.1 clearly shows the distribution of citations in the nine grant proposals. As

can be seen, citations spread across all the four main sections, a finding that offers

credence to the observations of Crookes (1986) and Hopkins & Dudley-Evans (1988). The

finding also provides evidence for what I analyzed in the previous section about the move

structure. All grant proposals divided the main texts into four main parts as required by

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SSHRC guidelines. However, these four parts are not homogeneous chunks as specified by the guidelines. For instance, in the introduction part, seven out of nine proposals involved reporting previous studies, though the guidelines prescribe a brief statement of the objectives. In the method part, citations account for 25.66% of the total, constituting the second largest slice in the chart (see Figure 3.2). Reporting prior studies is obviously also included in this part to establish territory, indicate gaps, and most important, to justify why certain methodologies are employed by introducing the sources. Even in the part of Communication of Results, P1 cited specific studies to explain how they would be disseminated (see Table 3.1). In conclusion, although 'Context' is the only part in which literature review is required, citations can be found in all four main parts.

Table 3.1 Percentages of citations in the four main parts of SSHRC grant proposals

	Per Paper				Percentage			
	I	C	M	CR	I	C	M	CR
P1	1	71	17	16	0.95%	67.62%	16.19%	15.24%
P2	1	86	7	0	1.06%	91.49%	7.45%	0.00%
P3	7	4	42	0	13.21%	7.55%	79.25%	0.00%
P4	2	40	18	0	3.33%	66.67%	30.00%	0.00%
P5	0	54	17	0	0.00%	76.06%	23.94%	0.00%
P6	16	59	36	0	14.41%	53.15%	32.43%	0.00%
P7	6	22	2	0	20.00%	73.33%	6.67%	0.00%
P8	5	4	3	0	41.67%	33.33%	25.00%	0.00%
P9	0	55	13	0	0.00%	80.88%	19.12%	0.00%
Average	4.22	43.89	17.22	1.78	6.29%	65.40%	25.66%	2.65%

Note: I=Introduction Part; C=Context Part; M=Methodology Part; CR=Communication of Results

Figure 3.2 Distribution of citations in the four main parts

1   Introduction 6.29%

2   Context 65.40%

3   Methodology 25.66%

4   Communication of Results 2.65%
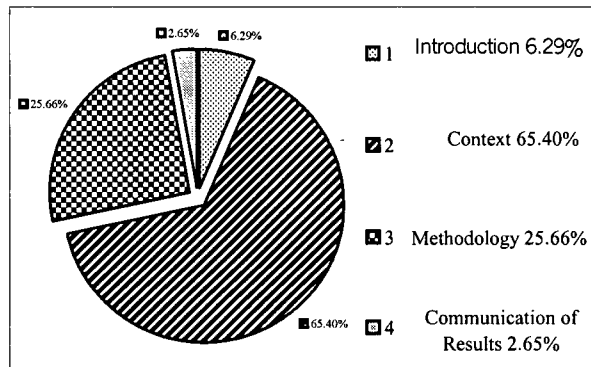
4.3.3 Integral/non-integral citations

The dichotomy between integral and non-integral citations is an important distinction proposed by Swales (1990). According to Swales, "an integral citation is one in which the name of the researcher occurs in the actual citing sentence as some sentence-element; in a non-integral citation, the researcher occurs either in parenthesis or is referred to elsewhere by superscript number or via some other device" (p. 148). In Table 3.2, we can clearly see a distinct preference for non-integral structures in all the grant proposals except P4. This is consistent with Hyland's (1999) finding about the same preference in the genre of research articles. Still, with an average percentage of 73.8% of non-integral forms in grant proposals, grant writers seem to make greater use of non-integral structures than research article writers do. According to Hyland, "integral forms tend to give greater prominence to the cited author" (p. 25) while non-integral forms serve the opposite function. If this is true, then it seems grant writers tend to downplay the agency while directing readers' attention more to the discussion of the research issues.

Table 3.2 Integral/non-integral citations

	Per Paper		Percentage	
	Integral	Non-Integral	Integral	Non-Integral
P1	41	64	39.0%	61.0%
P2	27	67	28.7%	71.3%
P3	9	44	17.0%	83.0%
P4	36	24	60.0%	40.0%
P5	9	62	12.7%	87.3%
P6	9	102	8.1%	91.9%
P7	8	22	26.7%	73.3%
P8	2	10	16.7%	83.3%
P9	17	51	25.0%	75.0%
Average GP	17.56	49.56	26.2%	73.8%
Applied Linguistics RA			34.4%	65.6%
Sociology RA			35.4%	64.6%
Average RA			32.2%	67.8%

Note: RA stands for research articles, and GP stands for grant proposals

When I asked the professors whether they agreed with this claim, most of them gave a

negative answer:

> To me I don't see that as non-integral. I see it these are two different ways of expressing how
> other people's work has informed me. ...that they are equally valid. ...I think part of the reason
> that this are mixed is to offer some varieties in terms of presentation. (P6, from interview)

In answer to my question, P9 was very hesitant. Though he did not deny the possibility

that non-integral citations might serve the function to weaken the agency of the cited

authors, he attributed the frequent use of non-integral to stylistic need, the need to

foreground the research problem, and the need to fully use the limited space:

> Grant writers may reduce the agency of the authors they cite by using non-integral citations more
> frequently than integral citations. However, I don't think they do it intentionally to reduce the
> agency of the authors. Rather I feel it is a question of style, among other things. For example, I am
> currently preparing a research application for the National Cancer Institute of Canada. In their
> format, authors are not identified in the text by name, but only by footnote. I also attribute the
> differences you found to such things as wanting to emphasize the research problem, as you
> suggested, and to incorporate a great deal of research literature in a limited space. There is also the
> issue of wanting to highlight their own research work and its pertinence to the proposed research.
> (P9, from e-mail)

It is interesting to note that P4 is the only professor who preferred the integral form to the non-integral with a ratio of 3 to 2. In my e-mail to her, I asked her if her preference for integral citations is somehow related to her past research experiences and research interest; she confirmed my speculation by the following comment:

> I think I am more likely to use integral citations because this introduces a more personal element to the writing, and acknowledges the construction of ideas in relationship to human agency. (P4)

4.3.4 Reporting and non-reporting structure

The dichotomy between reporting structure (in which a 'reporting' verb such as *show, establish, suggest* is employed to introduce the cited work) and non-reporting structure is another attribution feature of interest to researchers. As can be seen from Table 3.3, there are substantial differences between the genre of grant proposals and the genre of research articles, both in the density of reporting structures and in the choice of reporting verbs. In the nine grant proposals, the average number of reporting structures per paper is 12.8 contrasted with 28.6 in average research articles, 33.4 in applied linguistic research articles, and 43.6 in sociology research articles. These figures can be put together and compared because of the comparable text length between research articles and grant proposals, as I have mentioned earlier. In addition, while in research articles the percentage of reporting structures is as high as 42.6%, in the grant proposals reporting structures comprised only 22% of total citational forms.

Table 3.3 Reporting forms in the nine grant proposals

	RS	TC	RS/TC	Reporting Verbs
P1	26	105	24.8%	examine(8), point to(6), be committed to (10), focus on, analyze
P2	12	94	12.8%	highlight 2, note 2, find(2), argue, show, commend, suggest, problematize, challenge
P3	10	53	18.9%	suggest 2, describe, assert, study, write, seem to agree, attempt to illustrate, substantiate, claim
P4	20	60	33.3%	emphasize(4), find(3), examine (2), suggest 2, seek to 2, identify, argue, investigate, highlight, insist, posit, advocate
P5	10	71	14.1%	posit(4), reveal, report on, work at, touch upon, propose, warn against
P6	7	111	6.3%	contribute to(3), emphasize, note, develop, use
P7	20	30	66.7%	call for(2) (2), point out(2), challenge(2), raise(2), emphasize(2), state, claim, reveal, touch on, describe, find, acknowledge, call
P8	1	12	8.3%	name
P9	9	68	13.2%	find 3, describe(2), propose, refer to, conclude, identify
Average	12.8	67.1	22.0%	
Ave. RA	28.6		42.6%	suggest, argue, found, show, describe, propose, report
AL RA	33.4		44.4%	suggest, argue, show, explain, found, point out
Socio RA	43.6		42.0%	argue, suggest, describe, note, analyze, discuss

Note:

* The figure behind the reporting verbs indicates the frequency of the occurrence. If the verb appeared only once in that paper, no indication is given.

* RS=reporting structures; TC=Total number of citations; Ave. RA=Average situations in research articles; AL RA= research articles in Applied linguistics; Socio RA=research articles in Sociology

Because of the small sample size as well as the limited use of reporting structures, it is hard to draw a conclusion from the data about the regularities of the use of reporting verbs in grant proposals. Therefore in Table 3.3 I simply list all the reporting verbs used in each paper and their frequency of occurrence. I tend to find that there is a considerable diversity in the choice of reporting verbs compared with the quite uniform use of reporting verbs in research articles. And there are some reporting verbs quite unique to this particular genre, such as 'be committed to', when self-citation constitutes a quite large portion of all citations:

> I am strongly committed to results of research being widely disseminated, not only in scholarly journals and monographs (1996a/c/d, 1997/98a, 1998, 1999a), but also to diverse, generally more

popular audiences (as with 1996b, 1997/98 b, 1999b/c). (Cited from P1's proposal)

Reporting verbs such as 'seek to', 'call for', which are used to create a research space, are

unique to this genre as well:

> My book "..." (Y, in press) <u>seeks to</u> develop a conceptualization of identity that does justice to the
> complex lives of language learners, constantly changing across historical time and social space.
> (Cited from P9's proposal)

4.3.5 Short quote/Block quote/Summary/Generalization

According to Hyland (2000), "short direct quotes" are limited to quotes of six to eight

words, "block quotes" refer to extensive use of original wording set as indented blocks,

"summary" reports a single source while "generalization" ascribes the proposition to two

or more authors. This typology shows how source material is used in the writer's

argument (Dubois, 1988; Thompson, 1996), and helps reveal writers' attitudes towards

the cited work.

Table 3.4 Presentation of cited work

	Occurrences in each paper					Percentage1				Percentage 2			
	Q	B	S	G1	G2	Q	B	S	G1	Q	B	S	G2
P1	0	0	21	84	18	0.0%	0.0%	20.0%	80.0%	0.0%	0.0%	53.8%	46.2%
P2	5	5	26	58	17	5.3%	5.3%	27.7%	61.7%	9.4%	9.4%	49.1%	32.1%
P3	0	5	9	39	12	0.0%	9.4%	17.0%	73.6%	0.0%	19.2%	34.6%	46.2%
P4	1	1	19	39	10	1.7%	1.7%	31.7%	65.0%	3.2%	3.2%	61.3%	32.3%
P5	5	5	10	51	11	7.0%	7.0%	14.1%	71.8%	16.1%	16.1%	32.3%	35.5%
P6	7	4	40	60	24	6.3%	3.6%	36.0%	54.1%	9.3%	5.3%	53.3%	32.0%
P7	1	0	12	17	8	3.3%	0.0%	40.0%	56.7%	4.8%	0.0%	57.1%	38.1%
P8	0	2	0	10	4	0.0%	16.7%	0.0%	83.3%	0.0%	33.3%	0.0%	66.7%
P9	0	2	25	41	16	0.0%	2.9%	36.8%	60.3%	0.0%	4.7%	58.1%	37.2%
Average	2.1	2.7	18.0	44.3	13.3	2.6%	5.2%	24.8%	67.4%	4.8%	10.1%	44.4%	40.7%
AL RA						8.0%	2.0%	67.0%	23.0%	8.0%	2.0%	67.0%	23.0%
Socio RA						8.0%	5.0%	69.0%	18.0%	8.0%	5.0%	69.0%	18.0%

Note: Q=short quote, B=block quote, S=summary, G=Generalization

AL RA=research articles in applied linguistics; Socio RA=research articles in sociology

Since Hyland did not specify very clearly how to count the number of generalizations,

and neither did he offer any textual example to show how they are actually counted in his study, I list two ways of counting here, results of which are listed as G1 and G2 respectively. For instance, in the following case, I counted the actual work cited in the form of generalization as G1 (=4) and the whole proposition as one instance of generalization as G2(=1):

> These abilities appear to be relatively independent of conceptual understanding and, as such, develop more rapidly (Case & Okamoto, 1996; Fischer & Canfield, 1986; Porath, 1996, 1997).

As we can see in Table 3.4, on average, about 67.4% of the studies cited are presented in the form of generalization, and each instance of generalization includes three to four studies (13.3/44.3). Even if the number of generalizations Hyland counted was G2, comparing his figures with those in our corpus of grant proposals, we can find that while in research articles citations are overwhelmingly expressed as summary (67% in AL RA/69% in Sociology RA) with generalization comprising only 23%(AL RA)/18%(Sociology RA), the figure of 40% in grant proposals reveals a much more frequent use of generalization. By presenting the cited work mostly in the form of generalization, grant writers tend to put cited work more in an unnoticeable position, thus leaving more space for their own interpretations. With cited work often appearing in a group, readers would be more often than not left without strong impressions of individual work; the information they get would be centered round the research issues and the grant writer's interpretations. In this way, grant writers successfully achieve the communicative purpose of promoting the research topic as well as themselves as credible researchers.

It is interesting to note that the sum of short direct quotes and block quotes in grant proposals of Education (4.8%+10.1%) (see the figures in Percentage 2) is close to that in

research articles of soft disciplines (8%+2% in Applied linguistics or 8%+5% in Sociology). This helps to confirm Hyland's proposition that writers in soft disciplines tend to use more direct quotations than writers in hard disciplines do.

4.3.6 Self-citation

While in most academic genres self-citation "is far less central to academic argument than other-citation" (Hyland, 2000, p. 23), it is a very important feature in the genre of grant proposals owing to its usefulness in helping the writer realize explicit presence, construct an authoritative academic persona, and satisfy promotional purposes.

Table 3.5 Percentages of self-reference in both reference list and textual context

	References in reference list			Content citations		
	SRL	RL	SRL/RL	SCT	TCT	SCT/TCT
P1	21	74	28.38%	41	105	39.05%
P2	9	48	18.75%	13	94	13.83%
P3	13	35	37.14%	20	53	37.74%
P4	6	54	11.11%	8	60	13.33%
P5	8	65	12.31%	8	71	11.27%
P6	6	46	13.04%	18	111	16.22%
P7	4	27	14.81%	5	30	16.67%
P8	2	11	18.18%	2	12	16.67%
P9	9	55	16.36%	19	68	27.94%
Average	8.7	46.1	18.90%	14.9	67.1	21.41%
Ave. RA				5		7.90%
AL RA				3		5.00%
Socio.RA				5		5.60%

Note: SRL=Self-references in the reference list; RL=all references in the reference list; SCT=Self-citations in text; TCT=Total number of citations in text

As can be seen from Table 3.5, there are roughly 8.7 items of self-reference in the reference list per proposal, constituting about 18.9% of total number of citations. In text, the average instances of self-citation increase to 14.9 per proposal, almost double of the

instances in the reference list. From 16.36% in reference list to 27.94% in text, we can clearly see the more frequent repetition of self-citations than that of other-citations in text. Grant writers' intention to project their self-work is thus quite evident.

Hyland (2001) examined self-citation in a corpus of 240 research articles from 8 disciplines and found that about 70% of the papers contained a self-citation and that self-citations comprised 8% of all citations. The average number of self-citations in each paper was 4.6. Compared with these figures on research articles, grant proposals obviously have much denser use of self-citations (see Table 3.5). One thing that is worth noting is that, while in Hyland's study self-citations tend to appear more frequently in sciences and engineering (11% of total references) than in soft fields (5%), the same can not be verified in my corpus of nine grant proposals coming from the field of education. A percentage as high as 21.41% shows that academic writing of soft fields could also have a high frequency of self-citations. This seems to be at odds with Hyland's claim that there is comparatively little opportunity for self-citation in soft fields due to the wide academic territory and non-linear research progression.

When the participating professors were asked about the underlying motivation for the frequent use of self-citations, they all mentioned that it was an important means to demonstrate the proposers' track record and to impress the grant committee:

> Self-citation is in an intelligent fashion. It's not just throwing them in, you know, to impress the committee, but because the committee is looking at how programmatic your research is. Part of what you need to be doing is convincing them what you have been doing. You have been producing publications that come from previous funding. So that's part of it. But I think the biggest motivation for that is to show that you are making an intellectual contribution that you are using those citations in a way that reflect in a way you see yourself fitting in this literature. (P6)

> It's built on previous research, and so it's not a new project, and so when I was citing myself

extensively, I was trying to show the things I have done in this area, this is as far as I have gone. (P1)

P7 attributed the high frequency of self-citation to her authoritative status in the proposed research area:

> I probably refer to myself a lot and that's because, I'm considered in North America to be the prime principal research in the whole area of Year Round Schooling and student achievement, and so I've written a book, I've written monographs, I've written a whole lot of articles, and it comes to both national and international attention. But there is not a lot of other research about it. So sometimes, you have to refer to yourself, but I think it is always good to try balance: refer to other people as well. At the same time, if you are applying as an established scholar, you need to show you have already done something in the field.

However, the need to balance self-citation and other-citation is also mentioned by the scholars, as we can see from the above P7's comment, as well as P3's comment below:

> On the other hand, it's not just you. You have to be situated in the community of scholars. So you have to do this (other-citation) as well.

4.3.7 Summary

In this study, I have employed some typologies developed by previous researchers to examine the attribution features of grant proposals. By combining qualitative data from interviews and e-mails, I also attempt to offer tentative explanations for those referential behaviors by exploring the underlying conventions and communicative purposes of this particular genre.

From the above discussions, we can clearly see that the genre of grant proposals differs significantly from that of research articles in the use of citations (see Table 3.6). First, the density of citations is much higher in research grant proposals than in research articles. Second, while in research articles writers also prefer non-integral citations to integral forms, grant writers have an even higher percentage of non-integral use. Third, in grant proposals, literature review is always centered round the research issues rather than

individual works; therefore non-reporting structure has an overwhelming use. Fourth, generalization form of citation, in which cited studies appear in groups, is a form preferred by grant writers. Lastly, self-citations play a much more important part in grant proposals than in research articles.

Table 3.6 Comparing attribution features of grant proposals and research articles

	Grant Proposals	Research Articles
Citations per 1000 words	16.8	10.7
Non-Integral	73.8%	67.8%
Non-Reporting	77.6%	57.4%
Generalization	67.4%	26.6%
Self-Citation	21.4%	7.9%

By putting all these five aspects of data together, I attempted to form a tentative picture of the attribution features of grant proposals. When in most cases cited work were in brackets, or appeared in groups, without reporting verbs expressing attitudes or comments on them, grant writers seemed to put cited work as well as cited authors in a comparatively unnoticeable position. Contrasting these features with the heavy use of self-citations, I speculated that grant writers tended to background other researchers' work while foregrounding their own track record, in order to achieve the genre's overall promotional purpose. However, as Swales (1986) has argued, it is always dangerous to make such assumptions. When the grant writers were consulted about their opinion, most of them attributed their preference for non-integral, non-reporting and generalization forms of citations to the constraints of space:

> I don't agree that the prominent use of non-integral, non-reporting, and generalization forms of citation has the purpose of weakening the agency of cited authors. While it is true that a grant writer wants (and needs) to feature their own track record because the track record is taken into account in adjudication, the grant genre also requires the demonstration of knowledge of relevant literature in limited space. I think that is the reason you see this sort of citation most prominently. If a more lengthy literature review were possible, you would see more integral, reporting, and

summary forms of citation. (P6)

If you try to write a proposal you will find that this method of referencing uses the least number of words - and the space is strictly limited in a grant proposal. Having been on the SSHRC committee, I also know that what adjudicating readers are interested in is seeing whether the proposer has read the important body of relevant work, so I do not bother to write out the author's opinions specifically. In an article one's purpose is quite different. One has room and a need to lay out the arguments of others so that readers can follow up the references if they wish. (P5)

Some of the grant writers attributed it to the stylistic need for variation. Although we are unable to come to a definitive conclusion in this study, the interesting figures obtained from our data about the distinctive referential behavior in this particular genre point up the need for further investigation into the underlying motivations of individuals and conventions of the community.

4.4 Hedges and boosters

To answer the third research question, the use of hedges and boosters was examined in the nine research grant proposals. The working definitions of hedges and boosters are consistent with the literature I reviewed in Section 2.3.3. Hedges refer to words and phrases that are used to negotiate a precise representation of the state of knowledge, or to convey deference, humility, and respect for colleagues views (Myers 1989; Hyland, 1996a, 1996b), while boosters are words and phrases that express the writer's commitment to a claim and establish solidarity with an audience by stressing the shared knowledge (Hyland, 1996b, 2000). The results of this study reveal the importance of hedging and boosting in research grant writing and show an interesting distribution of their use across rhetorical sections. However, before I discuss the results, I will first introduce the categorization of boosters in this study, and explain my understanding and reading of the word "will" in the grant proposals.

4.4.1 Categorization of boosters

In identifying hedges and boosters, a group of words or phrases came into prominence. These are verbs, adjectives or nouns that directly boosted the proposed research. The following are examples in which these words and phrases are highlighted:

> This study **will not only benefit** professional practitioners, but also.... Studying...are **important** because they **will help** educators understand how to.... Policy-makers and school administrators **will benefit from** specific findings from.... This is a **unique** study where...will be documented and analyzed. Given the rising interest in..., this study **will undoubtedly contribute valuable insights into** the beliefs, practices, and issues surrounding such programs. This study is also **unique** in that it.... By dovetailing..., the regional study

will contribute to a growing body of literature in several domains:.... (P3)

Because microgenetic analysis allows for articulation of social cognitive processes, the roles of teachers and peers in scaffolding learning, and sociocultural influences (Catan, 1986), it **contributes to** the research bases on the development of social understanding and prosocial behaviour in young children and effective instruction in the social domain. It **will extend** the literature on early intervention with children at-risk for school failure. It also **will contribute to** research on highly able children who are disadvantaged, an area where little work has been done on either the nature of information processing or on instructional effectiveness. (P6)

This research **will help** to address concerns in two ways. First, continued analysis of stakeholder perceptions and student achievement data **will assist** politicians and educators with policy and decision making. Second, the proposed research **will be the first major** educational study to examine equity issues related to school-year calendar changes. Thus, it has the potential to be **a landmark study** designed to provide a research base that **will help** educators to offer equitable programs to all students. (P7)

This research **responds to the importance** that Canadian society places on the family. ...It also addresses ...--an issue that is **of critical importance.** (P9)

As I have discussed in the literature review, Myers (1990) in his case study points out that English researchers, when presenting their work as interesting and original, clearly realize that direct boosters like *new, fundamental, and important* are all but forbidden, and even *interesting* seems to provoke some readers. However, in my corpus of nine research grant proposals, there are approximately 196 instances of such words and expressions. Compared with the number of boosters (=266) identified according to Hyland's list (2000), these words and expressions are a large sub-category if we consider them as boosters (see Figure 4.1).

Figure 4.1 Categories of boosters
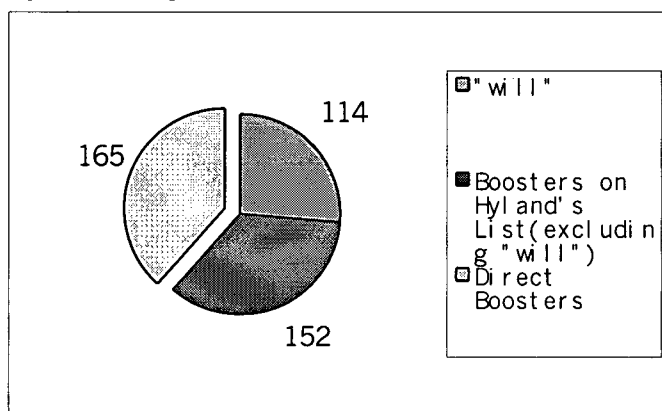
In addition, if we search through Hyland's examples of boosters, we can also find these words and phrases (which I termed as "direct boosters") although they do not appear on his list of 180 items of boosters. Here are examples given by Hyland (2000, p. 98) (underlining is in the original):

> The extent of cathodic activity occurring immediately proximate to the polymer-metal interface <u>will be the most significant factor</u> determining rates of coating disbandment.

> Therefore, <u>it is important</u> to consider all potential sources that may add to the total aflatoxin load on animal and human populations. Aflatoxins are produced by the filamentous fungi Aspergillus flavus (Link) and A.parasiticus (Speare). The detection of aflatoxins in water from a cold water storage tank is described here, and this represents <u>the first</u> such published report.

Interestingly, in Salager-Meyer's study (1994), he included some of these words, such as "of particular importance", "extremely interesting", into a subcategory of hedges, which he termed as "emotionally-charged intensifiers". However, considering these words and phrases serve the purpose of promoting the value of the research and expressing the assurance of the writer, I decided to categorize them as a sub-group of boosters. One thing I need to mention is that I only consider those words as boosters when they were used to describe the proposed research.

As can be seen from Figure 4.1, the word "will" was used very frequently in the

nine research grant proposals, with altogether 498 instances. In the previous literature

on boosters (e.g., Hyland, 1996b, 2000; Vassileva, 2001), there are no specific

discussions of the use of "will". However, it is obviously unwise to include all "will"s

as boosters. Compare the use of "will" in the following two examples:

> 1) It **will** extend the literature on early intervention with children at-risk for school failure. It
> also **will** contribute to research on highly able children who are disadvantaged, an area where
> little work has been done on either the nature of information processing or on instructional
> effectiveness.
>
> 2) For the first study, the teacher (or teachers) **will** be asked to nominate.... For the second,
> nomination of five children who are ... **will** be requested (the novice group). In both cases,
> nominations **will** include average language ability. The studies **will** take place in January of
> 2000 and 2001 in order that teachers have sufficient knowledge on which to base their
> nominations. (P6)

These are two examples cited from P6's proposal. I inquired about P6's own

understanding of the use of "will" in these two paragraphs in my e-mail to her. And

below is her answer:

> Here, the uses of "will" are somewhat different. In the first set of examples, "will" is being
> used with certainty and confidence to indicate how the research will contribute to the
> field. In the second set of examples, "will" is used in describing what will take place in the
> research procedures. Both sets express future tense, but there is a subtle difference between
> them. The first is intended to convey certainty of the research's merits; a reviewer would
> likely understand that there is more emphasis on "will." The second is the more usual
> "everyday" use of "will."

Most professors, just like P6, confirmed my understanding of the different shades of

meaning in the use of "will". P1, for instance, in my second interview with her,

commented on the use of "will" based on the examples I cited from her proposal. She

believed that in some cases, the "will" is just the statement of intent while in some

other cases, the "will" "has the results from it":

> They [in the second situation] express confidence, and they tell you what the outcome is
> going to be. So they are boosting yourself, because you are promising these will be the
> outcome. (P1)

Based on this understanding, I checked the 498 instances of use of "will" again together with the inter-rater, and came up with 114 instances of "will" which we considered as 'real' boosters. In Table 4.1 below, the left half columns show the distribution of all "will" in six rhetorical sections. As we can see, the use of "will" appears most frequently in the Method section while least frequently in the Literature review. However, owing to the fact that in the Method section, "will" was usually used to simply express future tense, we can see from the right half columns of the Table that instances of "will" which were identified as "real" boosters appeared most frequently in the Benefit section rather than in Method section. And the instances of "will" used as the real boosters constitute only 13% of total "will" in the Method section.

Table 4.1 "Will" use in sections

	GPS	I	LR	B	M	C	TT	GPS	I	LR	B	M	C	TT
P1	2	1	2		14	4	23	2	1	1		6	2	12
P2	4	3	5	6	29	4	51	3		2	6	2		13
P3	9	9	2	6	30	4	60	2		2	5	9		18
P4	18	1	1		7	4	31			1		2		3
P5	12		4	8	38	9	71	3		3	3	3		12
P6	6	4	2	2	50	2	66	3	1		2	2		8
P7	9	1	6	11	45	12	84	4		4	11	9	1	29
P8	8	6	1	2	19	4	40		3	1	1			5
P9	8	1	7		56		72	4		5		5		14
Total	76	26	30	35	288	43	498	21	5	19	28	38	3	114
Per 1000	14.18	5.8	2.12	17.9	24.46	20.5		3.92	1.12	1.34	14.3	3.23	1.43	
ratio								0.28	0.19	0.63	0.80	0.13	0.07	

Note: GPS=Grant Proposal Summary; I=Introduction; LR=Literature Review; B=Benefits; M=Methodology; C=Communication of Results; TT=Total

However, there seem to be many gradations of meaning between pure future sense and certainty of expected outcome. Besides, the identification inevitably involves subjectivity, as reflected by P5 and P7's different understanding in answer to my

questions:

> "will" always means the future tense in anything I write. If I want to add emphasis I do so by writing "<u>will</u>" or "*will*" or "**will**" in the actual prose. They are therefore NOT boosters here in the sense you are using. (P5)

> I think it's basically when you say "will", for me at least, it's certainly a future tense, but it's also "this is the defended plan, this is what you can account on saying 'I am going to do these things'"(P7)

P5 excluded all occurrences of "will" from boosters while P7 believed that all uses of "will" carry the meaning of certainty and confidence to some extent. It thus seems almost impossible to give a clear-cut identification of boosting words. Therefore in later discussion, situations of including all uses of "will" and including only the 114 instances would be both concerned.

4.4.2 Most frequent hedges and boosters in the corpus

Table 4.2 shows the most frequently occurring hedges and boosters used in the corpus, with *may* and *will* constituting approximately 22% (based on figures in Table 4.5b) of all devices. This confirmed Hyland (1996b)'s finding that *may* and *will* accounted for nearly 17% of all hedges and boosters in academic writing. Table 4.2 also reveals that the most common boosters (here computing boosters1 for instance) account for 59% of the total and the most frequent hedges for about 55%.

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Table 4.2 Most frequent hedges and boosters in the corpus

Hedges		Boosters1		Boosters2	
may	39	will	498/114	will	498/114
suggest	20	importance	28	particularly/in particular	21
would	19	particularly/in particular	21	find	16
often	15	find	16	evident(ce)	11
propose	14	extend	14	indeed	9
might	12	significant	14	clear(ly)	8
possibility	11	assist/help	13	determine	7
generally	10	critical	13	expect	7
indicate	8	contribute to	12	given that	7
could	7	evident(ce)	11	demonstrate	5

Note: Boosters1 in this table refer to the boosters including the sub-category of direct boosters discussed in 4.4.1, while Boosters2 only include words on Hyland (2000)'s list.

It is interesting to note that the most frequent hedges did not differ much from those in other academic genres, such as research articles and scientific letters (see Hyland, 1996a, 1996b, 2000), with dominant use of modal verbs (*may, would, might, should, could*), approximators (*often, generally*) and epistemic verbs (*suggest, propose*). However, in the boosters' lists, the sub-category of direct boosters that I discussed in the above section (*important/importance, contribute, assist/help, extend, significant, critical*) constitutes the largest portion of most common boosters if "will" is taken into account. In the list of Boosters2, this sub-category of direct boosters was put aside, and only boosters included in Hyland's (2000) list were calculated. And the result shows that boosters, such as *show, the fact that,* which were frequently used in research articles and scientific letters (Hyland, 1996b, 2000), did not seem to be the most common boosters in my corpus, whereas boosters such as *must, given that* which appeared on my list were not the most frequent in other academic genres. This might be explained by the fact that the grant writers were proposing a plan rather than

reporting results of a completed study.

4.4.3 Density of hedges and boosters

The quantitative results demonstrate the importance of hedging and boosting in research grant writing, with an average of 122 (including all "will")/79 (excluding "will" expressing simply future tense) occurrences per paper, about 27.10/17.31 occurrences per 1000 words. Table 4.3 (a) shows the results when including all instances of "will" while Table 4.3 (b) shows the results of including only instances of "will" that are believed by the researchers as "real" boosters.

As can be seen, the combinational density of hedges and boosters in my corpus of research grant proposals is quite close to the approximately 20 occurrences per 1000 words in research articles (Hyland, 1996b) and 18.4 in scientific letters (Hyland, 2000). However, while hedges exceeded boosters by nearly 3 to 1 in research articles and 2 to 1 in scientific letters, boosters interestingly exceeded hedges in my corpus of research grant proposals. Table 4.3 (b) shows that while the frequency of hedges was only about half of that in research articles (6.69/14.60), the use of boosters was almost double of that in research articles (10.63/5.88).

Table 4.3(a) Density of hedges and boosters

	Hedges		Boosters		Totals	
	Total occurrences	per 1000 words	Total occurrences	per 1000 words	Total occurrences	per 1000 words
P1	30	7.36	48	11.78	78	19.15
P2	29	5.78	104	20.74	133	26.52
P3	15	4.12	87	23.88	102	28.00
P4	26	5.95	63	14.41	89	20.36
P5	45	9.76	93	20.16	138	29.92
P6	12	2.82	96	22.57	108	25.39
P7	77	12.48	125	20.26	202	32.74
P8	16	5.87	59	21.64	75	27.51
P9	30	6.06	140	28.29	170	34.35
GP Average	31.11	6.69	90.56	20.42	121.67	27.10
RA Average	85.5	14.60	34.5	5.88	120	20.48

Table 4.3(b)

	Hedges		Boosters		Totals	
	Total occurrences	per 1000 words	Total occurrences	per 1000 words	Total occurrences	per 1000 words
P1	30	7.36	37	9.08	67	16.45
P2	29	5.78	66	13.16	95	18.94
P3	15	4.12	45	12.35	60	16.47
P4	26	5.95	35	8.01	61	13.96
P5	45	9.76	34	7.37	79	17.13
P6	12	2.82	38	8.93	50	11.75
P7	77	12.48	70	11.35	147	23.83
P8	16	5.87	24	8.80	40	14.67
P9	30	6.06	82	16.57	112	22.63
GP Average	31.11	6.69	47.89	10.63	79.00	17.31
RA Average	85.5	14.60	34.5	5.88	120	20.48

Many professors mentioned that, although they had never heard of the term 'boosters' before, they definitely used these sorts of words and phrases in their grant writing. P4, for instance, said:

> I never called it the booster, but I do try and make the point that it will be significant. I do say 'it is important research', 'will make a contribution', 'will add to the knowledge about XYZ'. Yeah, I am very careful about trying to make that clear.

Similarly, P2 said,

> So I definitely use those sorts of phrases, on the parts I thought would really need to be strong, I want to really focus on. Because there is a lot of writing, you know, they don't really have to read through all the stuff; you do have to put in more colorful comments trying to get their attention.

P2 argued that the use of boosters is one of the strategies that has made the difference between grant proposal writing and other academic writing. And he even considered grant writing as a kind of creative writing:

> That's why some people are so skillful at it. People might be brilliant researchers, but they can't get the money, because they don't know how to do it, to do the creative writing almost in some senses. (P2)

P7 talked about her grant application experiences, which she believed made her draw on more boosters:

> The first 2 times I applied with a colleague for a SSHRC, she was the regular scholar and I was the new scholar, and we didn't get it. And the next time, I was applying as the PI; I did a draft, and I gave it to a doctoral student, who was a friend, and he read it and he said, you are downplaying your expertise. You are downplaying what you know and what you can do, and you need to foreground that more and you need to sound confident or you are not going to convince them that you should be funded. And he said, so take a look here, be stronger here, be stronger here, and I did that, and I was funded. So personally, I have taken that advice ever since. (P7)

However, in many cases, scholars are just unconsciously using these stylistic devices without noticing that they have become part of their writing and serve the hedging or boosting functions. P6 did not agree, for instance, that words like "demonstrate" carry any boosting meaning, and she believed that her grant writing would not differ from her journal writing in terms of stylistic features. P1, in answering my question why boosters were more frequently used than hedges, hesitated and said:

> I don't know. I suppose the other thing that happens in these proposals is that you are meant to be certain about what it is you want to do, and part of getting money is to look confident about you are supposed to do.

P9 believed that he used boosters more frequently to meet the requirements of the

funding agency:

> I use more boosting words than hedging words because I have been led to believe that funding agencies want to see clarity in goals and intended research products, relevance and significance of findings.

It is interesting to note that in all the eleven grant proposals I collected, only two of them (P5 and P7) used hedges a little bit more than boosters. P5, who comes from Great Britain, again believed that her preference for hedges over boosters is culturally inherited:

> I am British not North American! True Brits do NOT promote themselves -ever. We find a lot of N.A. writing very boastful, presumptuous and self-aggrandizing. This is PURELY a cultural difference I think. I have had to learn to put in what you call "boosters" since I have been told here repeatedly that genuine honesty is not recognised here and no one will think it is "very good" if I do not say it is "very very good"! I spend my time making my students tone down some of their more outrageous claims to stardom! (Cited from e-mail)

> When I was writing a proposal for a North American funder, i.e., when I was writing for tone to apply to SSHRC, I had to use a much more forceful style than when we were writing and applying for English funding, because that's cultural, because nobody in England would dream of saying, 'I am an eminent professor', and nobody would dream of saying, 'the very important work which I have done in the area of…", whereas over here, if you don't say 'the very important work I have done here', people would assume it isn't important. I mean, this whole notion of, what you just called 'hedges and boosters', is completely alien to the British English culture. (Cited from interview transcript)

From the comments offered by the professors, it seems clear that scholars consciously or unconsciously tend to use (or learn to use) more boosters than hedges in grant writing, due to the communicative need of the genre, or the community's cultural influence, or for the purpose of catering to the requirements of the funding agency.

4.4.4 Distribution of hedges and boosters

As Table 4.4 and Figure 4.2 indicate, the section that discusses the benefits of the proposed study is both the most heavily hedged division and the most heavily

boostered division (10.73 and 43.41 instances per 1000 words, respectively). By contrast, the Method section exhibits the lowest use of hedges (5.01 instances per 1000 words) and the lowest use of boosters (5.78 instances per 1000 words). This is consistent with other researchers' findings (e.g., Salager-Meyer, 1994), and may well due to the fact that the Benefit section, as the name implies, serves the function of making claims about the potential contributions of the proposed research. The writer therefore is usually under rhetorical pressure to strike a balance between presenting their proposed study with assurance, and carefully framing the statement in order to head off possible negative responses. By contrast, the Method section, which mainly serves the descriptive function, rarely makes claims. It thus does not impose a rhetorical pressure on the writer to use hedges and boosters frequently. In grant proposal summaries, while the density of hedges was close to that in the main texts (7.09/7.03), the boosters used outnumbered those used in the main texts (16.42/9.96). The result was quite expected since grant proposal summaries are "the first rhetorical act" (Swales, 1990) in which the writer needs to impress the reader by accentuating the significance of the study. It is interesting to note that although the curve of hedges is flatter than that of boosters (see Figure 4.2), they are quite similar to each other in terms of the general rises and falls. The result of the chi-square tests performed shows that rhetorical section and these two stylistic devices are closely related (chi-square=27.59, d. f. =5, $p<.001$).

Table 4.4 Distribution of hedges and boosters across rhetorical sections

		GPS	I	LR	B	M	C	MT	Total
Hedges	per paper	38	26	122	21	59	14	242	280
	per 1000 words	7.09	5.80	8.62	10.73	5.01	6.69	7.02	7.03
Boosters	per paper	88	36	137	78	68	24	343	431
	per 1000 words	16.42	8.03	9.68	39.84	5.78	11.47	9.96	10.83

Figure 4.2 Distribution of hedges and boosters across rhetorical sections
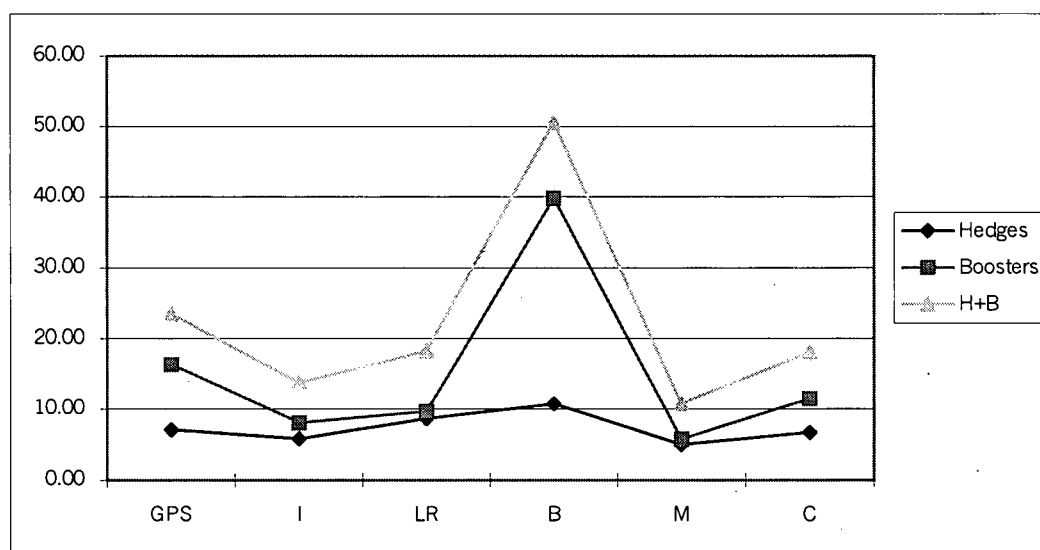
Note: GPS=Grant proposal summary, I=Introduction, LR=Literature Review, B=section which claims the Benefits, M=Methods section, C=Communication of Results

If we follow Vassileva (2001)'s assumption that equal values for hedges and boosters neutralize the illocutionary effect of the text as a whole, thus representing zero degree along the cline of commitment/detachment, we can see boosters outnumber hedges in all the rhetorical sections of grant proposals, and that the writers seemed to express commitment throughout the text (see Figure 4.3). This is obviously different from Vassileva's finding about research articles that English scholars express more commitment than detachment only in the last Conclusion section. This may be due to the fact that research grant proposals are a promotional genre in which being

committed to one's claims is more important than showing deference or humility to the reader.

Figure 4.3: Commitment and detachment in sections
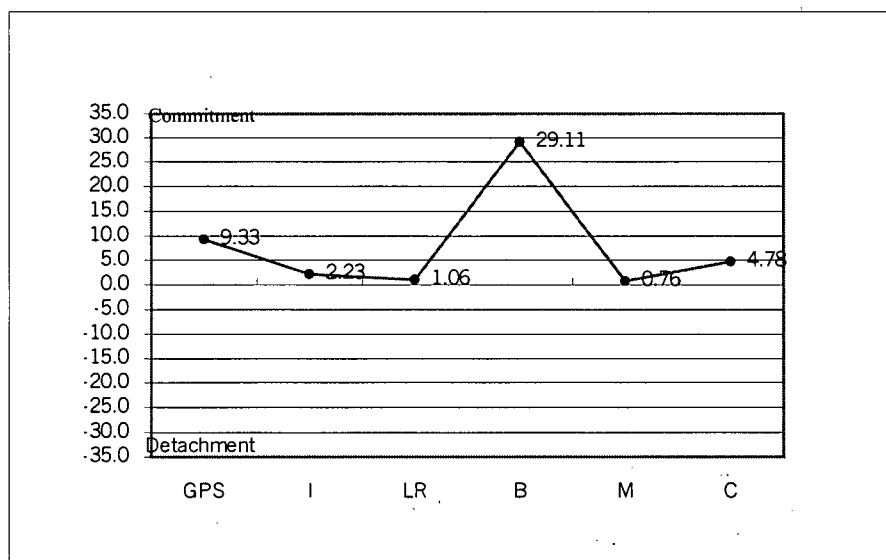
4.4.5 Summary

Both quantitative and qualitative results reveal that hedges and boosters are important linguistic features of research grant proposals. While in most other academic genres the use of hedges exceeds the use of boosters, the situation is just the opposite in the research grant proposals in my corpus. Scholars tend to use boosters more frequently than hedges in order to promote the proposed research, to meet the requirements of the funding agency, or cater to the cultural conventions in the North America.

In examining the categories of boosters, a group of words and expressions which directly accentuates the importance or the significance of the proposed study was found to constitute a large portion of total boosters. This finding throws doubt on

Meyers (1990)'s claim that English scholars prefer not to use words such as "important" or "significant".

The examination of hedges and boosters across rhetorical sections shows that the distribution of hedges and boosters is not even across sections because of the different communicative purposes. Benefits sections and grant proposal summaries tend to have the densest use of hedges and boosters, while in the Method section these stylistic devices are used much less frequently.

The findings throw some light on the stylistic features of research grant proposals. It would be interesting to investigate the categories of hedges and boosters in more detail and their distribution in different rhetorical sections if more samples could be collected.

4.5 The 'Secret Language' of Grant Proposal Writing

In the foregoing four sections, I have discussed the formal language of grant proposal writing, including the generic structure, the referential behavior, and the use of hedges and boosters. In this section, I turn to the 'secret language' of grant proposal writing in the Canadian context, mainly based on the interviews with the successful grant writers. I first discuss their perceptions of the grant application practices, and their understanding of the reader-writer relationship. The reader and the rules, just as P5 argued, are "two foresides" that writers need to consider in grant writing. Then I discuss how the participants learn to write research grant proposals and the strategies they usually take in the writing processes.

4.5.1 Grant writers' perception of the reader and the rules

Who are the readers?

The readers of SSHRC are a combination of esoteric and exoteric readers, and are supposed to be the people who do not have a conflict of interest with the writers. P5, who now serves on a selection committee of SSHRC, said that the committee she was on had eight members. After they receive the applications in December every year, they write to one reviewer who is on the writer's list of suggested reviewers. They also select one or two reviewers of their own who are respected scholars in the writer's field. These two to three reviewers undertake the job as the main readers and are responsible for introducing, summarizing, and explaining to the whole committee why they think it is a good proposal or not. Except for these two to three reviewers who are

the experts in the applicant's research area, other committee members might not be familiar with the field at all. All the interviewed professors seem to have a very clear idea of who the readers are, from their personal experiences either as grant applicants or as grant reviewers. As P4 stated, the readers are all esteemed researchers in a particular field:

> You must remember, that, who is SSHRC? SSHRC is just basically a community of researchers. ... when you send your grant application to SSHRC, they can turn it to the members of the community who review it and come back, and sit around and talk about the value of the research. So basically what we are dealing with is a community of researchers. (P4)

All the participants have also mentioned that the readers of the grant proposal, theoretically speaking, should not be people who know the writer/applicant in person.

P1 talked about her experience as a grant panelist:

> There are certain guidelines you have to follow, for instance, at the committee that I am on, I have to be absent for all these applications which come from the university of...[the name of her university], I can't be in the room. ... And if any of those people who are applying from my department, or if I have been co-author with them, or by knowing them as friends, then I have to be out of the room. So there are kinds of guidelines which are meant to prevent this.

P5 said that the committee members change every three years, and if a committee member wants to apply for SSHRC him/herself that year, then s/he can't serve on the committee.

What kind of relationship is it between the readers and the writer?

When asked about how they perceive the relationship between the grant reader and the grant writer, the participants first agreed that there might be an unequal power relationship. P4, for instance, explained it as follows:

> I mean they clearly have the power, of course, they are the people who decide whether to give you the money or not. So there is always an unequal relationship then. (P3)

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Because of this unequal relationship, according to P2, grant proposal writing differs from other academic writing, in the sense that applicants need to think more about how to capture the attention of the reader and focus more on the possible outcome of the research.

However, as P1 also realized, in Canada, there is a small research community. She gave an example that happened last January. The SSHRC committee sent her an e-mail message asking her if she would be willing to read an application for a certain project. They did not tell her who wrote it, but told her the name of the project. She replied to them that she couldn't, because she knew immediately from the name of the project who the writer was, and actually she had given the writer advice in writing the application. Interestingly, she also gave an opposite example. She said she got an application about three years ago from somebody she just detested because the person could never finish anything. But the application was very good. She hesitated for a long time, and finally 'wrote a very glowing appraisal". But the result was that the person got the money but did not finish his project. In retrospect, she still finds it hard to decide whether she should pay more attention to her personal sense or whether she should assess the grant proposal objectively, getting rid of the influence from the network, when similar situations occur.

P5 and P7 also mentioned the small academic community in Canada and similar situations when a reviewer happens to know the writer. P7 described the relationship as a very subtle one:

> This year, for instance, when I'm submitting a grant proposal, I won't be asked to a review, but next year, when I won't have any grant proposal being submitted, then I will be very

likely asked to review. So you know that you are writing it one year, but you're going to be a reviewer next year and it's the same with the whole community. So you don't do, you don't, sort of say, I won't critique this person because he/she won't critique me, because there's not that kind of relationship in terms of the proposals. But at the same time, you want to treat people the way you would like to be treated when you submit a grant. (P7)

Since some literature on grant writing has suggested that the funding system is an "incestuous buddy system", I raised this question during the interviews. The professors obviously have different opinions on this topic. P5 said,

> It's a myth which will be around forever I think, because it's a very good excuse. If you don't get your grant from them, instead of thinking "what did I do wrong", you think "well, it's not fair, because there is an old-boy network, and I am new, and they don't know me". And that's total nonsense. (P5)

She explained that the rules for marking new scholars are different from the rules of marking old scholars in SSHRC, which was actually mentioned by all the participants. The policy is that, for an experienced scholar, the research record counts more than the proposal, while for a new scholar, whichever is better for him/her is weighted more highly. P5 also said that actually new scholars were disproportionally funded and had benefited this year. Therefore, P5 argued that,

> Because the rules are different, I think this is a game; if you play by the rules, there is absolutely no unfairness in there.

P4 expressed a similar opinion. She believed that because of the blind review and scoring system, the funding system should be a fair system. When she was asked whether her decision as a reviewer might be influenced by the fact that she knows the writer/applicant, she said,

> My final decision? Sure, I mean, if I think the person is doing valuable research. Because after all, what's the importance to evaluate people's research report? If they have got a good research report, then obviously that would count a favor.

Some professors, however, have some different opinions, although they also recognized the fairness of the blind review and evaluating system. P1, for instance,

believes that the influence of networking is possible and actually exists, which can be seen from the tone the writer takes and the references s/he cites. When P2 was asked to comment on this topic, he first laughed and then said:

> So there is a real intelligence you have to bring to bear. You built it up through going to conferences, and meeting people, and getting used to which one is likely to be more intrigued in your sort of work and stuff. Yeah, you can't afford just being far away from these people for a year. That's part of strategic wire-working and getting grants. That's why people who are successful are very good at networking at conferences; they involve themselves and get chapters in books, and they get to know the other book authors, and you know, so you actually grow up a real list of names that you could draw upon and that comes in handy at grant writing time. You need to do that. That's a really important part of it. So there is a networking, although it's not like having to know everyone in person and stuff, but you do need to be able to construct a review list that could get you some compliments. This doesn't mean that you try to get an easy write, but it just means you try to be much more sensitive to whom you like to put on that list. And that's why it's really hard if you haven't done very much, if you come in as a first-year or second-year, and you get lost in your teaching and don't get to the conferences...

P3, a professor who has successfully obtained three continuous SSHRC grants, believed that:

> SSHRC tends to fund who they have already funded; in other words, the hardest one, this is my impression anyway, my impression is, the hardest grant to get is the first grant... I suppose in some way it is the elite group who are getting the funding, because there are a lot of good people who are not getting funding. You know, in the academy, there are a lot of protocols, there are a lot of distinguishing features, ... So I think all that also influences all people who are judging your work, because it's not just the proposal they are judging, they are judging the package....

Most of the professors considered the issue from both aspects. While they conceded the possibility of networking, and the subtle relationship between the reader and the writer, they argued for the fairness of the system and the morality of the grant reviewers. Consistent with P4's and P5's opinions, P3 believed that "there are checks and balances there"; and P7 believed that the blind review system is "the locker of the drawer". She said,

> so it is incestuous in that you are likely to know who they are, but it is not just a buddy system

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because you could get a really negative review, probably as easy as you can get a really positive one.

In her opinion, as the reader, either as a grant reviewer or a grant committee, s/he should and would be responsible and fair. When she was asked to describe the relationship between the grant reader and the grant writer, she said,

> I think it's respectful. I think that when you take on the job and you are asked by SSHRC if you are willing to review proposals, you read them with a view to being helpful and fair, recognizing that it's somebody's career that you are supporting or that if you're criticizing, you need to do it for a very good reason and not capriciously, because it is their career that is being affected. At the same time, it has to be fair, you have to discriminative among proposals; there is no point reading everything superior...

Research record, the quality of the project, or the quality of writing?

As indicated by all participants, a grant proposal is rated on two scales in SSHRC, one is the research record of the writer/applicant, and the other is the quality of the research project. When asked if the quality of writing matters, P5 replied,

> Writing is only important in that, that is the only way you can tell the committee the quality of your proposal.

She believes that there is no fixed format, no one way of writing. As long as the writer clearly tells the reviewers or the selection committee these important components, such as the literature s/he has reviewed, the methodology s/he will use, and the significance of the research, no matter how s/he writes, it would all be acceptable.

P1, however, believes that there are certain formulas for writing a grant proposal. She said she showed her successful grant proposal to two other people who were writing grant proposals. They both followed the model and they both got the money. She explained the dialectical relationship between the quality of 'science' and the quality of writing:

> I think if you don't have the quality of the project...then I think however well you write your

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proposal, you are not gonna get funding. But I think you can have a very good project, and if you can't convince other people that it has not been done, that it's worth doing, and you are capable of doing it,…you are not gonna get a funding for it. (P1)

P4, as a language and literacy educator, obviously put more emphasis on the writing

itself:

> I am also interested in the quality of the writing, because I like to see if the person can articulate the ideas well. Because if the person can't articulate the ideas, how can they be able to write up their results? I mean it could look like an interesting proposal potentially, but if their thought process, the ability to articulate the ideas, if it's confusing, and unclear, I would have less confidence in their ability to actually do an appropriate analysis, and write decent conclusions. In that case, that would also compromise the quality of the proposal.

Most professors believed that the ability to construct a cogent argument is as

important in grant writing as in other academic writing:

> I actually think all this has to be with the ability to construct an argument…(P2)

> What you consider most is how logical and well-constructed the argument is for doing the work. One can tell by how well it's written and how well the argument flows from beginning to the end. (P6)

P6 believed that only when the article reads well could the reader be attracted to read

further and to consider other aspects of writing, such as the strength of the literature

review and the appropriateness of the research methodology. In her opinion, the

quality of the research and the quality of writing always go together:

> Generally if a grant proposal is well written, it is quality work. (P6)

4.5.2 The learning of grant writing

All the professors talked about their experiences of learning to write their first

grant proposal. To most of them, it seems to be a very natural process. P5, for example,

said that she did not learn it; she just did it by following the funding instructions very

carefully and sorting out what she wanted to do before writing down the contents very

clearly. P4 mentioned that she just learned grant proposal writing by following some models of success and going to the information sessions that informed her what the grant committee was really looking for.

P1 said the first time she wrote a grant proposal for SSHRC, she had just got her doctorate and worked as part of a larger project. She described that experience as a kind of apprenticeship. By working with senior scholars and getting guidance from them about what it is that SSHRC was looking for and how to write a grant proposal to appeal to their criteria, she said she learned how to write a grant proposal, and that experience was always behind her when she later applied for her own funding.

P2's experience of learning to write grant proposals is quite unique. He said he learned to write grant proposals with the help of RSG: Research Support Group. It was a group organized by four first-year professors, who believed that because of the heavy teaching load, they would be unable to keep track of all the different grants they could apply for individually. They therefore decided to gather together and share resources and ideas. According to P2, "it was a really powerful exercise, ...otherwise we can be very isolated in the university."

P3, as a senior professor, who has received three consecutive SSHRC grants, compared the support assistant professors now are able to get with what she got when she was applying for her first grant as the principal investigator. She said although she got some successful proposals from senior colleagues at the time, there was nobody to help with the application. There were no workshops, no SSHRC research secretary, and no one who could help with the reviewing and giving of feedback. (This situation

was also mentioned by P9, who is also a senior professor.) P3 said what she did at the time was just to follow the instructions, and "try to be very careful about doing what they asked". At the same time, she attributed her success in grant writing partly to the "basic training" she received. According to her, the research courses she took when she was a graduate student, and reading and writing of other academic genres, all prepared her to write a good grant proposal.

Similar to P3, P6 also said that she picked up grant writing skills through writing her master's thesis and doctoral dissertation. She believed that "in terms of the intellectual piece", these kinds of academic writing were similar to each other. Interestingly, she mentioned "a wonderful set of guidelines for writing SSHRC proposals" provided by a colleague, which according to her, provided a lot of useful details in terms of budget.

It seemed that all the professors learned to write grant proposals very naturally by strictly following the instructions of the funding agency and by absorbing nutrition from "basic training" and other kinds of academic writing. However, it would be very helpful if institutions as well as senior scholars could assist junior scholars or novice writers in their grant writing process in various ways.

4.5.3 Strategies employed in grant writing

To start early

When asked about the time they needed to prepare a SSHRC grant proposal, all the participants agreed that they would start well ahead of the deadline. P2 said he had

his proposal put together in five weeks, with advice and suggestions coming from the Research Support Group. P1, although she wrote her most recent proposal only about three or four days before the deadline, admitted that it was a surprise that she could finally get the funding. She said she would have actually paid more attention to her tone if she had had more time for writing. And she attributed her success to her past experiences of grant writing and the strategic sense she had of what SSHRC people really want. P4 also admitted that to do a grant proposal was time-consuming, and that working with the computers and mechanics was even more complicated and stressful than just presenting ideas. However, she saw the time she spent on grant proposal preparation as an investment:

> I see it as an investment, because if I get funding for three years; that means I don't have to break my back every year trying to get money. If I have to do that every year it would be terrible.

She also mentioned that different funding organizations have different expectations. SSHRC, as a national funder, is probably the most elaborate of all the organizations compared with other smaller local grant agencies. When she reflected over her first experience applying for a local grant, P4 said she "made a mistake of really making...an extensive proposal for the money that was given to me". She believed that was a waste of time and energy. She said she has now learned from that experience, and if she applied for a small grant, it must be for a study that would not require an ethical review. In her opinion,

> To some extent, how much work you put in, depends on the organization, and also how much money you are asking for.

Revising and welcoming feedback

Revising is obviously an important step in the grant writing process. P1 focused the revisions mostly on the content and the research itself. She believed that the process of re-writing was not just part of improving the language; it was also part of getting straight what the writer really wants to do. P3 employed similar revising strategies by paying attention to both content and language:

> I think I do all those things. It's like for a while you spent a lot of attention on the content, and later you spent a lot of attention on the methodology, and finally you have got to figure out what impacts the budget. But all through that, I am very conscious of what I am saying. .... I don't want to exaggerate anything, but at the same time you want to persuade them that it's a worthwhile project, or this topic is worthy of public funding.

P2 and P4 talked about their experiences of working and reworking the proposal in order to make it clear, logical and cogent. P2 said he usually took the same approach that Antoine de Saint-Exupéry did in writing the *Little Prince,* that is, to overwrite it first, and then to refine and cut it back, until it is really "crystal clear". Interestingly, P7 took a strategy that was the opposite of P2's:

> When I write, I set up my pages and my margins first. And I make sure that, as I go along, I am going to have enough space. When I get to the very end, and I think, oh good, I have got another half page, I could go back and add a few things that I left out.

P5, however, said that she did not do a lot of re-working and re-drafting, because, first, she would have thought exactly what she wanted to do before picking up the pencil; second, she didn't find clear writing very difficult. But she did do revisions when collaborating with other researchers in applying for a grant. Several other professors also mentioned the more complex writing and revising process when the proposed project is a collaborative one. P7, for instance, described how she and her collaborator wrote the first draft together, and how they then made revisions to it by gathering and

negotiating the different views.

As a new scholar who has less experience of grant writing and who still claims to have no confidence in writing, P2 welcomes the feedback from all perspectives. He said he was less defensive when he got feedback, because that was what he needed and looked for. However, he received more support from the RSG (Research Support Group) than he did from the broader faculty. He said he actually had a senior professor read his grant proposal before turning it in, but only got very cursory and discouraging comments.

P7 described her revising process as a constant reading and thinking process. She talked about how she fully used the time on the road, when she commuted from home to the university every day to think about the proposed research. She also mentioned how talking to people who are outside the research community could also stimulate her thinking and help improve her proposal:

> For example, the one [the grant proposal] I was writing two weeks ago, is a follow up to my year round school research. Then last week, the Premier asked me to be part of his dialogue of education. I made a presentation there, and a lot of people have asked me questions since. And so basically, the outreach changes the way I am thinking about it because of the questions people have asked me. So it is just modification to make sure it is as strong, and as up to date, and as clear as it possibly can be.

To have the reader and the rules in mind

P5 argued that there were two "foresides" in writing and rewriting a grant proposal: the reader and the rules (the requirements or the instructions of the funding organization). Therefore, in writing and revising the proposal, she focuses on whether the language is clear and logical enough for a reader who might not be familiar with

the research field to understand, and whether the writing has met all the requirements. For instance, she said if she applied to an agency that funded projects conforming to the goals of Track 2000, she would download and print Track 2000, and in the proposal she would discuss how her proposed research related to the Track 2000.

Her opinion seemed to be echoed by all the participating professors. In order to address the audience, who might be a combination of the esoteric and the exoteric, many of them mentioned the issue of not using jargon in grant writing, especially in the summary part:

> I think everybody reads the summary but not everybody reads the whole proposal. So the summary is addressed to a different audience, so it is not just technical. .... SSHRC actually says in its guideline to make sure that you choose to write in lay language, avoid jargon, because not everybody is going to understand. They are not going to be in your discipline. (P7)

P4 said she often tried to see her proposal through the eyes of a reader who may not necessarily know her work very well. Therefore, sometimes she gave her grant proposal to her husband (who is also an academic but knows nothing about her field) to read, to see if it made sense to him

In order to draw the attention of the reader, P6 mentioned not only her strategy of using a language "that is not too jargon laden", but also her emphasis on the practical significance of her proposed research to cater to the preference of the committee:

> Because I write for the SSHRC audience, specifically for the committee that looks at the educational proposals, I always look to the link between theory and practice. So how important is this research from the theoretical point of view, but also from the point of view of informing what we do in schools.

In section 4.1, I have cited several participating professors' opinions, which were quite similar to that of P6. As P3 said, there is now a new slogan in SSHRC, that is, "go public or perish". Realizing the emphasis SSHRC has put on the real-world

significance, the grant writers tended to put considerable weight on the establishment of real-world territory, and on the discussion of real-world need as well as possible contributions to society.

To strictly follow the rules set by the grant awarders seems to be advice given by all the professors. P5, for example, said she usually printed out the instructions when writing and rewriting a grant proposal. She would read every single line, and then go back to her proposal to see if she can tick off the instructions one by one. She would also check if her grant application fit what the grant council wants to give money to. For instance, if the council says they are interested in funding projects that address policy administration, she would not apply for it if her research is not related to that at all; or she would explicitly point out in her proposal that her research does somehow relate to policy administration. She particularly emphasized the SSHRC's rigid requirements on the length of the proposal. She said that as a selection committee member, she often saw proposals that finished mid sentence. That was because if people wrote more than six pages, SSHRC would rip off the rest of the pages and put them into the shredder. When P5 was asked whether she thought that was too strict, she said,

> My feeling is, serves them right. They are doomed to a failure, because if you are so stupid that you can't read the rules, then you don't deserve funding. If you are so stupid that you can't read the rules, how can I believe that you can do good rigorous research?

She also said,

> I think the grant writing is a game. I think lots of academia is a game, and you play by the rules. If you don't play by the rules, you are stupid. You wouldn't go out to a baseball pitch with a soccer ball. If you are saying, 'well, I prefer to play with the big ball, not the little ball', go play soccer then, don't play baseball with me.

P4, who saw grant proposal writing as an investment, also suggested the importance of

reading instructions carefully in order not to waste time and energy. When she was

asked why she included functional components into her grant writing, such as

summary, objectives, context, methodology, communication of result, etc., she found

the answer was self-evident:

Why do I include them? Because they asked.

Several other professors also mentioned that how they strictly followed the rules by

using the headings specified by SSHRC guidelines as a framework to think about and

to introduce the proposed project.

4.5.4 Summary

As many genre analysts (e.g., Bhatia, 1993; Hyland, 2000; Ivanic & Weldon,

1999) have argued, specialist information is a very important part of data, for it brings

validity to the study by helping to double check the results of textual analysis, and by

providing contextual information that explains the rationale behind the textual

performances.

In this section, I reported the participants' perceptions of the grant writing process

and practice (their interpretations of their own textual choices were reported in the

previous four sections). There are several findings that need to be highlighted. One is

that all the participants seemed to be aware of the rules and the readers as two

essential factors that they needed to consider in grant writing. This finding confirmed

our belief that the awareness of the social conventions as well as the interactions

between the reader and the writer is essential in grant proposal writing. Second, the

writing strategies the participants discussed in relating their learning experiences and writing processes could be of use for learner writers. Another interesting finding concerns the existence of networking. Although all the professors recognized the fairness of the funding system, and although the networking in most cases was not understood in the negative sense, from their talk, we can see that the networking does exist because of the small academic community, and that it does have an effect on grant writing, for instance, on the appropriation of the tone, and on the use of citations.

CHAPTER FIVE

CONCLUSIONS

This study investigates the textual and contextual features of research grant proposal writing. More specifically, it examines three different levels of textual features: the generic structure, the referential behavior, and hedges and boosters. The study explores how successful grant writers perceive the grant writing practice and process, and what strategies they usually employ in grant writing. Four specific research questions are:

1. What is the generic rhetorical structure of the grant proposal summary? What is the generic rhetorical structure of the main text of research grant proposals?

2. What are the referential patterns used and favored by grant writers? Are there any differences in quality and quantity between the referential patterns used and preferred in the genre of research grant proposals and those used and favored in other academic genres reported in previous research?

3. How are hedges and boosters used in the genre of research grant proposals? Are there any differences between the use of hedges and boosters in this genre and their use in other academic genres based on the findings of relevant previous research?

4. What is the rationale behind successful grant writers' textual choices?

How do they perceive the grant writing process and practice? What are the strategies they usually employ in achieving the communicative purpose of the genre and in addressing the reader?

5.1 Summary of the findings

This section will summarize the findings of the present study. Four major findings emerged from both the textual analyses and analyses of data collected from interviews and follow-up e-mails. These four findings that correspond to the research questions are summarized in the following five sub-sections.

5.1.1 The generic structure of grant proposal summaries

A three-move scheme was identified as reflecting the generic structure of research grant proposal summaries. These three moves are: "Justifying a research need", "Meeting the research need" and "Claiming potential contributions". The moves analysis based on this move-step scheme showed that most of the grant proposal summaries conformed to the three-move scheme, though there was some reordering or omission of the moves. The moves analysis also revealed some interesting trends in the arrangements of the moves. The grant proposal summaries tended to give more weight to the establishment of the real-world territory than to the establishment of the research territory. While the literature review was usually brief and negational, reporting the proposers' own previous research was lengthy and affirmative. The second move, which outlines the objectives and describes the methods of the study, was emphasized, and constituted about half of the proposal's total length. All these

features in the move structure distinguish grant proposal summaries as a unique sub-genre.

5.1.2 The generic structure of grant proposal main texts

In the main text of research grant proposals, the ICMC (Introduction-Context-Methodology-Communication of results) was first recognized as the overall structure; ten moves as the constitutive functional components were then identified. They were found recurring frequently within as well as across the ICMC four parts.

The moves analysis came up with some interesting findings. First, the grant writers preferred to set the scene for the reader by "establishing the territory" and "indicating the niche" repeatedly across the ICMC four parts. Second, some grant writers employed a niche-centered, tide-like structure in reviewing the literature. The structure serves the promotional purpose while at the same time helping to head off possible objections. It reports and reflects the spiral development of research and the advancement of knowledge.

5.1.3 Referential behavior

The use of citations in the research grant proposals differs significantly from that in research articles in mainly five aspects. First, the density of citations is much higher in research grant proposals than in research articles. Second, while research article writers also prefer non-integral citations to integral forms, grant writers tend to use

non-integral citations with an even higher percentage. Third, unlike in research articles, non-reporting citations were found to be overwhelmingly used in research grant proposals. Fourth, "generalization" form of citations was preferred by grant writers while "summary" is a form used more frequently by research article writers. Finally, self-citations play a much more important role in grant proposals than in research articles. All these features in referential behavior reflect to some extent the promotional purpose of the genre.

5.1.4 Hedges and boosters

This study reveals that hedges and boosters are important linguistic features of research grant proposals. While hedges exceeded boosters by nearly 3 to 1 in research articles, boosters overwhelmingly exceeded hedges in my corpus of research grant proposals. And it is interesting to note that the frequency of hedges in grant writing was only about half of that in research articles, while the use of boosters was almost double that in research articles. Boosters outnumbered hedges in all the rhetorical sections of grant proposals, while in research articles, writers tend to express more commitment than detachment only in the Conclusion section. These findings throw some light on the stylistic features of the genre.

5.1.5 The 'secret language' of research grant writing

The study reported nine successful grant writers' perception of the grant writing practice and process. All the grant writers believed that the rules and the reader are

two essential factors that they need to consider in grant writing. Some of them confirmed the existence of networking and its influence on grant writing, although the networking in most cases was not understood in the negative sense. The study also explored the strategies the grant writers usually employed in writing, such as starting early, revising repeatedly and welcoming feedback, and most importantly, having the reader and the rules of the funding agency in mind during the whole writing process.

5.2 Implications for genre analysts

The implications of this study for genre analysts mainly center round the notion of "moves" and the structural move analysis approach. Problems emerged in the moves analysis invite genre analysts to further consider the following questions:

1. How to deal with the muddiness in moves identification? What might be the cause of the muddiness?

In analyzing both the grant proposal summaries and the grant proposal main texts, the muddiness in moves recognition and identification always existed. Some of these difficulties have been issues of debate among genre analysts for quite some time, for instance, whether we should assign a separate move or step to "reporting previous research". Genre analysts have tended to deal with the muddiness either by combining the moves with unclear boundaries (e.g., Swales, 1990) or by proposing ways to sharpen the identification criteria (e.g., Bhatia, 1993). This study, however, queries whether these previous solutions have really got to the root of the problem. This study suggests that the muddiness is essentially a problem resulting from the basis

assumption of Structural move analysis. The assumption that a piece of discourse can always be assigned to a move/step serving a particular communicative function is worth questioning. While it is useful to think of a genre consisting of a series of moves, it tends to be too idealized by neglecting the complexity and flexibility of language, and the multi-function a piece of discourse might serve.

2. To what extent can the variations of the order of the moves be considered allowable? Is "move" an appropriate unit in analyzing texts with considerable length?

In analyzing the main text of the nine SSHRC grant proposals, the moves identified, mainly based on Connor and Mauranen's (1999) move scheme, were found to recur throughout the text, which suggests a similar situation in analyzing texts of considerable length. Since the notion of "move" itself implies the importance of the order, the question was raised in this study concerning to what extent the order variations of the moves can be considered allowable. If the moves are only functional components of a text that recur frequently without any obvious regularity, should they still be considered as "moves"? Is this kind of move-scheme still useful for novice writers?

This study raised some critical issues concerning the basic notion of "move" and the assumptions that it carries with. Genre analysts should address these issues in order to better support the structural move analysis approach.

5.3 Implications for novice grant writers

As we have discussed before, to obtain research funding is the first step in the process of knowledge production, and it has become increasingly important for researchers nowadays. For novice writers, especially those whose native language is not English, it would be of great use if they could have some knowledge of the textual practice and the social practice of the genre. In this study, the analysis of the textual data and the data from interviews and follow-up e-mails revealed some interesting strategies that successful grant writers usually use in their writing. These strategies could provide novice writers some useful information on how to write a successful grant proposal.

For instance, novice writers could learn how to organize the structure, how to arrange the moves. Setting the scene for the reader and reviewing literature in a niche-centered, tide-like structure are all moves strategies novice writers could employ in their own writing. The study also revealed the citational patterns used and preferred in research grant proposals, and compared them with those in research articles. These results could help novice grant writers to establish their skills of grant writing based on their previous experience of writing research articles. The distinctive use of hedges and boosters in research grant proposals explored by the study could also help novice writers to have a feel of how to express their commitment and detachment appropriately in this particular genre. From the tips given by the successful grant writers, novice writers could also learn how to address the reader and how to meet the requirements of the funding agency.

5.4 Reflections on the study

The study has turned out to be a very valuable experience for the researcher in two respects. First, as a second language writer who has never had the experience of writing grant proposals, this whole research process is also a process of learning how to write academic genres, particularly, the research grant proposal. By examining the three textual features of the genre, and by investigating the rationale behind it, I gained previous knowledge of this particular genre, and moreover, knowledge of the Canadian academic community. It is this knowledge of the genre and the practices of the community that I presented in this study and hope to share with the prospective reader of my thesis.

Second, as a novice researcher, by going through the whole process from research design to data collection and data analysis, and finally to the presentation of results, I have had a deeper understanding of the genre scholarship, its strengths as well as its limitations. The completion of this thesis is in fact the beginning of further studies; the problems identified and raised in this study will inspire me to find satisfactory answers in future studies.

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Appendix A

Questions for semi-structured interviews

Part I: Questions concerning the writer's grant proposal (GP henceforth) writing experiences and process.

1. Would you please tell me the process of your writing a GP?

    How long does it take you to write a GP? Do you make revisions to it with the progress of your research? Did you receive comments from readers (peer reviewers, grant officials or collaborators in your research group) concerning how to revise your GP?

2. Have you ever been formally trained to learn to write GPs?

    a) Do you have any norms in your mind of what a typical GP look like?

    b) In the form of the grant proposal, more often than not there are directives/guidelines, will you write strictly according to the directives? In writing the body of the proposal, what do you focus on?

3. How do you perceive your GP writing experiences? Do you think it is a never-ending process that you need to learn and relearn in different occasions with different status in the community?

Part II: Questions concerning the social, historical, disciplinary conventions of Chinese/English academia, and their literacy practices. This part of interview is open or semi-open.

Part III: Questions concerning the practice of grant application.

1. What do you think is the most important factor for the success of the application for fund? Do you think a well-written grant proposal will greatly influence the decision of grant officials?   Besides the "quality of science", what factors do you think might influence the decision to fund or not to fund a project?

2. Do you consciously employ some rhetorical strategies in order to make you grant proposal sound more scientific or persuasive? (It could be discourse-based, pointing out some of the rhetorical features in their own proposals and ask them about the possible reasons for their textual choices.)

3. Have you had experiences of serving at the grant panels or being a peer reviewer? If you have, what did you concern most in reviewing the application? Did you have experiences of reviewing a GP written by someone you know?