T. C. ULUDAĞ ÜNİVERSİTESİ EĞİTİM BİLİMLERİ ENSTİTÜSÜ YABANCI DİLLER EĞİTİMİ ANABİLİM DALI İNGİLİZ DİLİ EĞİTİMİ BİLİM DALI

THE TEXTUAL ORGANIZATION OF "DISCUSSION" AND "CONCLUSIONS" SECTIONS OF RESEARCH ARTICLES IN APPLIED LINGUISTICS

(YÜKSEK LİSANS TEZİ)

Tuğba Elif TOPRAK

BURSA 2011

T. C. ULUDAĞ ÜNİVERSİTESİ EĞİTİM BİLİMLERİ ENSTİTÜSÜ YABANCI DİLLER EĞİTİMİ ANABİLİM DALI İNGİLİZ DİLİ EĞİTİMİ BİLİM DALI

THE TEXTUAL ORGANIZATION OF "DISCUSSION" AND "CONCLUSIONS" SECTIONS OF RESEARCH ARTICLES IN APPLIED LINGUISTICS

(YÜKSEK LİSANS TEZİ)

Tuğba Elif TOPRAK

Danışman

Yrd. Doç. Dr. İsmet ÖZTÜRK

BURSA 2011

T. C. ULUDAĞ ÜNİVERSİTESİ EĞİTİM BİLİMLERİ ENSTİTÜSÜ MÜDÜRLÜĞÜNE

Anabilim/An	asanat l	Dalı,		Bilim Dalı'nda
		numaralı		′nın
hazırladığı			"	
		ili tez savunma sınavı,/		
, , , ,,	sorulan	sorulara alınan cevaplar .(başarılı/başarısız) olduğuna	•	
karar verilmi	iştir.			
	Üye (Tez	Danışmanı ve Sınav Komisyonu Başkanı) Akademik Unvanı, Adı Soyadı	Üye Akademik Unvanı, Adı Soy Üniversitesi	vadı
		Üniversitesi	Universitesi	
		Üye Akademik Unvanı, Adı Soyadı	Üye Akademik Unvanı, Adı Soy	/adı
		Üniversitesi	Üniversitesi	
		Üye Akademik Unvanı, Adı Soyadı Üniversitesi		
			/ 20	

ÖZET

Mevcut çalışmada Uygulamalı Dilbilim alanının önde gelen beş dergisinde İngilizce olarak yayımlanan ve ampirik çalışma aktaran araştırma makalelerinin tartışma ve sonuç bölümlerinin yapısal organizasyonunun incelenmesi amaçlanmıştır. 30 araştırma makalesinin tartışma ve sonuç bölümlerinden oluşan bütünce (corpus) bu çalışmada geliştirilen ve Yang ve Allison'nın (2003) araştırmasına dayanan bir modelle incelenmiştir. Bulgular araştırma makalelerin sözü geçen bölümlerinde sıklıkla kullanılan ve bu bölümlerin yapısal organizasyonuna ışık tutan makro kalıpları ortaya koymuştur. Sonuçlar aynı zamanda çalışmanın bulgularının akademik yazma alanında etkili olduğunu göstermiştir. Bu çalışmada, araştırma makalelerinde sıklıkla kullanılan makro yapıların tespitinin öğretmen, öğrenci ve araştırmacılara akademik yazın alanında yardımcı olabileceği ortaya konulmuştur. Çalışmada araştırma makalelerinin tartışma ve sonuç bölümlerinin yapısal organizasyonunu gösteren bir model de geliştirilmiştir.

Anahtar Sözcükler: Tür Çözümlemesi, Akademik Söylem, Akademik Yazın, Araştırma Makalesi, Sonuç, Tartışma

ABSTRACT

This study aims to investigate the rhetorical organisation of research article discussions and conclusions written in English in the field of Applied Linguistics reporting empirical research and published in five prominent journals of the field. The study examined the rhetorical structure of RA discussions and conclusions and the frequencies of moves and steps used in these sections. RA discussions and conclusions were analyzed using a model developed in this study, based on Yang and Allison (2003). The findings revealed the most commonly used move patterns, moves and steps which would give insights into the rhetorical structure of RA discussions and conclusions. The findings of this study have relevance for the teaching of academic writing. Identifying commonly used move patterns, obligatory and optional moves and steps may aid novice writers, teachers, learners and researchers in dealing with academic writing and understanding the conventions of this prestigious genre. A revised model for the discussion and sections is also proposed.

Key words: Genre Analysis, Academic Discourse, Academic Writing, Research Article, Discussions, Conclusions

ACKNOWLEDGEMENTS

I would like to express my deepest gratitude to my supervisor Assist.Prof.Dr. İsmet Öztürk, who has helped me with his guidance, advice, support and encouragement during this process. His insightful comments and suggestions have shaped my thesis work. I would also like to thank my friends who have contributed to my study with both intellectual and moral support. My special thanks go to my dear friend, home mate and colleague Münevver İlgün who has showed her support, affection and encouragement. I owe too much to my dear friend Özlem Karal for always believing in me and providing me with her spiritual support and encouragement all the time. My deepest gratitude, love and thanks go to my dear mother, dear father and beloved sister for making me who I am, never ceasing believing in me and holding my hand in good and hard times. Finally, I would like to thank all the people who have somewhat contributed to my study.

TABLE OF CONTENTS

Özet	iii
Abstract	iv
Acknowledgement	v
Contents	
List of Tables	viii
List of Figures	ix
CHAPTER 1	
(INTRODUCTION)	
1. INTRODUCTION	1
CHAPTER 2	
(LITERATURE REVIEW)	
2. LITERATURE REVIEW	
2.1. English for Academic Purposes	
2.2. Genre Analysis	
2.3. Studies on Research Articles	
2.3.1. Studies on micro organization of research articles	
2.3.2. Studies on macro organization of research articles	11
CHAPTER 3	
(METHODOLOGY)	
3. METHODOLOGY	18
3.1. The Corpus	18
3.2. Method of Analysis	
3.2.1. A Detailed Description of The Modified Model	
3.2.1.1. The discussion section	
3.2.1.2. The conclusion section	25
CHAPTER 4	
(RESULTS)	
4. RESULTS	28
4.1. Move Patterns Found in The Corpus	
4.1.1. Move patterns in the discussion section	
4.1.2. Move patterns found in the conclusion section	30
4.2. Frequency of Occurence of Each Move and Step	
4.2.1. Frequency of occurrence each move and step in the discussions	
4.2.2. Frequency of occurrence each move and step in the conclusions	34

CHAPTER V (DISCUSSION)

5. DISCUSSION	36
5.1. Move Patterns in Discussions and Conclusions	
5.1.1. Move patterns in discussions	36
5.1.2. Move patterns in conclusions	
5.2. Frequencies of Moves and Steps in Disc	
	liscussions41
5.2.2. Frequencies of moves and steps in conclusions	
СНАРТЕ	R VI
(CONCLUSION AN	
6. CONCLUSION AND SUMMARY	44
REFERENCES	47
APPENDIX I List of Research Articles in T	The Corpus 53
APPENDIX II A Sample Analysis of The R.	
APPENDIX III A Sample Analysis of The R.	A Conclusions58
APPENDIX IV A Sample Analysis of The R.	
	A Conclusions 61
VITAE	

LIST OF TABLES

Table 3.1.	Yang&Allison's Model (2003) used for pilot analysis	21
	Moves and steps of the discussion section	
Table 3.3.	Moves ans steps of the conclusion section	25
Table 4.1.	Number and percentage of move patterns used in discussions	29
Table 4.2 .	Number and percentage of move patterns used in conclusions	30
Table 4.3.	Frequencies of moves and steps found in RA discussions	32
Table 4.4.	Frequencies of moves and steps found in RA conclusions	34

LIST OF FIGURES

Figure 2.1.	Model proposed by Hopkins and Dudley-Evans	
	(1988) on RA discussions	. 14
Figure 2.2.	Model proposed by Swales (1990) on RA discussions	. 14
Figure 2.3.	Model proposed by Nwogu (1997) on RA discussions	. 14
Figure 2.4.	Model proposed by Yang and Allison (2003) on RA discussions	. 15
Figure 2.5.	Model proposed by Kanoksilapatham (2005) on RA discussions	. 15
Figure 4.1.	Percentage of moves in discussions	. 33
Figure 4.2.	Percentage of moves in conclusions	. 35

CHAPTER 1

INTRODUCTION

The analysis of written and spoken discourse has attracted great attention of both applied linguists and practitioners who are interested in English for Academic Purposes and English for Specific Purposes. Many studies have been conducted in the field of genre analysis on written academic genres (Samraj, 2008). There is now a significant body of literature in English on a variety of academic genres including abstracts, presentations, lectures, theses, dissertations and textbooks however; it is the research article which receives the most attention (Holmes, 1997). This is barely surprising, because the research article has been the most important channel in scientific circles (Salager-Meyer, 2001; Swales, 1990; Li and Ge, 2009) to share knowledge and report the findings of the researches since the birth of the first English-medium scientific journal: The Philosophical Transactions of the Royal Society of London in 1665 (Swales, 1990).

The interest in RA in genre analysis stems from practical needs as it is necessary to provide learners and researchers with appropriate models of academic and scientific texts. Since English has become the lingua franca of science and technology and RAs written in English are the channels to distribute the scientific knowledge, analysing the RA and understanding its structure have gained importance. Each year an increasing number of non-native speakers study at the universities of English speaking countries such as UK and the USA. Institutions whose medium of teaching is English also exist in EFL contexts. Moreover, considering the fact the ability to read and write scientific RAs is a key to success in science, as also suggested by Berkenkotter and Huckin (1995), it could be said that understanding the conventions of academic genre is essential for becoming a member of a discourse community. Thus, studying the structure of RA would help facilitate the ability of both native and non-native students to understand and produce successfully constructed RAs and become members of discourse communities of their particular fields.

Since Swales' pioneering work (1990) on the analysis of the moves and steps within the Introduction section of Research Articles (RA), many other researchers have studied the Introduction, Method, Results and Discussion sections of RA. The analyses have been conducted mainly in the social and natural sciences (Samraj, 2008). In ESP genre analysis of RAs, some researchers have concentrated on its structure (Brett, 1994; Holmes, 1997; Lim, 2006; Nwogu, 1997; Ozturk, 2007; Posteguillo, 1999; Samraj, 2002; Swales, 1990; Yang & Allison, 2003, 2004), while others have focused more on some of its particular linguistic features, such as hedging (Crompton, 1997; Hyland, 1994, 1996, 1998; Salager-Meyer, 1994), modality (Salager-Meyer, 1992), verb tense (Malcolm, 1987; Salager-Meyer, 1992; Thompson & Ye, 1991) and first person pronoun (Hyland, 2001; Kuo, 1999; Salager- Meyer, 2001; Thetela, 1997). Where the structure of specific sections of the RA has been analysed, attention has been mainly directed towards the Introduction. Swales' (1981) study, which was the first full scale analysis of RA Introductions, has been particularly influential on the subsequent researchers carried out in the field. The RA Introduction has also been studied by Crookes (1986), Anthony, (1999), Samraj (2002, 2005) and Ozturk (2007). Whereas the introduction section receives the most attention, several studies also have been conducted on results (Brett, 1994; Williams, 1999; Yang and Allison, 2003) and methods (Martinez, 2003; Lim, 2006) sections. The fact that little attention has been paid to RA discussion section in particular is an inadvertence since discussion section may be the most important section of the research article. It is where the authors present their findings and seek to establish their importance. Moreover, the conclusion section which gives an overall account of study has been viewed as a complementary section of discussions and its structure has not been investigated in detail.

As far as the discussion section is concerned, the bulk of the research to date on that particular section of the RA has dealt with the natural sciences. Majority of studies conducted on the discussion section analysed RAs in the fields of chemical engineering (Peng, 1987), medicine (Nwogu, 1997; Williams, 1999) and biochemistry (Kanoksilapatham, 2005). This is perhaps unfortunate since a large and increasing number of non-native speaker students are studying social science subjects through the medium of English. There is therefore a pedagogical rationale for extending the genre

analysis of the RA into the social sciences. A further justification for studying social science RAs is that this will enable us to determine how far the patterns observed in the natural sciences are generalizable to all written academic discourse.

Another issue related to the studies conducted on the discussions is that many move-based studies tend to examine a small number of texts (e.g., Peng, 1987; Williams, 1999;) limiting the generalizability of the results. Moreover, few move-based studies (e.g., Nwogu, 1997; Posteguillo, 1999) have worked with a representative corpus, thus claims made by these studies need to be strengthen. Specifically, the number of articles used in previous studies on RA discussions (Hopkins & Dudley-Evans, 1988; Peng, 1987; Holmes, 1997; Posteguillo, 1999; Yang. & Allison,2003) is relatively limited. Thus, to arrive at more generalizable and reliable results, studies analysing larger corpuses are needed.

Swales (1990) argues that the relationship between main RA functions and its sections could be complex. For instance, it is not very clear to what extent the discussion section presents arguments related to the findings of the study or also provides readers with suggestions related to pedagogical implications. Hence, understanding ideal functions of the sections and their actual use is crucial and apparently this point seems to be neglected in the studies conducted previously. Moreover, the number of RAs used in previous studies on discussions is relatively limited to arrive at more generalizable results. Also, move-level analysis alone used in most studies seems to fail to reveal the communicative purposes of that section. Besides, the most detailed study conducted on results and discussion sections of RA by Allison and Yang (2003) also seems to fail to mirror the distinctions between results, discussion and conclusion sections since a particular move was used repeatedly in three sections and moves and steps did not match the specific functions of each section. Since the scope of the study was too large including results, discussion, conclusion and other closure sections and the same model was used in these sections, a more careful and detailed analysis is required to gain more reliable results.

Conclusion sections, also in the scope of the present study, have been neglected so far and there is a limited body of research (Allison and Yang, 2003) on it. Taking all

these into account, this study aims to provide some information on the organization of RA discussion and conclusions written by authors who have published their articles in five established journals (Applied Linguistics, Language Learning, The Modern Language Journal, Studies in Second Language Acquisition and System) at a move-step level analysis in a relatively under-researched area, Applied Linguistics. It is hoped that, the study would shed some light on the practices of authors who have published their work in prestigious journals of the field. Thus the model developed in this study may help non-native researchers to be aware of the conventions of RA writing, that "prestigious genre" as Swales (1990) calls it and become members of their discourse communities.

Following on from this introductory chapter, the literature on the issues raised in English for Academic Purposes is reviewed in the Literature Review. After the studies conducted on micro and macro structure of RA are reviewed, it will be seen that, although some work has been done in the field, several issues need to be examined in detail. The third chapter will consider the selection of the corpus and will explain the method of analysis. The fourth chapter gives the results of the analysis in detail and presents the commonly used move patterns employed in RAs analysed. The fifth chapter of the study includes discussions related to the results of the study accompanied by information related to relevant literature. The last chapter to this study will conclude the study by providing a summary of the findings and by supplying some pedagogical implications for teaching academic writing to non-native speakers.

CHAPTER 2 LITERATURE REVIEW

2.1. English for Academic Purposes

English for Academic Purposes emerged as a branch of English for Specific Purposes in the early 1980s and developed rapidly in the last two decades. EAP can be defined as teaching English with the aim of assisting learners' study or research in that language which covers a wide range of practices such as undergraduate and postgraduate teaching, classroom interactions, research genres, student writing and administrative practice (Hyland, 2006). At first, EAP was established as one of the two main branches of ESP together with EOP (English for Occupational Purposes).

However due to several factors such as internationalization of higher education, increasing number of immigrants and non-native speakers who study at universities in English speaking countries and position of English as a medium of instruction in many universities worldwide, EAP gained great importance and grew. Since learning genres and register differences are formidable tasks for non-native speakers of a language and teaching those students general vocabulary and grammar rules is not adequate for being successful in academic life, they are also in need of knowledge of genre and differences between genres (Biber and Conrad, 2009). This need has given rise to the emergence of English for Academic Purposes which equips the students with skills that would ensure their academic success.

2.2. Genre analysis

Genre analysis has attracted great attention of linguists since it provides us with knowledge of communicative functions that are present in genres and linguistic characteristics of these functions. Genre analysis has influenced current practices in language teaching to a great extent. These effects seem to influence and shape particularly the domain of English for Specific Purposes (Bhatia, 2005).

Genre has been widely used in analysing non-literary discourse during the last two decades (Hyon, 1996). A genre is different from another genre in terms of the communicative purpose it has. This communicative purpose determines and affects organizational structure and vocabulary choice of the writers. A detailed and useful definition of genre is provided by Swales (1990, p.58):

A genre comprises a class of communicative events, the members of which share some set of communicative purposes. These purposes are recognized by the expert members of the parent discourse community, and thereby constitute the rationale for the genre. This rationale shapes the schematic structure of the discourse and influences and constrains choice of content and style. Communicative purpose is both a privileged criterion and one that operates to keep the scope of the genre as here conceived focused on comparable rhetorical action. In addition to purpose, exemplars of genre exhibit various patterns of similarity in terms of structure, style, content and intended audience.

There are specific features of genres. For instance; genres evolve continuously, though they are identified on the basis of conventions (Berkenkotter and Huckin, 1995). These conventionalized patterns and features exist; however members of discourse communities use these stylized patterns to create new patterns. Genres serve typical socially recognised communicative purposes, but genres can be found being used to convey private intentions (Bhatia, 1993, 1995). Genres have typical names, however different members of discourse communities have different views and interpretations related to genres and sometimes these views and interpretations are disputed. Though it is generally believed that genres are independent from disciplinary variations, disciplinary conflicts can be found in especially academic genres (Bhatia, 1998b, 1999b). And finally it could be said that a wide range of methods, techniques are used to analyse genres, however genre analysis is mostly viewed as a kind of textual investigation. Swales (1990) presents some defining features of genre:

- A genre is a class of communicative events.
- The principal criterial feature that turns a collection of communicative events into a genre is some shared set of communicative purposes.
- Exemplars or instances of genres vary in their prototypicality.
- The rationale behind a genre establishes constraints on allowable contributions in terms of their content, position and form.
- A discourse community's nomenclature for genre is an important source of insight, (pp. 45-57)

According to Swales (1990), genres exist within discourse communities which can be described as the groups of people who have common public goals, mechanisms for communication among themselves. Discourse communities use one or more genres to achieve their communicative goals and acquire some specific lexis. Genres can differ in terms of complexity of rhetorical purpose. In that sense a recipe is different from a political speech. According to Swales (1990) genres differ:

- the degree to which they are prepared in advance of their communicative instantiation;
- the mode or medium through which they are expressed;
- the extent to which producers of prepared-text genres are conventionally expected to consider their anticipated audiences and readerships;
- the extent to which they exhibit universal or language-specific tendencies. (1990, pp. 61-7)

Genre analysis, especially inspired by pioneering work of Swales (1990) has had a deep impact on the practices of English for Specific Purposes. Teaching academic writing by presenting the students with appropriate and explicit models of academic writing, thus enhancing their proficiency in a relatively short time and equip them with necessary skills to become a member of their discourse community has been one of the most important endeavours of genre analysis. Hyon (1996) states that there are three main traditions in contemporary genre studies, which are ESP genre analyses, New Rhetoric studies, and an Australian approach which is based on systemic functional linguistics. One of the main quests of ESP genre analysis has been to find out the accepted conventions of specific genres and analyse presentation and order of content and use of rhetorical elements to achieve a communicative goal.

2.3. Studies on Research Articles

RA is the main channel to distribute the scientific knowledge. Researchers share their work with the other researchers all round the world through it. Understanding the structure of the RA is crucial since becoming a member of a discourse community and selling the results of the research successfully partly depend on "how you write" in a competing market, where every researcher tries to publish his own research. Thus, to

help the researchers with that issue and to explore the nature of the RA, numerous studies have examined the organization of the RA at both micro and macro level.

2.3.1. Micro Organization of Research Articles

Verb tense (Malcolm, 1987; Salager-Meyer, 1992; Thompson & Ye, 1991), hedging (Crompton, 1997; Hyland, 1994, 1996, 1998; Salager-Meyer, 1994), modality (Salager-Meyer, 1992), citation (Hyland,1999), first person pronoun (Hyland, 2001; Kuo, 1999; Salager- Meyer, 2001) and collocation (Campoy, 2002; Gledhill, 2000) are among the features that have been focus of researches examining micro organization of research articles.

Malcolm (1987) for instance, examined whether tense usage in EST (English for Science and Technology) discourse is governed by rhetorical functions unique to a particular genre or some temporal meanings governing tense choice in general English. He analysed 20 articles from the *Journal of Pediatrics* and maintained that a comprehensive analysis of tense choice in EST discourse is needed that specifies a hierarchical relationship between context- dependent rhetorical functions, context-independent temporal meanings, and, finally, actual tense choices. Another researcher, Salager-Meyer (1992) analysed 84 well-structured Medical English (ME) abstracts to account for finite verb tense and modality usage in medical English and to examine how the meaning conveyed by the different tenses and modal verbs is related to the communicative function of the different rhetorical divisions of abstracts and to that of each ME text type. The study revealed that there was a close relationship between the rhetorical function of the "history" type of discourse and the past and the present served the purpose of enhancing and emphasizing the generalizability of specific findings.

Hyland (1994, 1996, 1998) is one of the researchers who examined hedging in academic writing both in academic textbooks and research articles. On analysing 26 articles in molecular biology, Hyland (1996) concluded that hedging in scientific research writing cannot be fully understood in isolation from social and institutional contexts and suggested a pragmatic framework which reflected this interpretive environment. Another micro level item which has been examined is modality. Salager-Mayer (1992) analysing 84 medical English abstracts to examine verb tense, also dealt

with the issue of modality. He found that modals were move- and research-type determined and they had the discoursal function of signalling the tentative and suggestive author-marked moves. Moreover, modality was found to be significantly more frequent in review articles. It was concluded that medical text types had a direct bearing on the use of tenses and modality whereas research types did not.

Citation also has received attention in studies on micro organization of research articles. For instance, Hyland (1999) examined a computer corpus of 80 research articles and interviews with experienced writers to investigate the contextual variability of citations in eight disciplines and suggested how textual conventions point to distinctions in the ways knowledge was typically negotiated and confirmed within different academic communities. Differences between disciplines humanities/social sciences and hard sciences for instance, engineering, were found. Authors in the humanities and social sciences used more citations than scientists and engineers, and tended to use integral structures to employ discourse reporting verbs and to represent cited authors as adopting a stance to their material. Hyland (1999) suggested that this may be due to differences between fields in terms of epistemological and social conventions of the disciplines. Hyland (2001) also investigated the topic of self-mention, in other words first person pronoun use in research articles. 240 research articles from the fields of mechanical engineering, electrical engineering, marketing, philosophy, sociology, applied linguistics, physics and microbiology were analysed to investigate use of self-citation and exclusive first person pronouns. The study revealed that the pronouns we and I were the most commonly used devices for selfrepresentation. There was a difference between hard and soft disciplines in terms of self-mention since first person pronouns were much more densely used in the soft disciplines. Self-citation behaviour was also investigated and it was found that authors in hard sciences employed self-citation more than the authors in soft sciences. Another researcher examining first person pronoun use was Kuo (1999), who in a study analysed 36 scientific journal articles from computer science, electronic engineering, and physics and found that the frequency of personal pronoun use varied considerably. The study revealed that first-person plural pronouns were used far more frequently than other types of pronouns in the corpus. In contrast, there was not a single occurrence of

first-person singular pronouns. The writer of a single-authored article referred to himself\herself as we rather than I.

Collocations have been the focus of some studies examining elements of micro structure of research articles. For instance, Gledhill (2000) examined a corpus of 150 cancer research articles to characterize the phraseology of introductions. He explained the fixedness and idiosyncratic nature of scientific phraseology in terms of discourse processes such as reformulation. The findings of the study, as the authors suggested as well, had presented a good base for the design of a representative and specialised corpus of the research article and a contextual approach to corpus based studies that would be appropriate to the language teaching for specific purposes.

Authors' reflecting their identities in their writing is another issue that has been investigated. Dahl (2004) examined writer manifestation in three languages, English, French and Norwegian, across three disciplines, economics, linguistics and medicine, to understand whether language or discipline was the most important variable determining the pattern of metatext in academic discourse. To that end, she analysed 180 refereed research articles. The findings of the study revealed that the language variable was the most controlling one in the fields of economics and linguistics where English and Norwegian displayed similar patterns unlike French, which employed less metatext. In medicine, all three languages showed similar patterns in displaying little metatext. Therefore, she concluded that English and Norwegian are writer-responsible languages whereas French is a reader-responsible language. Moreover, she suggested that when the disciplines are taken into consideration since economics and linguistics had less formal structure, they would be more likely to reflect cultural elements when compared with medicine which followed more universal and strict patterns. Hyland (2001) also investigated identity in academic writing. He examined authorial identity in academic writing by analysing the use of personal pronouns in 64 Hong Kong undergraduate theses, comparisons with a large corpus of research articles, and interviews with students and their supervisors. The findings revealed that the students avoided using first person pronouns when making claims or arguments. Therefore, he concluded that some of the authors are not comfortable with reflecting authorial identity in academic writing.

2.3.2. Macro Organisation of Research Articles

Numerous studies have been conducted to discover and understand the macrostructure of RAs since Swales' (1981, 1990) pioneering study on RA Introductions. Most of the studies examined individual sections of RAs while several studies (Nwogu, 1997; Posteguillo, 1999; Kanoksilapatham, 2005) investigated overall structure of whole RAs. Nwogu (1997) in his study on the organization of medical research articles, identified an eleven move schemata using Swales (1981, 1990) genre-analysis model. Posteguillo (1999) investigated the schematic structure of 40 computer science RAs and concluded that I-M-R-D structure cannot be applied to RAs in computer science systematically. Kanoksilapatham (2005) examining 60 biochemistry research articles using Swales' genre-analysis model, proposed a structure of 15 distinct moves: three moves for the introduction section, four for the methods section, four for the results section, and four for the discussion section. Besides these studies, numerous studies have been carried out to investigate organization of abstract, introduction, methods, results, discussion and conclusion sections of RA.

Abstract is the brief summary, a condensed version of the RA which provides the reader with information related to the purpose of the study, procedures followed, results obtained, main conclusions and recommendations. Since abstracts help the reader save time by indicating whether the full text deserves their further attention or not (Bonn, Swales, 2007), in other words "sell" the article, understanding the structure of abstracts has gained attention of the researchers in the field. Among the studies focusing on RA abstracts Salager-Meyer (1990) in medical English, Santos (1996) in Applied Linguistics, Martin (2003) in experimental social sciences, Stotesbury (2003) in Humanities, Social and Natural Sciences, Samraj (2005) in Conservation Biology and Wildlife Behavior and Bonn&Swales (2007) in language sciences could be mentioned.

Since Swales' publication of a revised version of his groundbreaking CARS (Create a Research Space) model in 1990, numerous studies have focused on

introduction sections of RAs. Swales' CARS model has been used to analyse introductions of RAs by researches such as Anthony (1999) in software engineering, Golebiowski (1999) on English and Polish RA Introductions, Samraj (2002) in Wildlife Behaviour and Conservation Biology, Tucker in Art-History (2003), Ozturk (2007) and Hirano (2009) in Applied Linguistics.

Methods, which is the narrowest section of a RA, describes methodology and materials used and procedures followed in the study. The methods section is important in that it enables the researcher to convince the readers of the validity of the tools used to gather data. Despite its importance, studies focusing on methods section are limited in number. Studies which examined the overall structure on methods section are Nwogu (1997), Kanoksilapatham (2005) and Lim (2006). Martinez (2003) also examined Methods section, however, he analysed the methods sections of biology RAs in terms of their thematic structure.

The results section presents the data collected and statistical analyses carried out on the data. It contains all the results related to the research questions of the study. Among the studies which have examined results section, Brett's (1994) study on sociology RAs, Williams' (1999) study on medical RAs and Yang&Allison (2003) on Applied Linguistics RAs could be mentioned.

Hill, Soppelsa, and West (1982) proposed that the discussion section is the mirror image of introduction section and it moves from the solution of the problem that to the implications of that solution for the larger field, while the introduction moves from the larger field that motivates the study to the particular problem of the study. The chief purpose of the discussion section is to interpret the results obtained, account for likely reasons and justify the results and claims by presenting examples from relevant literature. Some of the studies carried out on discussion section include those of Hopkins and Dudley-Evans (1988) in which they identified eleven moves. There moves were "Background Information", "Statement of Result," "(Un)expected Outcome", "Reference to Previous Research" (Comparison), "Explanation of Unsatisfactory Result," "Exemplification, "Deduction", "Hypothesis", "Reference to Previous Research" (Support), "Recommendation", and "Justification" only "Statement of

Result" being obligatory. Dudley-Evans (1994) later revising his earlier work developed a model including the moves Information, Statement of Result, Finding, (Un)expected Outcome, Reference to Previous Research, Explanation, Claim, Limitation and Recommendation. Holmes (1997) analysed Discussion sections of 30 social science Research Articles, from the disciplines of history, political science and sociology, according to a modified version of the moves, or communicative categories, presented in previous studies. He found that, although there were fundamental similarities to the natural sciences, social science discussion sections also displayed some distinctive features. History texts were particularly distinctive, and of the three disciplines bore the least resemblance to those of the natural sciences. Nwogu (1997) analysed the discussion sections of 15 RAs from medical journals and identified three moves: highlight overall research outcome, explain specific research outcome, state research conclusions. Posteguillo (1999) examined 34 computer science RA discussion sections using Swales's model. Peacock (2002) analysed a total of 252 RAs from seven different disciplines and found no obligatory move in the total corpus. The most frequent identified moves were claim (in 90% of all RAs), finding (84%), reference to previous research (73%), and recommendation (59%). In another study conducted by Allison and Yang (2003) on 20 RA in Applied Linguistics, it was found that 'Commenting on Results' was the most frequent and obligatory move, and it occurred repeatedly in a discussion section, while 'Reporting Results' and 'Summarizing Results' together occurred less often. 'Reporting Results' occurred in all Discussion sections but one, so it was considered as quasi-obligatory. Kanoksilapatham (2005) who analysed the overall organization of 60 biochemistry RAs by using Swales' genre-analysis model identified four moves for discussion section. These moves were contextualizing the study, consolidating results, stating the limitations of present study and suggesting further research. Here are some models developed for the organization of discussion section.

- (1) Background Information
- (2)Statement of Result
- (3) (Un)expected Outcome
- (4) Reference to Previous Research (Comparison)
- (5) Explanation of Unsatisfactory Result
- (6) Exemplification,
- (7) Deduction
- (8) Hypothesis
- (9) Reference to Previous Research (Support)
- (10) Recommendation
- (11) Justification

Hopkins and Dudley-Evans (1988:118)

Figure 2.1. Model proposed by Hopkins and Dudley-Evans (1988) for RA discussions

Move 1 Background information.

Move 2 Statement of results

Move 3 (Un)expected outcome

Move 4 Reference to previous research for comparison or support

Move 5 Explanation

Move 6 Exemplification

Move 7 Deduction and Hypothesis

Move 8 Recommendation

(Swales 1990:172-173)

Figure 2.2. Model proposed by Swales (1990) for RA discussions

Move 9: Highlighting Overall Research Outcome

Move 10: Explaining Specific Research Outcome

- (1) Stating a specific outcome.
- (2) Interpreting the outcome.
- (3) Indicating significance of the outcome.
- (4) Contrasting present and previous outcomes.
- (5) Indicating limitations of outcomes.

Move 11: Stating Research Conclusions:

- (1) Indicating research implications.
- (2) Promoting farther research.

Nwogu (1997:135)

Figure 2.3. Model proposed by Nwogu (1997) for RA discussions

Move 1—Background information

Move 2—Reporting results

Move 3—Summarizing results

Move 4—Commenting on results

-Interpreting results

-Comparing results with literature

-Accounting for results

-Evaluating results

Move 5—Summarizing the study

Move 6—Evaluating the study

-Indicating limitations

-Indicating significance/advantage

-Evaluating methodology

Move 7—Deductions from the research

-Making suggestions

-Recommending further research

-Drawing pedagogic implication

Yang&Allison (2003:376)

Figure 2.4. Model proposed by Yang and Allison (2003) for RA discussions

Move 12: Contextualizing the study

Step 1: Describing established knowledge

Step 2: Presenting generalizations, claims, deductions, or research gaps

Move 13: Consolidating results

Step 1: Restating methodology (purposes, research questions,

hypotheses restated, and procedures)

Step 2: Stating selected findings

Step 3: Referring to previous literature

Step 4: Explaining differences in findings

Step 5: Making overt claims or generalizations

Step 6: Exemplifying

Move 14: Stating limitations of the study

Step 1: Limitations about the findings

Step 2: Limitations about the methodology

Step 3: Limitations about the claims made

Move 15: Suggesting further research (optional)

Kanoksilapatham (2005:291)

Figure 2.5. Model proposed by Kanoksilapatham (2005) for RA discussions

Conclusion sections in the RAs fulfil the functions of summarizing the study, highlighting overall findings of the study and evaluating the study. Evaluation can be done both by underlining the strengths and advantages of the study and stating its weaknesses and drawbacks. Further research can be recommended in this section, as well. No study to the researcher's knowledge specifically examined the conclusion sections of the RA. Since conclusion section is generally seen as a complement section of discussion section and the functions of this section mentioned above can be realized in discussion section as well, research examining conclusions is limited.

Bunton (2005) analysed the generic structure of conclusion chapters in PhD theses or dissertations. 45 PhD theses covering a range of disciplines, chapters playing a concluding role were identified and analysed for their functional moves and steps. Bunton (2005) found that most conclusions restated purpose, consolidated research space with a varied array of steps, recommended future research and covered practical applications, implications or recommendations. However, a minority were found to focus more on the field than on the thesis itself. These field-oriented conclusions tended to adopt a problem–solution text structure, or in one case, an argument structure. Variations in focus and structure between disciplines were also found. Though Bunton (2005) focused on conclusion sections, his corpus was comprised of PhD theses or dissertations, not RAs.

The single study focusing on conclusion sections of the RA was carried out by Yang&Allison (2003) on 20 RAs from the field of Applied Linguistics. Conducting a move-step analysis, Yang& Allison (2003) concluded that the three moves in the conclusion can all be found in the discussion, though with some variation in observed steps. This situation may result from the features of the model developed and used for analysis. Since the moves that should belong to conclusion section -when the function of this section is taken into consideration- were classified as the moves belonging to discussion section, the results obtained may not be quite revealing.

While the mentioned studies conducted on discussion and conclusion sections of RAs provide us with insights related to the organization of these sections, several questions remain to be addressed in detail. Most of the studies conducted on discussion section analysed RAs in the fields of chemical engineering (Peng, 1987), medicine (Nwogu, 1997; Williams, 1999) and biochemistry (Kanoksilapatham, 2005). It would be beneficial to carry out the investigation in relatively underresearched areas of social sciences, particularly Applied Linguistics since genre analysis is under the umbrella of this field. Moreover, the studies conducted on RA discussions employed a move based analysis on a relatively small corpus (Peng, 1987; Williams, 1999; Yang&Allison, 2003). Thus, a larger corpus is needed to gain more substantial results. It should also be noted that studies conducted on RA discussions seem to overlook the distinctions between RA sections and use a single move repeatedly in different sections as in Yang&Allison (2003). When it comes to RA conclusions no study to the researcher's knowledge specifically focused on this section. Yang&Allison (2003) examined the structure of closing sections of the RA, however the model of analysis utilized in Yang&Allison (2003) has several drawbacks that would be discussed in detail in the discussion section.

The present study aims to examine rhetorical structure of the RA discussion and conclusion sections in Applied Linguistics by using a move-step level analysis. With regards to this aim, the following research questions will be used:

- How are the RA discussions and conclusions in the field of Applied Linguistics rhetorically organized?
- What are the frequencies of moves and steps used in RA discussions and conclusions in the field of Applied Linguistics?

The following section presents the methods for corpus selection and the procedures for the detailed move analysis.

CHAPTER 3 METHODOLOGY

This chapter consists of three sections. In the first section information about the corpus used in the study, in the second section description of the procedure followed and in the third section information related to the model used in the present study is presented.

3.1. The Corpus

The corpus used in this study was comprised of 30 research article (RA) discussions and conclusions. The articles in the corpus were selected from the field of Applied Linguistics. Five established journals in the field, also indexed in the SSCI, (Applied Linguistics, Language Learning, Studies in Second Language Acquisition, Modern Language Journal and System) were used as source journals. The selected RAs reported empirical research and were under the category of "articles". They all followed the widely used Introduction-Methods-Results-Discussion framework. Theoretical articles and articles published in special issues were excluded from the scope of the study. The articles included in corpus were accessible and could be retrieved online. RAs published between the years of 2007-2010 were selected to better observe the current trends in the field and eliminate the possibility of encountering changes among the RAs published in a long time span since genres are continuously evolving. On the basis of the criteria mentioned above, a two-phased random stratified sampling for selecting the RAs was carried out. In the first phase 375 research articles reporting empirical research published in these five established journals were selected. These articles were analysed to obtain descriptive information related to section headings (I-M-R-D-C) of complete RAs. Each RA was analysed to determine the section headings it contained. After this procedure was followed for each article in the corpus, the sections headings were coded, and five different categories were identified. These categories were "discussion" and "conclusion" (each as separate section), "discussion",

"conclusion", "discussion and conclusion" (combined sections) and "the other". The RAs in "the other" category did not contain discussion and conclusion sections.

In the second phase, 30 RAs, 6 RAs from each journal, which made up the main corpus of the study were selected randomly from the articles containing separate "discussion" and "conclusion" sections. 10 RAs were selected for a pilot analysis. The pilot analysis was conducted to see whether the model developed by Yang&Allison (2003) was effective in identifying the moves and steps of discussion and conclusion sections.

3.2. Method of Analysis

This study employs the move analysis technique to analyse organizational pattern of 30 RAs. Different definitions of "a move "have been rendered by several researchers. For instance, Nwogu (1997:122) states that "The term move means a text segment made up of bundles of linguistic features (lexical meaning, propositional meaning, illocutionary forces etc.) which give the segment a uniform orientation and signal the content of discourse in it." Holmes (1997:325) defines move as "a segment of text that is shaped and constrained by a specific communicative function" while in Swales's approach "move is a functional term that refers to a defined and bounded communicative act that is designed to contribute to one main communicative objective, that of the whole text." (2000:35). According to Dudley-Evans& St. John (1998:89), on the other hand, "A move is a unit that relates both to writer's purpose and to the content that s/he wishes to communicate. A step is a lower level text unit than the move which provides a detailed perspective on the options open to the writer in setting out the moves."

As can be understood from the definitions above, a move is a functional unit that is relevant to the purpose of the writer to realize his communicative intentions within a text. A move can be realized in either a step or more than one steps. While a move realizes the communicative purpose of a segment of a text at a more general level, a step specifies that particular purpose more elaborately. These two-layered units of analysis were used in analysing the discussion and conclusion sections of the RAs in the corpus.

Discussion and conclusion sections of the 30 RAs were analysed manually to find out organizational patterns. First, all articles were read carefully and the analysis was carried out at the sentence level. When a sentence realized more than one function, the most salient purpose was taken into consideration (Yang&Allison, 2003; Holmes, 1997). Colour pens were used to highlight the moves and steps which were identified. Since on some occasions the most salient purpose was difficult to identify, repeated readings were required. The sentences were not analysed in isolation; their relation with the neighbouring sentences was also considered. Thus, a sentence was analysed by taking the functions of neighbour sentences and general function of the section as well. Analysis of the corpus was carried out repeatedly and the problem sentences that could not be categorized were noted down to discuss it with a specialist in the field. In order to provide interrater reliability, 10 of the RAs were analysed by a researcher specialising in Applied Linguistics who also carried out researches in academic discourse.

First, a pilot study was conducted by using the model of Allison and Yang (2003) given below to analyse 10 RAs. After conducting the pilot study, it was understood that the model needed modifications since moves and steps were presented in an overlapping way and each move that should belong to a specific section was used repeatedly in other sections as well. Hence, a model based on Allison and Yang (2003) but with modifications, additions and omissions was developed to analyse 30 RAs in the corpus.

Table 3.1. Yang&Allison's Model (2003) used for pilot analysis

(R)Move 1—Preparatory information

(R)Move 2—Reporting results

(R)Move 3—Commenting on results

Step 1—Interpreting results

Step 2—Comparing results with literature

Step 3 —Accounting for results

Step 4—Evaluating results

(R)Move 4—Summarizing results

(D)Move 1—Background information

(D)Move 5—Summarizing the study

(D)Move 6—Evaluating the study

Step 1—Indicating limitations

Step 2—Indicating significance/advantage

(D)Move 7—Deductions from the research

Step 1—Making suggestions

Step 2—Recommending further research

Step 3—Drawing pedagogic implications

(PI)Mo ve 2—Dealing with pedagogic issues

Step 1—Indicating necessity for pedagogic change

Allison and Yang (2003)

3.2.1. A Detailed Description of The Modified Model

The model used for the analysis in the present study reflected the organizational structure of the RA discussions and conclusions. The moves and steps included in the model are presented according to the section headings as in Table 3.2. and Table 3.3.

3.2.1.1. The discussion section

Table 3.2. Moves and Steps of the Discussion Section

(D) -Move 1 Restatement

Step 1 Restating purpose

Step 2 Restating findings

Step 3 Restating methodology

(D) Move 2 Commenting on findings

Step 1 Interpreting findings

Step 2 Comparing findings with the literature

Step 3 Accounting for findings

Step 4 Evaluating findings

Move 1: Restatement

This is the central Move in which the author restates information related the purpose and methodology of the study and the findings. Since the aim of the study is mentioned previously in the introduction, methodology in the methods section and the findings in the results section, the primary function of this move is to remind them to the reader.

Move 1 Step 1: Restating purpose: The author mentions for which purpose the study was conducted. Here some example sentences taken from the discussions analysed for the present study are presented below. The underlined expressions were frequently encountered in RA discussion sections restating purpose.

"The goal of the present study was to test the predictions of two models of lexical activation and access: the RHM (Kroll & Stewart, 1994) and the MDM (Frost et al., 1997)." (SSLA5)

"<u>The aim</u> of the present study was to investigate the relative effects of input tasks including structured input tasks with and without explicit information and problem-solving tasks on the development of Japanese learners' L2 pragmatic proficiency in the area of requests." (AL4)

Move 1 Step 2: Restating findings: In this step, the author reminds the readers of the findings that have been presented in results section. The purpose of the authors restating findings may be the need to account for, interpret and evaluate findings for the main function of discussion section is to discuss them in detail. This step, in a way is a preparatory step before the move "Commenting on Results". Examples are given below.

"The DI, the IP, and the IS groups performed significantly better than the control group." (MLJ5)

"The Anglophone participants' use of the imperfective adhered strongly to the durative features of verb types, which led them to a less appropriate use of this grammatical aspect with achievement verbs than was found among their Hispanophone counterparts. Among the Hispanophones, however, the lexical aspect influence led to differential effects only between the prototypical extremes of the aspectual categories: stative and achievement verbs. One striking similarity between the two groups was the effect of telicity and punctuality on the use of the perfective." (MLJ2)

Move 1 Step 3: Restating methodology: In this step the author gives brief information about the subjects of the study or data gathering tools which have been described in detail in the methods section as in the following examples.

"The integration of L2 knowledge was determined by examining whether L2 speakers were sensitive to grammatical errors in a self-paced reading task, as indicated by a delay while reading incorrect sentences." (LL3)

"Building upon their original research, this study consisted of two experiments investigating the involvement load hypothesis in vocabulary learning. Experiment 1 compared the performance of 64 adult English as a second language (ESL) learners from a range of countries at two different proficiency levels (i.e., matriculated undergraduate students vs. students in an Intensive English Program) to ascertain the effectiveness of three vocabulary tasks with different levels of task-induced involvement. Experiment 2 investigated whether two tasks hypothesized to represent the same level of task-induced involvement would result in equivalent initial learning and retention of target words by 20 adult ESL learners at two different levels of proficiency." (LL6)

Move 2: Commenting on findings

The main purpose of this move is to discuss the findings by making interpretations, speculating about the possible reasons for obtaining such findings, evaluating and comparing the findings with the relevant literature.

Move 2 Step 1: Interpreting findings

In this step, the authors try to make sense of the findings presented, give an explanation and interpretation. The underlined expressions in the example sentences below were two of the mostly used expressions the authors used when interpreting results.

"<u>This may indicate that</u> attriters use the former kinds of hesitation markers to cope with the increased cognitive demands of bilingual speech production and decreased accessibility of their L1 system, whereas their deployment of FPs may shift toward the L2 norm due to interlanguage effects in those cases where the L2 employs them differently from the L1." (LL4)

<u>"The lack of overall correlation between level and test results suggest that</u>, contrary to popular assumptions, DDL can be of use at lower levels: Learners are capable of detecting at least some patterns and applying them to new contexts." (LL5)

Move 2 Step 2: Comparing findings with the literature

Authors make use of this step when they want to compare and contrast the findings of their study with the relevant studies in the literature. This may be realized in two ways; authors may use this move to support their findings with the similar findings obtained it other studies, or show contrasts between studies to highlight unexpected or extraordinary outcomes. This is exemplified below.

"The finding that high-proficiency bilinguals lexically mediate their L2 <u>is not unique to this</u> <u>study</u>. The fluent Dutch-English bilinguals in Kroll and Stewart's (1994) study were faster to translate from the L2 to the L1, a direction of translation likely to engage lexical connections, than from the conceptually mediated L1-to-L2 direction. <u>In another study</u>, Kroll et al. (2002) observed that both less and more proficient bilinguals were faster to translate from the L2 to the L1 than the reverse direction, although the asymmetry was larger for the less proficient bilinguals. <u>Likewise</u>, Sholl et al.'s (1995) study showed that for relatively fluent bilinguals, only L1-to-L2 translation benefited from prior picture naming, which implies that the two directions of translation engage different processing." (SSLA5)

Move 2 Step 3: Accounting for findings

In this step the authors speculate about likely sources and reasons which contribute to their findings. In other words, they give account of why they have come up with these particular findings as in the following examples.

"Based on this conclusion, <u>it can be argued</u> that <u>because</u> the word pairs in the semantic condition in the present study had strong meaning relations, both low- and high-proficiency bilinguals were equally affected." (SSLA5)

"The finding that for the GENL group EPs have increased only before nouns, while the GECA and NLCA groups also have more pauses before verbs, <u>may be linked to the fact that</u> German and Dutch are closely related and a substantial part of the lexicon of the two languages consists of cognates. (D M2 S3) <u>A similar explanation might account for the fact that</u> EPs appear more often before prepositions for the two L2 English groups, as the use of prepositions in Dutch and German overlaps to a large extent. (D M2 S3) The fact that the most clear-cut and consistent difference between attriters and controls was found with respect to CDMs preceding articles and pronouns <u>suggests the intriguing possibility that</u>, for the attriting groups, lexical access problems may have "spread" to include other types of information activated by the noun." (LL4)

Move 2 Step 4: Evaluating findings

In this step, the findings are evaluated in terms of generalizability, reliability, etc.

"These findings remain tentative due to the small participant groups and because further details about the types of contexts in which these forms occur may reveal that some differences are attributable to other factors (e.g., variation in types of contexts produced)." (LL4)

3.2.1.2. The conclusion section

Table 3.3. Moves and Steps in the Conclusion Section

(C) -Move 1 Summarizing the study

(C) -Move 2 Evaluating the study

Step 1 Indicating limitation / evaluating methodology

Step 2 Indicating significance

(C) -Move 3 Deductions from the research

Step 1 Recommending further research

Step 2 Drawing implications

Move 1: Summarizing the study

This move gives brief and general information related to the aim of the study, procedure followed and results obtained. The sentences are generally constructed using past tense. Examples are given below.

"In this study, L2 learners' sensitivity to grammatical errors in a reading comprehension task was examined as an attempt to probe L2 learners' development of integrated knowledge. The findings of the study confirmed that the integration of L2 knowledge is selective. Specifically, the participants' knowledge about verb subcategorization seemed to be integrated, in that it is readily available in language processing, but their knowledge about the plural morpheme is not." (LL3)

Move 2: Evaluating the study

In this move the authors state the advantages, effectiveness and strengths of their study or indicate its weak points and limitations.

Move 2 Step 1: Indicating limitation / evaluating methodology

Indicating limitations and evaluating methodology were combined as a single step since limitations arise mainly because of the shortcomings stemming from methodology followed. Some examples are presented below.

[&]quot;<u>Nevertheless</u>, there are <u>shortcomings to the research that need to be considered</u>. First, the study consisted of a <u>small student sample with only</u> 10 L2 learners of German. The 10 participants used the CALL system as part of regular class instruction for three consecutive semesters; thus, their interaction with the system is likely to be representative of general system use." (MLJ3)

"However, there are <u>some limitations to this study</u>. One of the primary limitations is the nature of the data collection instrument. Although the questionnaire provided useful and interesting information, there is a limit to what such an instrument can tell us. The quantitative items phrased questions in the researchers' terms and required that the learners respond to existing items rather than allowing them to address issues that were meaningful to them. In the qualitative section, the prompts and answers were admittedly short and perhaps superficial." (MLJ4)

Move 2 Step 2: Indicating significance

In this step, the authors mention the contributions of their study to the field, indicate strengths, advantages or a gap that the study has filled in the literature as in the following examples.

"Given the design of the current study and its focus on both irregular and regular past tense, the results presented here <u>add to the emerging body of research</u> that investigates the differential effects of feedback on different linguistic targets." (SSLA2)

"Nevertheless, <u>the current study was novel</u> in the sense that it utilized speech samples of actual high-stakes oral proficiency testing with an extensive collection of suprasegmental parameters, and it investigated their impact on L2 proficiency assessment." (MLJ1)

"In conclusion, <u>this study provides insight into</u> the nature of L2 learners' difficulties with word classes, <u>a topic that had only been indirectly addressed</u> in the L2 literature, primarily in studies of vocabulary acquisition." (SSLA1)

Move 3: Deductions from the research

This is the move in which authors present the reader with research avenues deserving exploration or the issues that need further inquiry. Also, pedagogical and practical implications that could be applied to real life conditions and classroom context are emphasized.

Move 3 Step 1: Recommending further research

This is the step in which authors point to the research areas deserving further inquiry or suggest what other researchers can do to better explore the issues in question as in the examples presented below.

"That recasts and prompts differentially affect rule-based and exemplar-based targets in this way is *worthy of further investigation.*" (SSLA2)

"<u>Future research</u> on comprehension-based learning <u>may need to examine</u> individual and combined contributions of these and other factors to learner success in L2 pronunciation development." (SSLA3)

Move 3 Step 2: Drawing implications

In this step, authors present the readers with pedagogical and practical ideas suggested by the research findings which may also prove beneficial if applied in real life situations. Some examples are presented below.

"Such awareness of the nature of the relationship between these two ends in L2 speaking development may usefully <u>inform pedagogical decisions</u> in so far as to ensure a balanced consideration of automatization and restructuring. At this point, it is necessary that L2 teachers provide the contexts and the pedagogical means to promote formulaicity especially among advanced L2 learners, since acquiring a rich and varied formulaic language would enable the latter to reach a native-like level much as natural as in the way language is processed and used by NNSs." (SYS1)

"From a pedagogical perspective, it appears crucial to prepare students appropriately for the stay abroad. This preparation should naturally include work on language knowledge and language learning strategies, as well as work on learners' attitudes." (SYS2)

CHAPTER 4 RESULTS

This section provides the results related to move patterns of discussion and conclusion sections of the RAs analyzed and frequencies of moves and steps used. In section 4.1. the results of move patterns in discussion and conclusion sections are provided in detail. Section 4.2. presents the results of the analysis related to the frequencies of moves and steps found in both sections.

4.1. Move Patterns Found in The Corpus

Results related to the first research question of the study "How are the discussion and conclusion sections of RAs rhetorically organized in Applied Linguistics?" are presented below. Results on move patterns found in corpus are presented in separate two sections as "4.1.1. Move patterns in the discussion section" and "4.1.2. Move patterns in the conclusion section" below.

4.1.1. Move patterns in the discussion section

The move patterns of RA discussion sections are presented in Table 4.1. In the table below, names of the move patterns identified in 30 RA discussions were abbreviated due to space limitations. For instance; D refers to "Discussion", C stands for "Conclusion", M refers to "Move" and S refers to "Step". This way, DM2 refers to Discussion-Move 2 which is "Commenting on Results" while CM3 stands for Conclusion-Move 3, "Deductions from the Research". For more and detailed information see Tables 3.1. and 3.2. in The Methodology section.

Table 4.1. Number and Percentage of Move Patterns Used in Discussions

	Move Patterns	N	%
Pattern I	DM1-DM2-CM3-DM1-DM2-CM3-CM2-DM1-DM2	1	3
Pattern II	DM1-DM2-CM2-CM3-DM1-DM2	1	3
Pattern III	DM1-DM2-CM3-DM2-DM1	2	7
Pattern IV	DM1-DM2-CM3-DM1-DM2	2	7
Patters V	DM1-DM2-CM3-CM2	1	3
Pattern VI	DM2-DM1-CM3	1	3
Pattern VII	DM1-DM2-CM2	1	3
Pattern VIII	DM1-DM2-CM3	4	13
Pattern IX	DM1-DM2 *	17	58
TOTAL		30	100

As can be seen in Table 1, nine different move patterns were identified in discussion sections of the RAs. Discussions generally followed a similar pattern, all of them opening with Move 1 "Restating" except one which opened with Move 2 "Commenting on Findings". The most common pattern was DM1-DM2 which occurred in a cyclical order. 17 discussions in the corpus employed DM1-DM2 move structure which constituted 58% of the move patterns used in the total corpus. The number of the cycles differed from article to article, ranging from one to ten cycles. The second mostly used pattern was DM1-DM2-CM3 move structure which was found in seven discussions, comprising 13% of move patterns used in the corpus. The other move patterns presented in the Table 1 occurred once or twice. It is worth mentioning that some of the patterns identified included moves which normally belong to the conclusion

section. Though, the number of the instances was relatively limited, possible reasons for these instances will be presented in discussion section in detail.

On some occasions, CM3 "Deductions from The Research" occurred in the middle or at the end of the pattern, acting as a bridge between cycles. CM2 "Evaluating the Study" displayed the same functions, though occurring less than CM3. Both DM1 and DM2 occurred in all the article discussions, thus they could be regarded as obligatory moves in discussion sections. In 4.1.2. results related to move patterns found in RA conclusion sections will be presented.

4.1.2. Move patterns in conclusion sections

In this section the move patterns found in RA conclusions are presented. The names of the moves were abbreviated. See Table 3.2 in The Methodology section for detailed information.

Table 4.2. Number and Percentage of Move Patterns Used in Conclusions

	Move Patterns	N	%
Pattern I	CM1-CM2-CM3-CM2-CM1-CM3	2	7
Pattern II	CM1-CM2-CM1-CM3-CM2	1	3
Pattern III	CM1-CM3-CM2-CM3	5	17
Pattern IV	CM1-CM2-CM1-CM3	2	7
Pattern V	CM1-CM3-CM2	2	7
Pattern VI	CM1-CM2-CM3	5	17
Pattern VII	CM2-CM1-CM3	2	7
Pattern VIII	CM1-CM3-CM1	1	3
Pattern IX	CM1-CM2	3	9
Pattern X	CM2-CM3	1	3
Pattern XI	CM1-CM3	5	17
Pattern XII	CM3	1	3
TOTAL		30	100

12 different patterns were identified in the RA conclusion sections. In 26 out of 30 instances, the conclusions started with CM1 "Summarizing The Study". The most

frequent patterns were CM1-CM2-CM3 (17%), CM1-CM3-CM2-CM3 (17%), and CM1-CM3 (17%) each occurring in five conclusions, all comprising %51 of all move patterns in the corpus. The second most frequent pattern was CM1-CM2 (10%) in which "Summarizing The Study" was followed by "Evaluating The Study". Moves did not occur in isolation, mostly accompanied by other moves as the case in 29 conclusions. Only in one conclusion CM3 was found as the single move. Generally speaking, most of the conclusions in the corpus opened with "Summarizing The Study", continued with "Evaluating The Study" and finished with "Deductions from The Research". Though this pattern was disrupted with the inclusion of other moves as in CM1-CM2-CM1-CM3 and CM1-CM2-CM3-CM2-CM1-CM3, the conclusions followed a more linear structure when compared to the discussions. This section has presented results related to the move patterns found in RA conclusions. In the following section, results related to the second research question of the study will be presented.

4.2. Frequency of Occurrence of Each Move and Step

The second research question of the study addressed the frequency of move and steps in the discussion and conclusion sections of Applied Linguistics RAs. Results of the analysis conducted will be presented in following two sections.

4.2.1. Frequency of occurrence of each move and step in the discussions

Table 4.3. Frequencies of moves and steps found in RA discussions

	Instances	Percentage			
M 1 Restating					
S1 Restating Purpose	18	11			
S2 Restating Findings	140	82			
S3 Restating Methodology	12	7			
TOTAL	170	100			
M 2 Commenting on Findings					
S1 Interpreting Findings	81	27			
S2 Comparing Findings with The Literature	105	35			
S3 Accounting for Findings	101	34			
S4 Evaluating Findings	12	4			
TOTAL	299	100			

Table 4.3 presents the results related to the frequency and percentages of move and steps in RA discussions in the corpus. As the table reveals, the most frequent move in the discussion section was Move 2 "Commenting on Findings" occurring 299 times. Move 1 "Restating" was used 170 times. When it comes to steps of Move 1, "Restating Findings" was the most prevalent step by far. It occurred 140 times, thus comprising %82 of the steps belonging to the Move 1. The second most used step of Move 1 was "Restating Purpose" (11%) in which the authors briefly stated the aims of the study. This step occurred 18 times in corpus. "Restating Methodology" (7%) on the other

hand, was less common, only occurring 12 times. Figure 4. 1 presents information related to the percentage of moves that were used in RA discussions in the corpus.

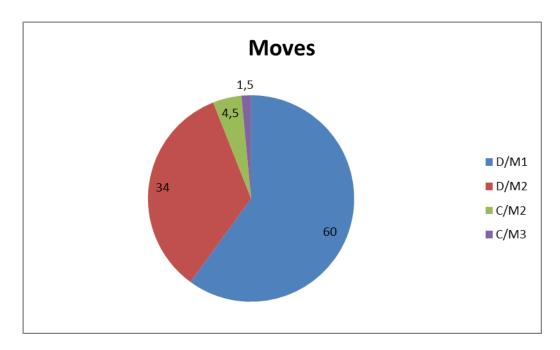


Figure 4.1. Percentage of moves in discussions

Move 2 "Commenting on Findings" which mostly followed Move 1 "Restating" fulfilled its functions through four steps which were "Interpreting Findings", "Comparing Findings with The Literature", "Accounting for Findings" and "Evaluating the Findings". Among the steps, "Comparing Findings with The Literature" was the most common one (35%) followed by "Accounting for Findings (34%). "Interpreting Findings" which comprised 27% of the steps of Move 2, occurred 81 times whereas, the last step "Evaluating Findings" (4%) was less common, only occurring 12 times. As indicated by the frequency of Moves and Steps, this section was highly cyclical. This characteristic of cyclicity exists in all the discussion sections of RAs in the corpus.

4.2.2. Frequency of occurrence of each move and step in the conclusions

Table 4.4. presents the results related to the frequency and percentages of move and steps in RA conclusions in the corpus. Below, results of the second research question of the study related to conclusions will be presented in detail.

Table 4.4. Frequencies of moves and steps found in RA conclusions

	Instances	Percentage		
MOVE 1 Summarizing The Study	31	100		
Total	31	100		
Move 2 Evaluating The Study				
Step 1 Indicating Limitation/Evaluating Methodology	20	48		
Step 2 Indicating Significance	22	52		
Total	42	100		
Move 3 Deductions from The Research				
Step 1 Recommending Further Research	27	55		
Step 2 Drawing Implications	22	45		
Total	49	100		

When it comes to conclusion section, as Table 4.4. reveals, it can be stated that the most frequent move was Move 3 "Deductions from The Research" which was preceded by "Evaluating The Study" occurring 42 times. However, if we consider that "Summarizing the Study" does not have any steps and the other moves fulfil their function through more than one step, it can be concluded that Move 1 was indeed dominant, though numbers suggest it was the second mostly used move. Figure 4.2. presents information related to the percentage of moves that were used in RA conclusions in the corpus.

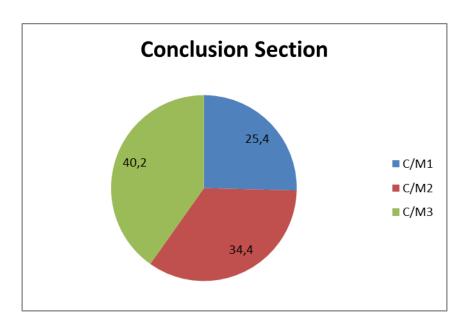


Figure 4.2 Percentage of moves in conclusions

The steps in Move 2 "Evaluating the Study" both occurred similar times, "Indicating Limitation and Evaluating Study" 20 (48%) and "Indicating Significance" (52%) 22 times. Move 3, "Deductions from The Research", which was the most prevalent move in conclusion section occurring 49 times comprised of two steps; "Recommending Further Research" occurring 27 times (55%) and "Drawing Implications" (45%) occurring 22 times.

CHAPTER 5 DISCUSSION

5.1. Move Patterns in Discussions and Conclusions

5.1.1. Move patterns in discussions

This study aimed to investigate the textual organization of discussion and conclusion sections of RAs reporting empirical research. To this end, 30 articles in the field of Applied Linguistics published within years of 2007-2010 in 5 prominent journals were analysed by using genre-analysis. The analysis showed that nine different move structures were used in the discussions of RAs (See Table 4.1 in Results section). Discussions generally followed the same pattern, all of them opened with Move 1 "Restating", except one discussion which started with Move 2 "Commenting on Findings". The results suggest that authors start writing discussions by using Move 1 in which they restate the purpose of the study, and/or the methodology followed and/or the results obtained. Hence, it could be said that they try to contextualize the study and present background information before they discuss the results in detail. This issue was not addressed by Yang and Allison (2003) in their study investigating move structures of the discussion section. They identified "Reporting Results" as a frequent move in discussions; however this move was placed under results section in the model developed. Unlike the present study, a specific move or step was not assigned for the sentences which reported on methodology or the aim of the study. Another study by Hopkins (1997) reported that discussion sections began with Move 1 "Background Information" proceeded to Move 2 "Statement of Result" and Move 3 "Outlining of Subsequent or Parallel Developments". In the model developed by Dudley-Evans & Hopkins (1988) "Background Information" was the move where authors give information related to the aims, theoretical background and methodology of the study and "Statement of the Result" was the move in which results of the study were presented. Similarly, discussion sections in the present study opened with Move 1 "Restating" which fulfils the same function, though as a single move. While in Dudley-Evans & Hopkins (1988) and Holmes (1997) three moves were present at the openings of discussions, in the present study 29 articles out of 30 included a single Move, which was Move 1 "Restating". This difference may result from the framework of the analysis employed in these studies. In the model developed in this study while Move 1 "Restating" is considered a broad move comprised of three steps which are "Restating Purpose", "Restating Methodology" and "Restating Findings", above mentioned studies used a model in which the moves were narrowly specified. Authors' using Move 1 as the opening move in discussions is a quite reasonable choice. This situation may arise due to the main function of discussion section, commenting on specific results of the study. To discuss the results of the study, the authors quite naturally need to remind the readers of the aim, methodology and particularly the results of the study. Quite logically, to comment on the results, authors first need to mention specific findings of the study that would be elaborately discussed and accounted for. The findings of present study seem to confirm this idea.

The most commonly observed move structure was DM1-DM2 which made up 58% of the move patterns used in total corpus. The structures occurred in cycles and these cycles differed in number, ranging from 2 to 10. This finding is in line with the findings of other studies (Peng, 1987; Hopkins&Dudley-Evans, 1988; Holmes, 1997; Yang&Allison, 2003; Kanoksilapatham, 2005) which reported the occurrence and recycling of the most common moves. One possible reason for the differences between cycle numbers may be due to the number of research questions dealt with in the discussion section. To check the likelihood of this account, RA discussions which employed more moves than the other discussions were checked and it was found that they addressed more issues than the other RAs. In other words, the number of research questions and findings presented as answers to these questions seem to determine the number of the move cycles.

Some of the move patterns identified included moves which normally belong to the conclusion section. For instance, the DM1-DM2-CM3 move structure was found in seven discussions, comprising 13% of move patterns used in total corpus. Yang&Allison (2003) also found that "Summarizing the Study", "Evaluating the Study" and "Deductions from the Research" were to be of high frequency due to the recurrence.

Especially, at the step level "Recommending Further Research" was found to be of high frequency. Therefore, they concluded that these moves were optional moves of the discussion section. However, before arriving at such a conclusion, it must be borne in mind that discussion and conclusion sections differ in terms of their functions. While the main function of the discussion section is to comment on results, the function of the conclusion section is to evaluate the overall findings of the study and the study itself. The fact that Yang and Allison's (2003) corpus included RAs lacking conclusion section may be an effective factor causing differences in findings. If the aim is to discover textual organization of discussion and conclusion sections of RAs and provide the readers with a sound model that could be used as a guide for RAs, careful selection of corpus is essential. That is to say, an analysis of a corpus including RAs differing in the sections that they include may not produce reliable results. Yang&Allison (2003) also stated that the appearance of these moves may be influenced by whether there is a subsequent conclusion or pedagogical implications section. However, in all cases these moves should not be classified as moves belonging to the discussion section as it was done in Yang&Allison (2003). When these instances in which the moves of the conclusion were used in discussions were re-examined by comparing them to the instances in the conclusion section, the analysis showed that there were clear differences between instances. For instance; the step "Recommending Further Research" was used for different communicative purposes in discussion and conclusion sections. In discussions, "Recommending Further Research" was used to signal the weaknesses of the claims made based on the findings of the study. Authors seemed to make use of this step when they were cautious about the reliability or validity of some specific findings, thus they suggested further research. Here are two excerpts from discussions in which C/M3S1 "Recommending Further Research" was used.

[&]quot;A different possibility is that the strategies used by the three languages under observation here, which are all closely typologically related, may not have changed because of their similarity across languages. *Further investigations* of typologically more distant languages will have to ascertain which of these two explanations is the more convincing one." (LL/4)

[&]quot;Once these factors have been identified and when it has been shown that the more stable form in terms of frequency appears in the same types of linguistic contexts for both groups, it will be possible to examine only the contexts in which the two seemingly more variable forms occur and

through which the same meaning is conveyed (e.g., past and completed event) or the same function is met." (SSLA/6)

To compare the use of C/M3S1 in these two separate sections, excerpts from conclusions in which this move was used are also presented below.

"This conclusion remains mainly speculative at this point. *Future research in this area* should investigate the predictions of the MDM in L1 English-L2 Arabic bilinguals: If the lexicon of native speakers of English is organized on the basis of orthographic-form similarities, then early English learners of Arabic should experience more sensitivity to orthographic than to morphological similarities." (SSLA/5)

"First, in-depth analyses of specific structures are needed. This study has examined a range of forms and the frequency of their use, but the specific linguistic contexts in which these forms are used must be examined to learn if these potential variants meet the conditions of the traditional linguistic variable." (SSLA/6)

As can be understood from the examples presented, there are differences between the instances where C/M3S1 was used in discussions and conclusions. In discussions, it was used as a reminder about the possible misinterpretations of findings and accounts given and therefore it was suggested that the likelihood of these interpretations should be checked in future studies. However, in conclusions the overall findings of the studies or the methodology were evaluated and future directions which would investigate unexplored features were mentioned. This distinction was not paid attention in Yang&Allison (2003) which used moves in an overlapping way in all sections of RAs regardless of their communicative functions.

For a limited number of instances, moves belonging to conclusion section occurred in the middle of move patterns as in Pattern 3 DM1-DM2-CM3-DM1-DM2 (See Table 4.1). It could be said that these moves acted as a bridge between the move cycles DM1-DM2. After the results were restated and commented on, opinions on pedagogical issues or further research were presented and then cycle was repeated.

For o move to be accepted as an obligatory move of a specific section, it is expected to occur in all sections analysed (Yang&Allison, 2003). The analysis showed that DM1 and DM2 were obligatory moves in discussion sections since they occurred in all article discussions. This suggests that the authors after presenting specific findings, commented on, accounted for, made interpretation of and compared them with the findings obtained through other studies. Though the findings of the present study

suggest that these two moves are obligatory, Yang&Allison (2003) identified DM2 as obligatory and DM1 as quasi-obligatory moves in discussion sections. Unlike Yang&Allison (2003), Hopkins&Dudley-Evans (1988) proposed that only "Statement of Results" is obligatory. While Swales (1990) states that "Statement of Results" is quasi-obligatory, Holmes (1997) claims that no move is completely obligatory in social sciences discussions. These differences might be attributed to the differences in the frameworks utilized for the analysis. As mentioned above, all the studies except Yang&Allison (2003) employed one-level (move) analysis and might therefore not able to capture some inherent relationships of functional units in discussion section. It could be said that following a move-step level analysis provides a much more detailed and specific account than a single-level analysis.

5.1.2. Move patterns in conclusions

When it comes to the conclusion section, the results revealed that 12 different patterns were present in RA conclusions, though these patterns had a lot in common (See Table 4.2.) For instance, 26 conclusions started with CM1 "Summarizing the Study" and this move occurred in all conclusions except one and thus could be regarded as quasi-obligatory (See Figure 4.2.). Three moves were identified which were "Summarizing the Study", "Evaluating the Study" and "Deductions from the Research" similar to the findings obtained by Yang&Allison (2003). Though some intervention and repetition of other moves occurred, most of the conclusions followed a linear pattern, opening with CM1 "Summarizing the Study", proceeding to CM2 "Evaluating the Study" and finished with CM3 "Deductions from the Research". Yang&Allison (2003) also found similar patterns in conclusion sections and concluded that conclusions follow a more linear pattern when compared to discussions which follow a cyclical pattern. This situation may be linked to the fact that the conclusion section is shorter and less complex than the discussion section. Since the main focus is on the "study" rather than "the findings", conclusions seem much tidier and more straightforward than discussions. That is why the organization of conclusion section has not received much attention of researchers and has been generally accepted as a part of discussion section. For instance, Swales and Feak (1994, p. 195), in a chapter on writing research papers, state: "we will not distinguish between these two terms (discussion and conclusions) since the difference is largely conventional, depending on traditions in particular fields and journals." Similarly, Peng (1987), Dudley-Evans (1994), Nwogu (1997) and Posteguillo (1999) did not treat the conclusion as a separate section and conducted the analysis by using the moves of discussion section. The only study to be cited on RA conclusions, Yang&Allison (2003) also used a very overlapping model in which the same moves were used for results, discussion and conclusion sections. Besides, the answer to the question what happens when the conclusion becomes a chapter was not fully answered since while some RAs contained this section, the others did not. Hence, the findings of present study on research article conclusions would shed light on an issue that has not been investigated in detail.

The results revealed that only CM3 "Deductions from The Research" occurred in all conclusions. CM2 and CM1 occurred in all conclusions except for two. Thus, these findings suggest that while CM3 could be regarded as obligatory, CM1 and CM2 could be regarded as quasi-obligatory moves. Though Yang&Allison (2003) stated that the moves mentioned above were also frequent in their corpus, CM1 "Summarizing the Study" being the most frequent, they did not mention which moves are obligatory and which are not. The model developed in the present study could be said to have predicted the structure of conclusions in the corpus since no other structures were identified which would not fit in the model. The main function of the conclusion section is to give account of the whole of the study, not specific findings. Thus authors respectively summarized the main findings or procedures followed, evaluated the study in terms of its weaknesses and strengths and suggested future research issues and pedagogical implications as it was foreseen in the model.

5.2. Frequencies of Moves and Steps in Discussions and Conclusions

5.2.1. Frequencies of moves and steps in discussions

The results showed that the most common move was Move 2 "Commenting on Findings" occurring 299 times (60%). Similarly, this move was the most frequent one in Yang&Allison (2003). This is quite understandable since the main function of discussion section is to comment on results. First authors restate aim, methodology and the specific findings of the study, or in other words the answers to research questions.

Then, they interpret the findings, compare them with the findings of relevant studies in the field, present accounts of results and finally evaluate the findings. Though not all of the discussions moved this way, majority of them included at least "Restating Findings", "Interpreting Findings", "Comparing Findings with the Literature" and "Accounting for Findings". The most frequent step was D/M2S2 "Comparing Findings with the Literature" occurring 105 times (35%), followed by D/M2S3 "Accounting for Findings" occurring 101 times (34%). However, when sentence number was checked, it was seen that "Accounting for Findings" was the most dominant step. Similarly, Yang&Allison's study (2003) suggests that "Accounting for Results" is by far the most frequent step followed by "Interpreting Results". Frequencies of moves and steps of this section indicate that discussion is highly complex and cyclical. This interpretation is confirmed by other studies (Peng, 1987; Holmes, 1997; Yang&Allison, 2003; Kanoksilapatham, 2005) in relevant literature as well.

"Evaluating the Study" and "Deductions from the Research" moves belonging to conclusion section were also found in RA discussions, but only constituting 6% of the total moves in the corpus. "Summarizing the study" was not present in any of RA discussions. Yang&Allison (2003) found these three moves existing in their corpus and concluded that these are optional moves of discussion section. However, as mentioned before, these moves should not be categorized as the moves of discussion section either optional or obligatory since they realize the functions of conclusion section. It could be said that the model of analysis used in Yang&Allison (2003) which treat results, discussion and conclusion section in the same way and places a single move under different three section categories may result in misinterpretations of findings.

5.2.2. Frequencies of moves and steps in conclusions

When it comes to the conclusion section, Move 3 "Deductions from The Research" was found to be the most frequent move with an occurrence of 49 times (40,2%), followed by Move 2 "Evaluating The Study" (34,4%). However, if we divide "Deductions from the Research" in its steps and calculate accordingly, Move 1 "Summarizing the Study" (25,4%) would outnumber it. Since Move 1 realizes its function as a single move and does not have a step, it could be said that indeed it is the

most dominant move in conclusions. The same interpretation was rendered by Yang&Allison (2003) who obtained similar results.

Though in the model developed by Yang&Allison (2003) CM2 was comprised of three steps which were "Indicating Significance/Advantage", "Indicating Limitations and Evaluating Methodology", in the present study "Indicating Limitations" and "Evaluating Methodology" were accepted as a single step. After the pilot study, it was concluded that limitations mentioned in conclusion sections mainly arise from methodological issues and were stated as shortcomings of the study. Thus, these two steps were combined. The analysis showed that "Indicating Significance" was more frequent than "Indicating Limitation/Evaluating Methodology". This may be as a result of the endeavours of authors to justify the importance and value of their research in the eyes of the readers.

Another step which was frequent in conclusions was "Recommending Further Research" the most frequent step after Move 1 "Summarizing the Study". This step was the third frequent step in Yang&Allison (2003), but not very significant in number. Though, "Recommending Further Research" was frequent in present study, the authors did not suggest specific and clear research avenues or solutions to the problems. They mainly presented superficial and cliché comments rather than pointing directly to the issues that should be addressed in future research. On some occasions, the authors provided the readers with possible extensions of their researches but went on stating that they were investigating issue in question with a study in progress. This situation may result from the competition among the researchers to conduct studies and publish them or maintain their research grants in a market which makes big demands on them.

CHAPTER 6

CONCLUSION AND SUMMARY

This study reported a systematic genre analysis of the discussion and conclusion sections in Applied Linguistic RAs, and showed how these sections were organized. To this end, 30 RA discussions and conclusions were analyzed by using move analysis technique based on a modified version of Yang&Allison's (2003) model. The study showed that discussions mainly included two moves which were Move 1 "Restating" and Move 2 "Commenting on Findings". The discussions had a highly cyclic structure and this was apparent in all RAs analyzed. Though a few moves belonging to the conclusion section occurred in discussion section, it is quite evident that these two sections have two distinct communicative purposes and should not be treated as complementary sections as previous research did. The conclusions analyzed seemed to have a more linear structure when compared to discussions and were less complex since the move structures were fewer and texts were shorter. Most of the RAs in the corpus showed similarities in terms of patterns followed. Though variations were observed, these were not significant in number.

The model used for analysis was based on the model developed by Yang&Allison (2003) but was revised with additions, omissions and modifications. After the pilot study on 10 discussions and conclusions, it was concluded that the model had several drawbacks. The moves in the model were used repetitively in four sections, that is to say the moves were not placed in the model by taking the functions of sections into consideration. In the present study, to overcome this problem, the model was modified with appropriate changes made. Moreover, all the RAs in the corpus had both discussion and conclusion sections, so it was ensured that the variations in the section headings would not influence the results obtained. This was one of the advantages of the present study since the studies conducted before did not pay attention to that shortcoming. Besides, a larger corpus was used in the present study to get more reliable and generalizable results. However, to increase the generalizability of the results, future

studies could use much larger corpuses to investigate the organization of these sections of RA.

This study was conducted with the intention of providing non-native researchers with a sound model that they could use when writing RAs. Previous studies in the field have shown that there are common organizational patterns within RAs in similar disciplines. These patterns could be seen as shared conventions of the members of a discourse community which they use to communicate their ideas and present their research findings. Becoming a member of a discourse community is a crucial part of academic life and to realize this end understanding these common conventions is essential. Only in this way the researchers would be able to produce well-written RAs and publish their work. At this point genre analysis plays an important role in investigating general and specific organizational patterns of RAs within specific disciplines. Considering the fact that even native speaker authors have difficulties in writing RAs, it can be concluded that writing RAs would be a challenging task for nonnative authors. Hence, it could be beneficial to present them with appropriate and commonly used models which would be a good starting point to understand the structure of RA. This understanding may have a liberating force which would then empower and aid researchers to create well-written RAs. Taking increasing competition in academic life, difficulties of publishing work in an international journal and writing in another language into consideration, it is hoped that this study would be of help to the researchers to understand the ways international authors publish their work. The use of this study is not limited to researchers only, undergraduate students in the colleges, novice teachers and postgraduates could also benefit from the insights of this study.

Though it would not be right to assume that all these move-based models are common to all disciplines and they should be followed strictly in writing, they could be of help for teaching academic writing in heterogonous groups of students having different proficiencies and discipline background. The outcome may be much more beneficial if these models are presented to homogenous groups who can focus on more specific features of genre as Dudley-Evans (2000) suggests. Moreover, taking the fact that learners in EFL contexts generally do not have enough language proficiency and

sophistication to deal with the notions such as discourse community and readership it could be assumed that moving from these models would assist them in handling with academic writing. Consequently it is hoped that the findings of this study would contribute to the teaching of this genre to novice writers, students and non-native researchers.

REFERENCES

- Anthony, L. (1999). Writing research article introductions in software engineering: how accurate is a standard model? *IEEE Transactions on Professional Communication*, 42, 38–46.
- Berkenkotter, C. & Huckin, T. N. (1995). *Genre knowledge in disciplinary communication: cognition, culture, power*. Hillsdale, NJ: Laurence Erlbaum Associates.
- Bhatia, V. K. (1993). Analyzing genre: Language use in professional settings. London: Longman.
- Bhatia V. K., (1995): "Genre-mixing and in professional communication: The case of 'private intentions' v. 'socially recognised purposes'", in P. Bruthiaux, T. Boswood, & B. Bertha, (eds.), *Explorations in English for Professional Communication*, City University of Hong Kong, Hong Kong.
- Bhatia, V. K. (1998b): "Generic Conflicts in Academic Discourse", in I. Fontanet, J.C. Palmer, S. Posteguillo, J.F. Coll (eds.) *Genre Studies in English for Academic Purposes*, Bancaixa, Fundacio Caixa Castello (15-28).
- Bhatia, V. K. (1999b): "Disciplinary Variation in Business English", in M. Hewings & C. Nickerson (eds.) *Business English: Research into Practice*, Prentice Hall (129-143).
- Biber, D. & Conrad, S. (2009). Register, Genre, and Style. Cambridge University Press.
- Bittencourt dos Santos, M. (1996). The textual organization of research paper abstracts in applied linguistics. *Text*, 16, 481–499.
- Bonn, S. & Swales, J. (2007). English and French journal abstracts in the language sciences: Three exploratory studies. *Journal of English for Academic Purposes*, 6, 93–108.

- Brett, P. (1994). A genre analysis of the results section of sociology articles. *English for Specific Purposes*, 13(1), 47–59.
- Bruce, I. (2008). Academic Writing and Genre: A Systematic Analysis. Continuum.
- Bunton, D. 2005. The structure of PhD conclusion chapters. *Journal of English for Academic Purposes*, 4, 207–224.
- Conduit, A., & Modesto, D. (1990). An investigation of the generic structure of the materials/methods section of scientific reports. *Australian Review of Applied Linguistics*, *Series S, No. 6*, 109-134.
- Crompton, P. (1997). Hedging in academic writing: Some theoretical problems. *English* for Specific Purposes, 16(4), 271–287.
- Crookes, G. (1986). Towards a validated analysis of scientific text structure. *Applied Linguistics*, 7, 57–70.
- Dillon, G. (1991). *Contending rhetorics: writing in academic disciplines*. Bloomington: Indiana University Press.
- Dudley-Evans, T. & St. John, M.J., (1998). *Developments in ESP: A Multi-Disciplinary Approach*. Cambridge University Press, Cambridge.
- Dudley-Evans, T.(2000) Genre Analysis: A key theory of ESP? *IBERICA*, 2, 3-11
- Gledhill, C. (2000). The discourse function of collocation in research article introductions. *English for Specific Purposes 19*, 115-135.
- Golebiowski, Z. (1999). Application of Swales' model in the analysis of research papers by Polish authors. *IRAL*, *37* (*3*), 231-247.
- Hill, S., Soppelsa, B. F. & West, G. K. Teaching ESL students to read and write experimental research papers, *TESOL Quarterly*, 16 (3), 333–347
- Hirano, E. (2009). Research article introductions in English for specific purposes: A comparison between Brazilian Portuguese and English. *English for Specific Purposes*, 28(4), 240-250

- Holmes, R. (1997). Genre analysis and the social sciences: An investigation of the structure of research article discussion sections in three disciplines. *English for Specific Purposes*, 16(4), 321–337.
- Hopkins, A., & Dudley-Evans, T. (1988). A genre-based investigation of the discussion sections in articles and dissertations. *English for Specific* Purposes, 7, 113-122.
- Hunston, S. (1993). Professional conflict: disagreement in academic discourse. In M.Baker, G. Francis and B. Tognini (Eds), *Text and technology: in honor of John Sinclair*. Philadelphia: John Benjamins.
- Hutchinson, T., Waters, A. (1991). English for Specific Purposes. A Learning Centred Approach. Cambridge University Press.
- Hyland, K. (1994). Hedging in academic writing and EAP textbooks. *English for Specific Purposes*, 13(3), 239–256.
- Hyland, K. (1996). Writing without conviction? Hedging in science research articles. *Applied Linguistics*, 17(4), 433–454.
- Hyland, K. (1998). *Hedging in scientific research articles*. Amsterdam: John Benjamins.
- Hyland, K.(1999). Academic attribution: citation and the construction of disciplinary knowledge. *Applied Linguistics*, 20(3), 341-367.
- Hyland, K. (2001). Humble servants of the discipline? Self-mention in research articles. *English for Specific Purposes*, 20(3), 207–226.
- Hyland, K. (2002). Authority and invisibility: authorial identity in academic writing. Journal ofPragmatic s 34. 1091–1112
- Hyland, K. (2006). English for Academic Purposes An advanced resource book. Routledge.
- Hyon, S. (1996). Genre in three traditions implications for ESL. *TESOL Quarterly*, 30(4), 693–722.

- Johns, A.M. (2002). *Genre in the classroom multiple perspectives*. Lawrance Erlbaum Associates, Publishers.
- Kanoksilapatham, B. (2005). Rhetorical structure of biochemistry research articles. English for Specific Purposes 24, 269–292.
- Kuo, C. (1999). The use of personal pronouns: Role relationships in scientific journal articles. *English for Specific Purposes*, 18(2), 121–138.
- Li, L. & Ge, G. (2009). Genre analysis: Structural and linguistic evolution of the English-medium medical research article (1985–2004). *English for Specific Purposes*, 28 (2), 93–104.
- Lim, J. M. H. (2006). Method sections of management research articles: A pedagogically motivated qualitative study. *English for Specific Purposes*, 25(3), 282–309.
- Malcolm, L. (1987). What rules govern tense usage in scientific articles? *English for Specific Purposes*, 6(1), 31–43.
- Martı'n, P. (2002). A genre analysis of English and Spanish research paper abstracts in experimental social sciences. *English for Specific Purposes*, 22(1), 25–43.
- Martinez, I. (2003). Aspects of theme in the method and discussion sections of biology journal articles in English. *Journal of English for Academic Purposes*, 2 (2), 103-123.
- McCloskey, D. (1986). The rhetoric of economics. Brighton: Wheatsheaf.
- Nwogu, K. N. (1997). The medical research paper: Structure and functions. *English for Specific Purposes*, 16(2), 119–138.
- Ozturk, I. (2007). The textural organization of research article introductions in applied linguistics: Variability within a single discipline. *English for Specific Purposes*, 26(1), 25–38.

- Paltridge, B. (1994). Genre analysis and the identification of textual boundaries. *Applied Linguistics*, 15(3), 288–299.
- Peacock, M. (2002). Communicative moves in the discussion section of research articles. *System*, *30* (4), 479-497.
- Peck MacDonald, S. (1987). Problem definition in academic writing. *College English*, 49, 315-331.
- Peck MacDonald, S. (1990). The literary argument and its discursive conventions. In W. Nash (Ed.) The *writing scholar: studies in academic discourse*. Newbury Park: Sage.
- Peck MacDonald, S. (1992). A method for analyzing sentence-level differences in disciplinary knowledge making. *Written Communication*, 9, 533-569.
- Peng, J. (1987). Organizational features in chemical engineering research articles. English Language Research Journal, 1, 79-116.
- Posteguillo, S. (1999). The schematic structure of computer science research articles. English for Specific Purposes, 18(2), 139–160.
- Salager-Meyer, F. (1990). Discoursal flaws in medical english abstracts a genre analysis per research and text type. *Interdisciplinary Journal for the Study of Discourse*, 10 (4), 365–384.
- Salager-Meyer, F. (1992). A text-type and move analysis study of verb tense and modality distribution in medical English abstracts. *English for Specific Purposes*, 11(2), 93–113.
- Salager-Meyer, F. (1994). Hedges and textual communicative function in medical English written discourse. *English for Specific Purposes*, 13(2), 149–170.
- Salager-Meyer, F. (2001). From self-highlightedness to self-effacement: A genre-based study of the socio-pragmatic function of criticism in medical discourse. *LSP* and Professional Communication, 1(2), 63–85.
- Samraj, B. (2002). Introductions in research articles: Variations across disciplines. English for Specific Purposes, 21(1), 1–17.

- Samraj, B. (2005). An exploration of genre set: research article abstracts and introductions in two disciplines. *English for Specific Purposes*, 24, 141–156.
- Samraj, B. 2008. A discourse analysis of master's theses across disciplines with a focus on introductions. *Journal of English for Academic Purposes*, 7 (1), 55-67.
- Stotesbury, H. (2003) Evaluation in research article abstracts in the narrative and hard sciences. *Journal of English for Academic Purposes*, 2, 327–341.
- Swales, J. (1981). *Aspects of article introductions*. Birmingham, England: University of Aston.
- Swales, J. M. (1990). *Genre analysis: English in academic and research settings*. Cambridge: Cambridge University Press.
- Thetela, P. (1997). Evaluated entities and parameters of value in academic research articles. *English for Specific Purposes*, 16(2), 101–118.
- Thompson, D. (1993). Arguing for experimental "facts" in science: a study of research article results sections in biochemistry. *Written Communication*, 10, 106-128.
- Thompson, G., & Ye, Y. (1991). Evaluation in the reporting verbs used in academic papers. *Applied Linguistics*, 12(4), 365–382.
- Tucker, P. (2003). Evaluation in the art-historical research article. *Journal of English* for Academic Purposes 2, 291-312.
- Williams, I. A.(1999). Results sections of medical research articles: Analysis of rhetorical categories for pedagogical purposes. *English for Specific Purpose*, 18, 347-366.
- Wood, A. (1982). An examination of the rhetorical structures of authentic chemistry texts. *Applied Linguistics*, 3(2), 121–143.
- Yang, R., & Allison, D. (2003). Research articles in applied linguistics: Moving from results to conclusions. *English for Specific Purposes*, 22(4), 365–385.
- Yang, R., & Allison, D. (2004). Research articles in applied linguistics: Structures from a functional perspective. *English for Specific Purposes*, 23(3), 264–279.

APPENDIX I

LIST OF RESEARCH ARTICLES IN THE CORPUS

APPLIED LINGUISTICS

- 1- (AL1) Hamada, M., Koda, K. (2010). The Role of Phonological Decoding in Second Language Word-Meaning Inference. *Applied Linguistics*, 31/4, 513–531.
- 2- (AL2) Conklin, K., Schmitt, N. (2008). Formulaic Sequences: Are They Processed More Quickly than Nonformulaic Language by Native and Nonnative Speakers?. *Applied Linguistics*, 29/1, 72–89.
- 3- (AL3) Bylund, E., Abrahamsson, N., Hyltenstam, K. (2009). The Role of Language Aptitude in First Language Attrition: The Case of Pre-pubescent Attriters. *Applied Linguistics*, 31/3, 443–464.
- 4- (AL4) Takimoto, M. (2007). The Effects of Input-Based Tasks on the Development of Learners' Pragmatic Proficiency. *Applied Linguistics*, 30/1.
- 5- (AL5) Csizer, K., Kormos, J. (2008). Modelling the Role of Inter-Cultural Contact in the Motivation of Learning English as a Foreign Language. *Applied Linguistics*, 30/2, 166–185.
- 6- (AL6) Roehr, K. (2007). Metalinguistic Knowledge and Language Ability in University-Level L2 Learners. *Applied Linguistics*, 29/2, 173–199.

LANGUAGE LEARNING

- 1- (LL1) Hakansson, G. Norrby, C. (2010). Environmental Influence on Language Acquisition: Comparing Second and Foreign Language Acquisition of Swedish. *Language Learning*, 60/3, 628–650.
- 2- (LL2) Vandergrift, L., Tafaghodtari, M., H. (2010). Teaching L2 Learners How to Listen Does Make a Difference: An Empirical Study. *Language Learning*, 60:2, 470–497.
- 3- (LL3) Jiang, N. (2007). Selective Integration of Linguistic Knowledge in Adult Second Language Learning. *Language Learning*, 57:1, 1–33.
- 4- (LL4) Schmid, M. S. and Fägersten, K. B. (2010). Disfluency Markers in L1 Attrition. *Language Learning*, 60, 753–791.

- 5- (LL5) Boulton, A. (2010). Data-Driven Learning: Taking the Computer Out of the Equation. *Language Learning*, 60, 534–572.
- 6- (LL6) Kim, Y. (2008). The Role of Task-Induced Involvement and Learner Proficiency in L2 Vocabulary Acquisition. *Language Learning*, 58, 285–325.

MODERN LANGUAGE LEARNING

- 1- (MLJ1) Kang, O., Rubin, D., Pickering, L. (2010). Suprasegmental Measures of Accentedness and Judgments of Language Learner Proficiency in Oral English. *The Modern Language Journal*, 94, 4.
- 2- (MLJ2) Izquierdo, J., Collins, L. (2008). The Facilitative Role of L1 Influence in Tense–Aspect Marking: A Comparison of Hispanophone and Anglophone Learners of French. *The Modern Language Journal*, 92, 3.
- 3- (MLJ3) Heift, T. (2010). Prompting in CALL: A Longitudinal Study of Learner Uptake. *The Modern Language Journal*, 94, 2.
- 4- (MLJ4) Loewen, S., Li, S., Fei, F., Thompson, A., Nakatsukasa, K., Ahn, S., Chen, X. (2009). Second Language Learners' Beliefs About Grammar Instruction and Error Correction. *The Modern Language Journal*, 93, 1.
- 5- (MLJ5) Takimoto, M. (2008). The Effects of Deductive and Inductive Instruction on the Development of Language Learners' Pragmatic Competence. *The Modern Language Journal*, 92, 3.
- 6- (MLJ6) Smith, H., J. (2007). The Social and Private Worlds of Speech: Speech for Interand Intramental Activity. *The Modern Language Journal*, 91, 3.

STUDIES IN SECOND LANGUAGE ACQUISITION

- 1- (SSLA1) Zyzik, E., Azevedo, C. (2009). Word Class Distinctions in Second Language Acquisition: An Experimental Study of L2 Spanish. *Studies in Second Language Acquisition*, 31, 1–29.
- 2- (SSL2) Yang, Y., Lyster, R. (2010). Effects of Form Focused Practice and Feedback on Chinese EFL Learners' Acquisition of Regular and Irregular Past Tense Forms. *Studies in Second Language Acquisition*, 32, 235–263.

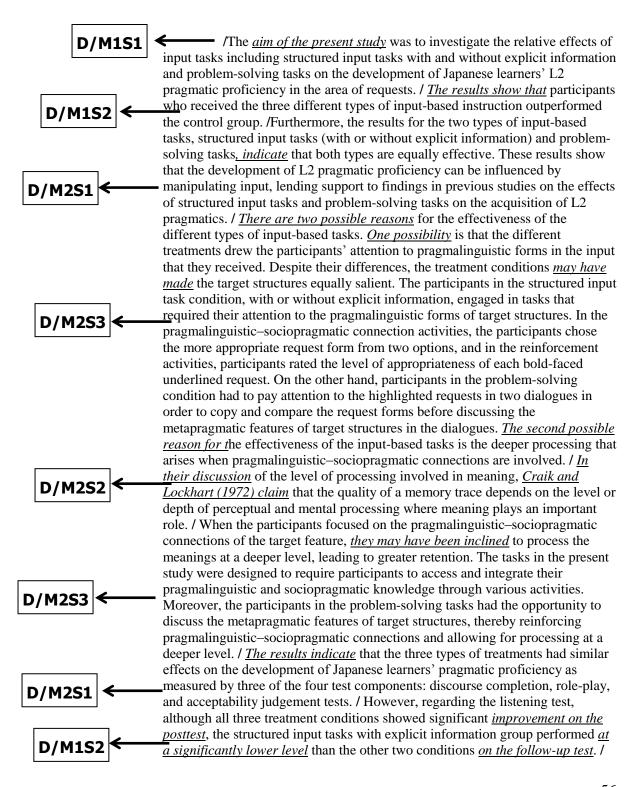
- 3- (SSLA3) Trofimovich, P., Lightbown, P. M., Halter, R., H., Song, H. (2009). Comprehension Based Practice The Development of L2 Pronunciation in a Listening and Reading Program. *SSLA*, 31, 609–639.
- 4- (SSLA4) Major, R., C.(2007). Identifying a Foreign Accent in An Unfamiliar Language. *SSLA*, 29, 539–556.
- 5- (SSLA5) Qasem, M., Foote, R. (2010). Crosslanguage Lexical Activation A Test of the Revised Hierarchical and Morphological Decomposition Models in Arabic-English Bilinguals. *Studies in Second Language Acquisition*, 32, 111–140.
- 6- (SSLA6) Geeslin, K., L. Gudmestad, A. (2010). An Exploration of The Range and The Frequency of Occurence of Forms in Potentially Variable Structures in Second Language Spanish. *Studies in Second Language Acquisition*, 32, 433–463.

SYSTEM

- 1- (SYS1) Ridha Ben Maad, M. (2010). Holistic and analytic processing modes in non-native learners' performance of narrative tasks. *System*, 38(4), 591-602.
- 2- (SYS2) Llanes, A., Muñoz, C. (2009). A short stay abroad: Does it make a difference?. *System*, 37(3), 353-365.
- 3- (SYS3) Hamada, M. (2009). Development of L2 word-meaning inference while reading. *System*, 37(3), 447-460.
- 4- (SYS4) Ghobadi, A., Fahim, M. (2009). The effect of explicit teaching of English "thanking formulas" on Iranian EFL intermediate level students at English language institutes. *System*, 37(3), 526-537.
- 5- (SYS5) Falout, J., Elwood, J. Hood, M. (2009). Demotivation: Affective states and learning outcomes. *System.* 37(3), 403-417.
- 6- (SYS6) Sakai, H., Kikuchi, K. (2009). An analysis of demotivators in the EFL classroom. *System.* 37(1), 57-69.

APPENDIX II

A Sample Analysis of the RA Discussion



Why, then, did the structured input tasks with explicit information group perform as well as the problem-solving and structured input tasks without explicit information groups on the listening post-test but not the follow-up test while all the groups performed similarly on the other post-tests and follow-up tests? Any answer to this question is necessarily speculative as no information on the psycholinguistic processing involved in either the treatments or the test was available. What distinguishes the listening test from the other tests is the requirement for online processing. Online processing tests place demands on working memory, as participants have to process and respond to the stimuli rapidly. Also, all three treatments can be assumed to have provided the participants with some explicit knowledge, but the treatments differed in how this knowledge was achieved. In the case of the first treatment, structured input tasks plus explicit information, the participants were simply given explicit information; they did not have to discover the rules for themselves. In the other two treatments, problem-solving and structured input tasks minus explicit information, participants had to discover the rules for themselves. It is possible, then, that the problem-solving and structured input tasks without explicit information participants attended to the pragmalinguistic and sociopragmatic features of the target structures more deeply. That is, the provision of explicit information did not push the participants in the structured input tasks plus explicit information group to process the target structures deeply. The problemsolving and structured input tasks without explicit information treatments, however, involved greater depth of processing, resulting in knowledge that was more firmly embedded and thus more easily accessed. Immediate post-test results did not reveal this difference because the explicit knowledge was fresh in the participants' memories. However, on the listening follow-up test, participants in the structured input tasks with explicit information group were less successful in accessing their weakly established explicit knowledge while coping with the test's demands on their working memory capacities. Participants in problem-solving and structured input tasks without explicit information groups, however, were still able to cope with the demands of the listening test because their explicit knowledge was firmly entrenched. / Although the explanation provided here is speculative at best, the current study's results are consistent with results in VanPatten and Oikennon (1996) which showed that in that teacher-fronted explicit information is not important because structured input tasks by themselves are effective. Takahashi (2001) also found that the explicit teaching condition was effective through the post-test stage but expressed doubts regarding the lasting effect of gains in L2 competence due to explicit enhancement/.

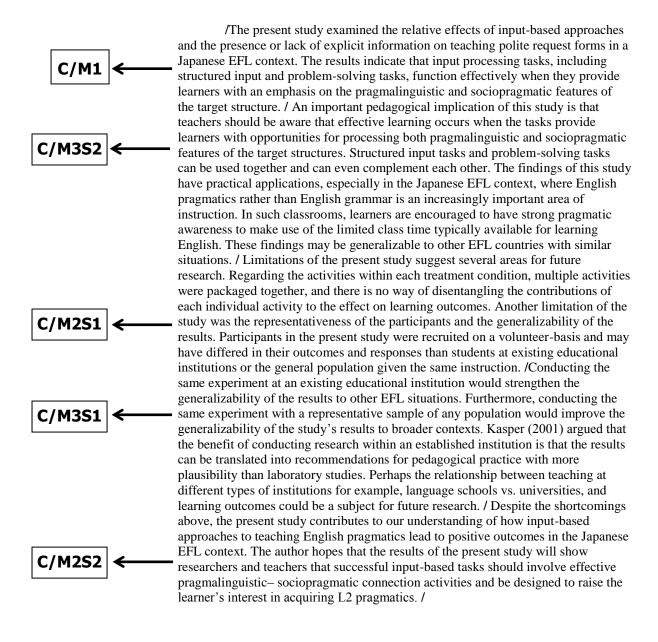
D/M2S3

D/M2S2

Takimoto, M. (2007). The Effects of Input-Based Tasks on the Development of Learners' Pragmatic Proficiency. *Applied Linguistics*. 30/1. (AL4)

APPENDIX III

A Sample Analysis of the RA Conclusion



Takimoto, M. (2007). The Effects of Input-Based Tasks on the Development of Learners' Pragmatic Proficiency. *Applied Linguistics*, 30/1. (AL4)

APPENDIX IV

A Sample Analysis of The RA Discussion

D/M1S2 The analysis presented here reveals that there are clear differences in the use of disfluency markers in the L1 of long-term migrants, on the one hand, and the reference population, on the other. Although all attriting groups made more use of EPs, RPs, and RTs than the controls, only the GENL group used FPs more often than the reference group. This may indicate that attriters use the former kinds of hesitation markers to cope with the increased cognitive demands of bilingual speech **D/M2S1** production and decreased accessibility of their L1 system, whereas their deployment of FPs may shift toward the L2 norm due to interlanguage effects in those cases where the L2 employs them differently from the L1. / This finding is interesting in view of Clark and Fox Tree's (2002) hypothesis that FPs have a communicative and semantic potential that other disfluency markers lack and that they are governed by syntactic rules. / The conclusion that CDMs are used more often by the attriters due to cognitive demands is backed up by the fact that this overuse was confined to clause-internal contexts, whereas the use of CDMs at clause boundaries did not **D/M2S3** differ between the populations. This suggests that the higher incidence of CDMs is indeed due to the increased demands of bilingual processing and L1 attrition affecting micro-planning. / Macro-planning strategies linked to organizing the overall content and structure of the utterance, on the other hand, show no difference **D/M1S2** between the attriting and the control populations. / A different possibility is that the strategies used by the three languages under observation here, which are all closely **D/M2S3** typologically related, may not have changed because of their similarity across languages. / Further investigations of typologically more distant languages will have C/M3S1 to ascertain which of these two explanations is the more convincing one. / An interesting finding is the fact that the attriters overuse CDMs particularly preceding lexical items (nouns and verbs), indicating that lexical access has become **D/M1S2** compromised over the attritional period. The finding that for the GENL group EPs have increased only before nouns, while the GECA and NLCA groups also have more pauses before verbs, may be linked to the fact that German and Dutch are closely related and a substantial part of the lexicon of the two languages consists of cognates. A similar explanation might account for the fact that EPs appear more often before prepositions for the two L2 English groups, as the use of prepositions in Dutch and German overlaps to a large extent. The fact that the most clear-cut and consistent difference between attriters and controls was found with respect to CDMs preceding articles and pronouns suggests the intriguing possibility that, for the attriting groups, lexical access problems may have "spread" to include other types of information activated by the noun. There is considerable evidence that unattrited native speakers have access to gender information in tip-of-the-tongue phenomena: They know the gender of the word that they are trying to access (e.g., Caramazza & **D/M2S3** Miozzo, 1997), as was the case in Example (1). We might therefore speculate that this type of knowledge is not immune to the attritional process and that attriters may occasionally prefer to retrieve the lexical item in question from memory before committing themselves to its gender. Because the German article not only has to be marked for grammatical gender but also for case, it is possible that these hesitation patterns indicate insecurities linked to case-marking. This explanation, however, appears less likely for two reasons: First, case is also marked on adjectives, which are very rarely preceded by disfluency phenomena of any kind in the data at hand. (Second, Dutch articles carry no case inflection, but EPs before articles have

increased more strongly for the Dutch attriters than for the Germans. The only nonlexical items before which hesitation phenomena occur more frequently among the attriters are prepositions. This is an interesting development in view of the proposal that free grammatical morphemes are more vulnerable in processes of language contact and language attrition than bound morphemes (e.g., Andersen, 1982; Haugen, 1978; Schmid, 2002) and that errors involving the choice of preposition are common (Olshtain, 1989). The fact that prepositions are often repeated or corrected (and are also often preceded by an unfilled pause) <u>may therefore be an indication that</u> attriters were sometimes unsure about which preposition goes with particular phrases.

Schmid, M. S. and Fägersten, K. B. (2010). Disfluency Markers in L1 Attrition. *Language Learning*, 60, 753–791.

APPENDIX V

A Sample Analysis of the RA Conclusion

The present investigation has demonstrated that disfluency phenomena can change in the process of L1 attrition. Disfluency markers with a cognitive function (CDMs) have been shown to be more frequent in data from attriters than from controls, whereas markers with a semantic function (SDMs) may besubject to C/M1 interlanguage effects. The increase of CDMs in the data from the attriters was interpreted as a symptom of the fact that the attritional process can lead to reduced accessibility of lexical and grammatical information. In other words, the higher incidence of disfluency markers was taken as an indication of slower processes of activation of (predominantly lexical) information. It was argued that the increase is not due to content planning, as the distribution of hesitation markers at clause boundaries did not vary between the experimental and the control populations. Finally, the analysis of the syntactic placement of the disfluency markers indicated that hesitation strategies were mainly employed in connection with the retrieval of lexical information. However, it was also suggested that it is not only the pure lexical form that may be affected in the process of language attrition but also lemma-specific grammatical information such as the gender of nouns. / This suggests that the attrition of lexical retrieval is more complex than has previously **C/M3S2** been assumed and that investigations of disfluency markers can further our understanding of this process./

Schmid, M. S. and Fägersten, K. B. (2010). Disfluency Markers in L1 Attrition. *Language Learning*, 60, 753–791.

ÖZGEÇMİŞ

Tuğba Elif TOPRAK, 1987 yılında İzmir'de doğdu. Uludağ Üniversitesi İngiliz Dili Eğitimi A.B.D'dan 2009 yılında mezun oldu. Aralık 2010 tarihinden bu yana Sakarya Üniversitesi Eğitim Fakültesi Yabancı Diller Eğitimi Bölümünde Araştırma Görevlisi olarak çalışmaktadır.

VITAE

Tuğba Elif TOPRAK was born in İzmir in 1987. She graduated from English Language Teaching Department, Uludağ University, in 2009. She has been working as a Research Assistant at Foreign Languages Teaching Department, Sakarya University since December, 2010.