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A Contrastive Genre Analysis of Research Works Introductions
Written by English Native Speakers and Algerian Learners of
English as a Foreign Language

*Thesis Submitted to the Department of English in Candidacy for the Degree of Doctorat LMD
in EFL Didactics*

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Dedication

This thesis work is warmly dedicated to:

My wife who has been a constant source of support and encouragement during the challenges of graduate studies and life. I am truly thankful for having you in my life, particularly on the tough days.

My daughters: Chaima, Ayat El rahman, and Roaya, I have nothing but gratitude to you, my children, for reminding me that every choice one makes has an end result and that a man is not old until regrets take the place of dreams.

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Abstract

Academic research papers have long been the focus of genre analysis and metadiscourse studies. Yet, contrastive genre analyses of PhD theses and Master's dissertations of language students, be it native or non-native speakers of English, have been given very little attention particularly to their writing research work introductions. Bringing together the two well-cited and comprehensive frameworks of move analysis (the CARS model, Swales, 2004) and metadiscourse theory (Hyland's (2005) metadiscourse taxonomy), the present study investigates the move-step structure and metadiscourse use in a corpus of introductions of academic writings (research articles, PhD theses and Master's dissertations) authored by English native and Algerian writers. The aim behind it is to identify the similarities and differences of the rhetorical preferences between these authors. The findings showed that all three moves introduced in the CARS model were employed in research work introductions. The findings were also in line with those of Swales (2004) who argued that most introductions authored by native English writers were in conformity with the M1-M2-M3 pattern and where the three moves appeared in a cyclical manner. On the other hand, while the Master's dissertations and research article introductions have been found to be similar, denoting a slight deviation from the CARS model, the PhD thesis introductions showed more liberal ways of text organization characterized by mixed discursive non-linear patterns. The analysis of research work introductions by native English and Algerian writers has demonstrated that native English writers were more likely to include all three moves in their introductions, especially Move 2. Its realization was also a mark of difference between the two groups of writers. Furthermore, the analysis revealed that while Algerian writers of all research works introductions oriented their attention towards local academic problems, native English writers focused more on research-related problems. In comparing the use of metadiscourse, native English writers' research articles showed inclination to use more interactive metadiscourse than the research articles of Algerian authors. PhD thesis writers employed more interactive metadiscourse than Master's dissertation writers did. The comparison pointed out to the fact while native English writers were more concerned about creating an international space for their research, the Algerian ones focused much on the organization of their texts. These findings might help us to deduce that while native English writers produced argumentative introductions where their stance towards the content and their potential readers were highly signaled, the Algerian writers seemed to produce narrative introductions characterized by the absence of self-representation, argument evaluation, reader involvement and promotional strategies. Overall, these results suggest that cultural elements, particularly discourse community norms and practices, have a significant influence on how academic authors structure their arguments and interact with their text and audience. Therefore, the findings illustrate the increasing urge for Algerian writers' understanding of intercultural contrasts and similarities. Besides, applied linguists are also urged to introduce methods for integrating metadiscourse in syllabuses and courses for teaching writing at the university level.

Keywords: Academic Research Works, Genre, Metadiscourse, Contrastive Rhetoric Introductions.

List of Abbreviations

APhDTI	Algerian PhD Thesis Introductions
AMDI	Algerian Master's Dissertation Introductions
ARAI	Algerian Research Article Introductions
CA	Contrastive Analysis
CARS	Create a Research Space
CR	Contrastive Rhetoric
DA	Discourse Analysis
DC	Discourse Community
EA	Error Analysis
EAP	English for Academic Purposes
EFL	English as a Foreign Language
ESP	English for Specific Purposes
FL	Foreign language
IA	Interlanguage Analysis
IR	Intercultural Rhetoric
LL	Log-Likelihood
L1	First Language
L2	Second Language
MD(s)	Master's Dissertation
NE	Native English
NSRAI	Native Speaker Research Article Introductions
PhD	Philosophy of Doctorate
RA	Research Article
RS	Rhetorical Structure

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General Introduction

1. Background of the Study.

2. Statement of the Problem.

3. Aims of the Study.

4. Significance of the Study.

5. Research questions.

6. Research Methodology.

6.1. The Corpus.

6.2. The Method.

7. Structure of the study.



1. Background of the Study

Academic research papers have long been the focus of researchers and scholars from different research fields. Research articles (hereafter, RA), PhD theses, and master's dissertations (hereafter, MDs) are examples of academic writings that have received enormous attention in the last few decades (Hyland & Paltridge, 2011; Kawase, 2018). The interest in examining student products stems from the fact that these academic writings are not only important activities in students' educational lives, but they also represent 'the key research genres of the academy, encompassing the most highly valued kinds of writing produced by students and experts' (Hyland, 2008, p. 47). For instance, a RA may be a necessity to get a university degree or establish a solid reputation in addition to serving as a vehicle for knowledge dissemination. Being mostly the last university writing activity, the PhD thesis and MD are also highly valued activities as they give university students access to social life opportunities. However, writing an academic research paper in English is not an easy task for both native and non-native learners (Bunton, 2002; Hyland, 2008; Kawase, 2018; Ono, 2017; Paltridge, 2002; Paltridge & Starfield, 2007; Wu and Paltridge, 2021; Shaw, 1991; Soule, 2007). This is due to the fact that writing in an academic setting requires more than just language and grammar proficiency; student writers must also be aware of the conventions and norms as well as the disciplinary knowledge of a particular discourse community (Hyland, 2005).

The interest in the study of academic writing has led to an increasing number of studies aiming to assist English language learners in improving their academic writing. Accordingly, academic writings were addressed by several fields of research, including contrastive rhetoric, genre analysis, and metadiscourse studies (Hyland & Paltridge, 2011). Contrastive rhetoric (hereafter, CR), a concept generally attributed to the work of Robert B. Kaplan (1966), is conceived as 'an area of research in second language acquisition that identifies problems in composition encountered by second language writers and, by referring to the rhetorical strategies of the first language, attempts to explain them' (Connor, 1996, p. 5). The major tenet underlining CR is that language and writing are culturally determined; hence, the way we organise our ideas in texts is predetermined by culture (Connor, 2008). Based on this, CR aims to find out the common similarities and differences in texts written by writers from disparate cultural and linguistic backgrounds. Although the concept of CR is innovative, it has received severe criticism for being reductive, deterministic, prescriptive, and essentialist-oriented. Eventually, these criticisms gained support from the majority of contrastive

rhetoricians, and they later helped in the growth and expansion of this research field in a new direction with more defined study goals. Ideas from different disciplines, such as genre analysis, were brought with the hope to refine and develop CR (Connor, 2008).

Genre analysis shifted the attention from examining students' essays to the study of different academic writings, including RAs, PhD theses, MDs, and grant proposals. Based on the tenet that writing is a social activity and student writing is determined by certain conventions and norms, student writing is considered essentially to be creating texts that meet those conventions and norms. In light of this, genre analysts established that adhering to conventional ways of writing a particular academic writing may challenge student writers, particularly those who are not native English speakers or who lack sufficient linguistic knowledge and knowledge of the conventional practices of a particular discourse community. Move-step analysis has been the main approach used to address this issue, as it is believed that by identifying the genre's "stable structural forms or conventions" and converting them into writing frameworks or models, novice and non-native student writers will find it easier to replicate them (Hyland & Paltridge, 2011; Swales, 2004). Accordingly, researchers in the field of genre analysis (Bunton, 1998, 2002; Samraj, 2002, 2008; Swales, 1981, 1990, 2004) sought to create prototypical frameworks for writing academic works and to reveal the underlying forces that shape the rhetorical structure (hereafter, RS) of a particular student's academic writing. The CARS model (initiated by Swales in 1981, and modified in 1990 and 2004) has been the major tool in identifying the conventional ways students and writers need to follow to produce acceptable academic writings. According to Swales, writers of RA introductions follow certain predictable rhetorical actions: establishing a territory, establishing a niche, and occupying the niche, each of which consists of certain rhetorical strategies. Inspired by Swales's (1981, 1990, 2004) ideas, other researchers and scholars (Anthony, 1999; Aull, 2019; Bunton, 2002; Burgess, 2002; Crookes, 1986; Kawase, 2015, 2018; Samraj, 2002, 2005, 2008; Soler-Monreal, 2015; Wu & Paltridge, 2021), working within the genre analysis domain, investigated the rhetorical structure of different kinds of academic writings. Other studies (Hyland & Zou, 2020; Li & Xu, 2020; Badenhorst, 2018), however, delved further into how linguistic elements and textual features are utilized to express the writer's position, attitudes, and opinions toward the text and the reader. Eventually, a variety of conceptual frameworks for investigating the linguistic features referred to as "metadiscourse" were suggested. These metadiscourse studies, together with move-step analysis studies, attempted to find out how language is used in academic research, providing us with a thorough

understanding of the textual organisation and linguistic choice preferences in academic writing.

This research work, which is grounded in the previously mentioned fields of study, is an expansion of the previous contrastive genre analysis and metadiscourse studies. In addition to investigating the rhetorical structure that the Algerian EFL writers follow in their academic writing introductions (RA, PhD thesis, and MD introductions), it compares the Algerian writing productions to those written by native English writers (RA introductions). Moreover, this research paper compares the use of metadiscourse devices in academic writing introductions authored by Algerian EFL and NE student writers, aiming to find out how writers from different linguistic and cultural backgrounds create coherence and represent themselves and their readers in their texts. Following Hyland and Milton (1997), who argued that "native student writing is a better type of comparable data to EFL learners" (p. 184), I believe that this study would provide non-native learners with good insights into how academic writings are accomplished. Although the introduction section has been the most investigated sub-genre in the literature, it remains the most important and perplexing part to write (Ono, 2017; Swales, 2004), particularly for novice and non-native English learners. In the following section, the underlying reasons for examining the introduction sections of academic writings are provided.

2. Statement of the Problem

Although academic genres were extensively examined in the literature, most of the previous genre and metadiscourse studies were conducted in contexts where English is taught as a first or second language. Very few cross-cultural studies on the move-step structure and metadiscourse use were conducted as reported by Connor and Mauraanen (1999), Wu and Yang (2022) and through the researcher's own investigations. As linguistic preferences are closely related to the norms of certain discourse communities or the academic discipline (Swales, 1990) and the content, structure, and interactions are determined by a particular community (Hyland, 2002), studies on how Algerian EFL learners rhetorically organise and use metadiscourse devices in their academic writing are still needed. Such studies remain a helpful means to understand the underlying factors that shape the rhetorical organization and use of metadiscourse devices in academic writings authored by Algerian writers. In addition, most of the researchers and scholars' efforts were devoted to examining the RA as a whole or in parts (Ono, 2017; Yang & Alison, 2003). In contrast, studies on PhD theses and MDs

have received little attention on the part of scholars (Akoto, 2020, Bunton, 2005; Paltridge, 2002; Samraj, 2008; Swales, 2004). Indeed, there may be a variety of causes for the dearth of these studies. First, compared to RAs, PhD. theses and MDs often have longer lengths, which has been noted by Swales (2004), arguing that ‘little was known about this genre from a discursal point of view, largely because of its daunting length of its exemplars’ (p. 102). Second, these research papers are still classified as academic works with limited access and have a lower scientific impact (Paltridge, 2002). These reasons and others are sufficient enough for neglecting the study of the PhD thesis and MDS.

In examining the rhetorical structure of academic writings, several researchers (Bunton, 2002; Flowerdew 1999; Kawase, 2018; Paltridge, 2002; Paltridge and Starfield, 2007; Paltridge & Wu, 2021; Shaw, 1991; Soule, 2007) have noted the difficulty of writing an academic research paper, particularly the introduction section, by both native and NNE writers. According to Flowerdew (1999), novice writers, particularly non-natives, face a number of difficulties when producing research papers, including textual organization, establishing relationships with readers, outlining their own arguments, and using citations. However, the difficulty increases when writing the introduction section of a particular research paper. It has been conceived to be the most difficult task for many learners to accomplish. This is because, according to Swales (1990), it poses many difficulties, on the one hand, and urges students to make a set of decisions in terms of organizational structure selection and appropriate word choice, on the other hand. In the Algerian context, the Algerian learners of English are not the exception as English is taught as the second foreign language. Accordingly, the Algerian undergraduate and graduate EFL learners may face difficulties while writing their academic works, particularly the introduction section. One reason underlying these constraints is the scarcity of genre analysis and metadiscourse studies, as it was already mentioned, on academic writings authored by foreign language learners. Another reason could be that writing in English entails not only writing appropriately but also meeting the discourse community’s conventions and expectations. The lack of formal instruction on how to write each part of an academic writing is also another reason leading the Algerian EFL learners to draw on reading instructional manuals or consult previously written academic writings in their university library. Though these resources may provide some enlightenment and advice on how to write a research work, they are unable to provide what Paltridge (2002) called "the range of thesis options...[and] the rationale for the various choices research work writers make". Similarly, Ventola and Mauranen (1996) claimed that

“innumerable guidebooks and manuals on writing up research were published; however, *“very few of these are based on serious linguistic analysis”* of the kinds of texts that a novice academic might have to master” (p. vii). Therefore, the need to carry out more research and investigations in genre analysis area is still of great importance. Connor (2002) expressed a similar viewpoint, arguing that groups of linked genres and subgenres have not been well studied. She also expressed her hope that future genre studies will provide greater development in generic interrelations on this particular research area. By conducting this study, we hope to give EFL student writers, in general, and Algerian students, in particular, the opportunity to get familiar with the most common and acceptable ways to organize the rhetorical structure of academic writing introductions at both the macro and micro levels.

3. Aims of the Study

This study is organized around two main aims. The first aim is to examine the rhetorical structure (move-step structure) of the introduction section of RAs in the field of applied linguistics authored by Algerian writers in national journals and RAs authored by NE writers in international journals. In addition, the study attempts to analyse the rhetorical structure of PhD thesis and MD introductions written by Algerian graduate and postgraduate learners. In doing so, this study aims to explore the common preferred practices and strategies used to construct the introduction section of academic writings. The findings are then compared to reveal the differences and similarities between texts authored by writers from different linguistic and cultural backgrounds. The second aim is to examine the metadiscourse devices employed by NE and Algerian EFL writers in their academic work introductions. This study attempts to find out and examine the use of interactional and interactive metadiscourse devices on both qualitative and quantitative levels. It is widely accepted that the use of metadiscourse in academic writing is crucial for texts to be coherent and cohesive as well as to persuade readers. Based on this, this study seeks to identify the language techniques different writer groups favor when producing academic writing introductions. It also aims to provide Algerian graduate learners with patterns favored by experts so that drawing on certain academic writing conventions will help to improve their language use when writing their academic writings.

4. Significance of the Study

Like most of the tertiary students over the world, Algerian graduate and postgraduate students have to write either a MD or a PhD thesis not only as part of the requirement for

their graduation but also as a way of knowledge dissemination. In addition to that, the Algerian postgraduate learners are supposed to write at least one research article in their field of study as a prerequisite to get their PhD certificate. This research article is meant to be published in either a national or an international journal. However, writing an academic writing (be it a PhD thesis, a MD or a research article) is not an easy task for not only non-native English (NNE) students but also English native speakers (Paltridge, 2002). Therefore, analysing the structural organization of academic writings introductions may be a beneficial way to help Algerian learners of English as a foreign language (EFL) to have sufficient knowledge and to get a better understanding about the introduction structure. Moreover, this study is conducted in response to calls from researchers and scholars in the field of genre analysis (Connor & Moreno 2005; Mur-Duenas, 2011) to provide NNE writers with the required knowledge relevant to academic writings writing.

In addition to the investigation of the rhetorical structure of different academic writing introductions, this study, based on the idea that metadiscourse employment varies according to genre, discipline and culture variation (Hyland, 1999, 2005; Kawase, 2015), endeavours to explore the use of metadiscourse devices in different genres authored by writers from different linguistic and cultural backgrounds. The rationale behind this is that, as asserted by Hyland (2005), good academic writing reflects the writers' ability to use effectively the metadiscourse devices and to control their level of personality 'by offering a credible representation of themselves and their ideas' (p. ix). Therefore, the study aims not only to provide the effective ways to write an academic writing introduction but also to provide NNE writers, in general, and Algerian learners, in particular, with acceptable ways of writing an academic writing introduction that meets a discourse community conventions and expectations.

5. Research Questions

By examining the move-step structure and metadiscourse devices employed by Algerian EFL learners and NE writers in their academic writing introductions, the current study attempts to answer the following questions:

a) Rhetorical Structure Questions

1. What are the move-step structures of RA introductions written by NE and Algerian writers?
- 1.1. To what extent do the move-step structures in RA introductions written by Algerian writers differ from those written by NE writers?

- 1.2. Do the move-step structures of RA introductions written by Algerian and NE writers conform to Swales (2004) model?
2. What are the move-step structures of PhD thesis and MD introductions written by Algerian writers?
- 2.1. To what extent do the move-step structures in PhD thesis introductions differ from those in MD introductions?
- 2.2. Do the move-step structures of PhD thesis introductions written by Algerian writers conform to Swales (2004) model?
- 2.3. Do the move-step structures of MD introductions written by Algerian writers conform to Swales (2004) model?
3. What are the major differences between academic writing introductions authored by Algerian and NE writers in terms of the move-step structures?

b) Metadiscourse Questions

1. What are the metadiscourse devices used by Algerian and NE writers in their RA introductions?
2. To what extent does the use of metadiscourse devices in RA introductions written by NE writers differ from those employed by Algerian writers?
3. What are the metadiscourse devices used by Algerian writers in their PhD thesis and MD introductions?
4. To what extent does the use of metadiscourse devices in PhD thesis introductions differ from those employed by MD writers?

6. Research Methodology

6.1. Corpus

This research is a corpus-based study. It examines research article introductions authored by Algerian writers and research article introductions written by NE writers, dissertation introductions written by Algerian master EFL learners and thesis introductions written by Algerian doctoral EFL learners. The corpus includes sixty academic writing introductions, or fifteen for each category. The Algerian theses and dissertations were selected from four universities (Algiers, Constantine, Tlemcen and Biskra university). The selection of the corpus from these universities was motivated by two reasons. First, it is believed that these universities have a long history in teaching the English language so that the researcher may have a sufficient number of theses and dissertations to be analysed. Second, these universities

are located in different regions, hence the corpus is hoped to be representative of the whole population of EFL university students in Algeria. It is worthwhile to mention that only research papers belong to the discipline of Applied Linguistics, or more precisely, the methodology of Teaching English as a Foreign Language are used in the present study. The research articles authored by Algerian writers were selected from the Algerian Scientific Journal Platform (ASJP) while those authored by NE writers were selected from international journals (e.g. Applied Linguistics, System).

6.2. Method

For examining the introduction sections of the academic writings, we relied on a modified version of Swales' (2004) model .i.e., the Create a Research Space model (hereafter, CARS).The CARS model, in our opinion, may reveal the textual rhetorical organization in the field of applied linguistics and reveal differences and similarities in the rhetorical organization of the introduction section of RAs, PhD theses, and master's dissertations written by Algerian writers and RAs written by NE writers. This may allow us to assist NNE writers (Algerian university students) not only to write respectable academic papers but also to be able to publish internationally. Our choice of the CARS model is based on many reasons. First, the CARS model went through different modifications (Swales,1981, 1990, 2004) .Second, it is the most comprehensive model for introduction section analysis (Biber et al., 2007; Connor, 1996).Third, it has been successfully and extensively applied by different researchers and scholars in genre analysis studies (Bunton, 2002; Pho, 2008; Samraj,2005; to name a few).Finally, it is, as described by Swales (2004), a simple and practical model for the description of the introduction section.

The CARS model has been successful in identifying the rhetorical structure and the linguistic elements that realize each move and step in RA introductions; however, it could not account for the interaction of the writer with the text and how the writer intentionally selects a particular language to establish relationship with potential readers. This is why, for the second part of this study, we drew on the metadiscourse theory by applying the metadiscourse taxonomy introduced by Hyland (2005). This model includes two main categories the interactive and the interactional metadiscourse. The interactive metadiscourse deals with the language used to organise texts in a coherent way while the interactional metadiscourse help writers to create relationship with their potential readers. By examining the text on two aspects, move-step structure and metadiscourse devices, we hope that this study would

provide a thorough analysis and a clear picture on how academic writings are rhetorically organized.

7. Structure of the Study

The present study is composed of six chapters. The first chapter provides an overview of the key concepts in the arena of discourse analysis and applied discourse analysis, genre and genre analysis and metadiscourse. So, this chapter is divided into three sections. The first section discusses the concepts of discourse analysis and applied linguistics. The second section is devoted to the notions of genre and genre analysis. This section discusses many viewpoints and definitions of these concepts, the distinctions between genres, register, and style, as well as several approaches to genre analysis. Then, the chapter closes with an overview of metadiscourse and different analytical frameworks for the analysis of metadiscourse devices.

Chapter two is devoted to discuss the concept of contrastive rhetoric (intercultural rhetoric). In this chapter, different definitions, the history and the development of contrastive rhetoric are presented. Contrastive rhetoric studies in applied linguistics and influential theories behind contrastive rhetoric are also presented. This chapter closes with discussing the concept of culture and its influence on academic writing.

In the third chapter, definitions of different academic genres, including the introduction as a sub-genre, are presented in the first section. The second section discusses the relevant previous literature with the aim to situate the current study. In this section, previous studies related to the rhetorical structure of RAs, PhD theses and master's dissertations are highlighted. In addition, relevant previous studies on metadiscourse use in the introductions of academic writings are also discussed. Chapter three closes with some closing remarks extracted from a summary of the previous studies.

Chapter four sets out the methodology of the present study, which examines and compares the rhetorical structure and metadiscourse use in academic writing introductions. In this chapter, the size of the corpus, criteria for selecting the corpus, corpus compilation and codification are explained. The analytical frame works adopted in this study, namely the CARS model, which introduced by Swales (1990, 2004), and the metadiscourse taxonomy introduced by Hyland (2005), are also discussed.

Chapter five deals with the analysis, discussion and interpretation of the findings related to the rhetorical structure of the academic writing introductions (research article, PhD thesis and master's dissertation introductions authored by Algerian writers and RA introductions authored by NE writers). Its main four sections cover the discussion of the rhetorical structure, move and steps status and the move patterns in introductions of academic writings of each group of writers.

Chapter six deals with the analysis, discussion and interpretation of the findings related to the metadiscourse use in the four sub-corpora. It is composed of four sections. Each section discusses the use of metadiscourse devices in the introductions of academic writings of a particular set of writers.

In the Conclusion, a summary of the main findings, implications, recommendations and limitations are highlighted. This chapter closes with discussing contribution to knowledge and suggestion for further research.



Chapter One:

Genre Analysis and Metadiscourse

Introduction

1.1. Discourse Analysis

1.2. Definition of Genre

1.2.2. Genre Analysis

1.2.3. Approaches to Genre Analysis

1.2.4. Main Concepts in ESP Genre

1.3. Metadiscourse: An Overview

1.3.1. Origin

1.3.2. Defining Metadiscourse

1.3.3. Approaches to Metadiscourse

1.3.4. Metadiscourse Categories

Conclusion



Introduction

This study is a genre analysis of introductions in three genres: PhD theses, MDs, and RAs. Embarking on this type of studies entails as a preliminary step foregrounding the theoretical underpinning that informs the research in hand. With this aim in mind, the current study starts with an overview of discourse analysis (henceforth, DA). This is because the concepts of ‘discourse analysis’, ‘discourse’ and ‘genre analysis’ are interrelated in a way that one cannot be accounted for without the other and any attempt to exclude one concept while dealing with the other would spoil it or at least make it look fragmentary. To put in another way, any discussion in which genre analysis is the subject entails taking into consideration the concepts of DA and discourse.

Discourse Analysis, as a field of study, has been defined as an umbrella term for a range of approaches and methods that deal with the analysis of language in use. Its emergence goes back to the 1960s when the traditional analysis of language (sentence and clause structure) became unsatisfied. DA has become an independent field of study, and its emergence and development go back to the needs and interests in the scientific study of language as it occurs in everyday human life.

Within DA, genre analysis, as an approach to the study of discourse, is a particular form of DA which deals mainly with any aspect of recurrent language use, including grammar and lexis (Hyland, 2013). Genre analysis has come as a reaction to the traditional DA approaches (register analysis) to provide language learners with acceptable writing models for achieving international communication. Genre analysis, then, becomes a saving educational life tool by the 1980s for most of English as foreign language learners (EFL) and even native ones.

This chapter starts with an overview of DA, its definitions, and its practical side namely applied discourse analysis. The chapter moves on to provide a brief overview of the term genre, discussing how genre is perceived by different genre scholars. Various definitions of genre analysis as a field of study are also highlighted in this chapter. The discussion sheds also some light on the concept of genre in different linguistic traditions and their relationships, with a particular focus on English for specific purposes (ESP) tradition. The chapter closes with brief definitions of the main concepts in genre analysis, namely, communicative purpose, a discourse community, and move and steps since these concepts are central to the present study.

1.1. Discourse analysis

Understanding what constitutes knowledge of language has long been the focus of many researchers over the world. Interests to find out how language works have led many linguists to study languages scientifically; however, traditional attempts to study language were mainly concentrated on the sentence level. Only within the last few decades, the study of language has witnessed a remarkable shift of interest in the sentence and its constituents to an interest in dealing with stretches of language that go beyond the sentence boundaries and extend far to include the world in which language is used. This new orientation, known as ‘Discourse Analysis’, holds the interests of linguists and researchers in the field of language studies. Questions to rise in this section, then, are what is discourse? And what is DA?

1.1.1. What is Discourse?

Before providing a comprehensive definition for DA, it is essential to define first what is meant by ‘discourse’. To begin with, the term ‘discourse’ is literally defined as the process of producing meaning through language in speech and writing (Oxford Advanced Learner's Dictionary, 2010). Richards and Schmidt (2010) list a number of denotations that set clear boundaries of what discourse is and what it is not. First, discourse is not grammar, they argued; grammar is a set of language rules function as a guide while forming grammatical units such as clause, phrase, and sentence. Discourse goes beyond these grammatical units to mean larger units of language such as paragraphs, conversations, and interviews. Second, Discourse embodies both the spoken and written modes. Therefore, the study of both modes comes to be known as discourse analysis though, sometimes, it is confined to speech rather than writing by other researchers claiming that spoken discourse is the subject of discourse analysis whereas text linguistics deals with written discourse. Crystal (1992) seems to agree with this idea stating that discourse is a continuous flow of words longer than a phrase, frequently forming a unit of coherence like a sermon, argument, joke, or tale. The third and final point made by Richards and Schmidt (2010) is that discourse in critical discourse studies refers not only to the kind of spoken utterances but also to the ‘meanings and values’ implied

in these utterances. Therefore, discourse, in this sense, refers to an ‘institutionalized way of thinking and talking about things’ (p. 174).

1.1.2. Defining Discourse Analysis

The time when DA had witnessed its emergence as a field of study was in the fifties and sixties (Flowerdew, 2013). Before that time, linguistics was largely concerned with the examination of isolated linguistic constructs, looking at how linguistic units such as phonemes and morphemes combined to form sentences. Based on the tenet that 'knowledge of a language is more than knowledge of individual sentences' (Leech 2008, p. 76), the study of language shifts from focusing on the study of isolated linguistic structures such as phrases and sentences to utterances in context. The study of actual instances of language becomes to be known as DA.

DA is the study of naturally occurring language. Harris introduced and first used the term in 1952 in reference to methods of evaluating language that go beyond sentence-level analysis and the connection between language and the context in which it is employed.(Paltridge, 2006). Although its basic definition seems to be simple, surveying the literature revealed that discourse analysis is an ambiguous term as different researchers define it differently. This ambiguity might go back to its characteristic as an interdisciplinary field of study. While the term discourse analysis is attributed to a certain kind of analysis by some scholars, others see it as an umbrella term covering various approaches and methods for the analysis of language in use.

According to Hyland and Paltridge (2012), discourse analysis (DA) is the study of language in action that examines texts in connection to the social situations. Somewhere else, the study of naturally occurring written discourse with a specific emphasis on its analysis above the sentence level is relevant to DA (Bhatia, 2004).In this sense, DA examines how sentences are put together to produce meaning, maintain coherence, and achieve goals. However, Widdowson (2004) conceives DA in a different view. He seems to be not convinced with viewing DA as simply the study of language beyond the sentence, claiming that if DA is defined as the study of language patterns above the sentence, ‘this would seem to imply that discourse is sentence writ large: quantitatively different but qualitatively the same phenomenon. It would follow, too, of course, that you cannot have discourse below the sentence’ (p. 3).According to Gee and Handford (2012), even a single sentence or utterance

can be examined as a "communication" or a "action," rather than just as a sentence structure whose "literal meaning" derives from the nature of grammar. Taking different views on DA together, Schiffrin, Tannen, and Hamilton (2001, 2015, p. 1) go beyond this by providing three distinctive definitions for DA claiming that it is: a) the study of language use, b) the study of language 'beyond the sentence' level, and c) the study of social practices and ideological assumptions that is associated with language.

DA as the study of language in use looks at the traditional linguistic units including phrases and clause structures; however, it gives more attention to why different structures of language express the same meaning. Studies associated with this approach were carried out from a different perspective such as pragmatics, speech act theory, functional language, and register analysis. Although each of these subfields emphasizes different aspects of language use, they conceive language as a social interaction and aim to explore how linguistic elements and structures are employed in different contexts in order to convey a number of meanings. The second approach that is DA as the study of language beyond the sentence level takes into consideration extended stretches of language, extended sequences of utterances and sentences, and how these larger units are constructed and organised. Within this approach, concepts such as 'cohesion' and 'coherence' were given much attention since they essentially contribute to the organization and construction of large stretches of language. Contrary to these two approaches which deal more with linguistic forms and language structure, the third approach focuses on the context (the participants) in which discourse takes place and looks at the relationship between speech/discourse community and issues such as power and gender (Upton & Cohen, 2009).

Based on what was discussed earlier, it is important to mention that our view about discourse analysis is similar to that of Hyland and Paltridge (2011) who regard discourse analysis as 'the study of language in action'. It looks at texts in relation to the social contexts. This definition serves the purpose of the current study since we intend to look at not only how different text types (genres) are organised and how writers use different strategies in organizing their discourse to achieve a particular purpose, but also the social context in which these texts are written. In addition, this study looks at how writers from different linguistic and cultural backgrounds represent themselves using metadiscourse devices. By context here, we mean both the social and cultural environment in which these texts are produced. Looking at both text and context allows us to have a good understanding on not only how Algerian

writers organise their discourse (academic works) but also how they represent themselves using different linguistic choices.

1.1.3. Applied Discourse Analysis

Any field of study is based on two sides, the theoretical and the practical side. DA, as the study of language use, has its theoretical and practical sides. In theory, DA provides valuable insights, knowledge and theories on how language works. In practice, applied discourse analysis helps to put those insights and theories into practice, giving us a good understanding on how language is used in real life. Importantly, dealing with the history and development of DA, particularly its applied orientation, allows us to see how genre analysis emerged as an independent field of study. In order to account for this development, Bhatia (1993), in one of his most-cited books entitled '*Analysing Genre: Language use in Professional Setting*', summarizes the history of applied discourse analysis. According to him, applied discourse analysis has advanced through at least four linguistic description levels over the past thirty years: register analysis, grammatical rhetorical analysis, interactional analysis, and genre analysis. Each phase results from the flaws of the one before it.

Register analysis is the first phase in applied discourse analysis. The underlying idea behind register analysis is that different people use language in different situations. Since situations vary, this means that there are varieties of language. Language variety refers to the occurrence of dialects connected to certain context of use. The function of discourse analysts, then, is to identify and describe the prevalent lexico-grammatical features of a set of situational texts on the belief that certain families of text would share the same lexico-grammatical features. Although register analysis studies provide us with significant insights on what lexical and grammatical features constitute a particular variety of language, its focus was mainly on a 'surface' analysis rather than giving a thick explanation about the function of these linguistic elements in a particular situation (Bhatia, 1993)

By the end of the 1960s, discourse analysts had become unsatisfied with a merely 'surface' description of linguistic and syntactic features of texts. This dissatisfaction rapidly led to the decline of register analysis, and paved the way for the emergence of grammatical rhetorical analysis (GRA). According to Bhatia (1993), the goal of GRA is to look into how grammatical choice and rhetorical function interact when writing in English for Science and Technology. In this level, discourse analysts are not interested in the frequency of particular

linguistic or syntactic features but on the rhetorical function that a particular linguistic feature takes on in constructing scientific texts. Although discourse analysis studies, at this level, bring to light significant contributions, their shortcomings lie on the fact that their focus was only on how the individual writer makes choices in constructing texts. Focusing only on the writer without giving attention to the reader's expectations has led to the next level. The latter comes to be known as interactional analysis (IA).

The core tenet of IA is that while creating texts, authors must consider not only how language and rhetorical choices relate to one another but also the limitations given by their comprehension of how the discourse will be perceived and interpreted by the reader.. Like the previous phases, The IA did not escape from criticism. It is claimed that although studies in this stage took both the writer and the reader into consideration, they did not pay enough attention to the social, cultural, institutional, and organizational demands and standards that influence the literary genre in a certain context (Bhatia, 1993).

All the three levels of description mentioned earlier have significantly contributed to discourse analysis in many ways; however, they are inadequate onto two aspects. According to Bhatia (1993), the three levels of analysis 'lacked adequate information about the rationale underlying various discourse types', .i.e., they do not take into consideration the socio - cultural and the institutional constraints that influence the nature of a particular genre. Second, they devote less attention to the 'conventional regularities in the organization of various communicative events' (p. 46).

Very recently, however, attention has shifted from a merely surface description to a thick description of texts in particular situations. This is because a surface description provides nothing for helping EFL learners to write effectively in the target language or English teacher to teach effective writing. A surface linguistic analysis has been seen insufficient as it deals only with grammatical theorists' matters. What needs to be done, then, is a deep description that is more applied in nature, in which a thorough description of the social, cultural, and institutional setting should be taken into consideration as well. Therefore, genre analysis has come to fill this gap.

In the following section, the focus is on the last level of applied discourse analysis; i.e., Genre analysis. The concept of genre and genre analysis are defined and approaches to genre analysis are highlighted. It is crucial to note that the discussion of genre and genre analysis is

related to English for Specific purposes approach. This is because the ESP approaches approached genre in relation to English language teaching in high -level academic settings, targeting principally non-native users of English in advanced academic and professional settings. Following the ESP approaches, then, serves this study which aims to analyze high level academic writing.

1.2. Definition of Genre

1.2.1. History and Development

Looking back at the history of the term ‘genre’ reveals not only that the meaning of this term has been used differently but also that its use has been developed through time. At first glance, the Webster’s Third New International Dictionary (2002) defines genre as a type of small picture representing a scene as a fancy way of referring to classes of real-world entities.

Traditionally, Aristotle was the first philosopher who introduced the term genre in his work in which he basically classified the literary genre into three categories, namely, poetry, novel, and drama (Deng, Chen & Zhang, 2014; Ren, 2010). Concurrently, the term genre has been applied in the fields of cultural and media studies to refer to more popular cultural forms: soap opera, film noir, western, thriller (Flowerdew, 2013). Etymologically speaking, the term genre is a French word but it originally comes from the Latin language to mean *kind* or *class*. The study of genre has quietly gained popularity in different fields such as folklore, rhetoric, literary and linguistic areas (Chandler, 1997). Being the focus of different fields of study, the term genre has received different definitions based on different considerations. What follows, therefore, is a brief definition of genre according to different applied linguistic perspectives with more focus on the English for specific purposes since this view is more relevant to the current study.

1.2.1.1 Genre in Applied Linguistics

In linguistics and its applied relatives, genre has gained a new status in the last four decades. Traditionally, the term genre has long been a tool for classification and categorization of texts motivated by the belief that genre membership is determined by similarities in terms of form, content and style. This belief, however, has been challenged in the last few decades. Genre becomes to be seen as a means to help shape and even generate what is represented in culturally defined ways (Bawarshi & Reiff, 2010). This new

conceptualization of the term genre is clear in most recent definitions provided by researchers from different orientations.

Researchers from different traditions such as Swales,(1981, 1990), Bazerman (1988), Miller (1984,1994), Martin(1994) , Coe (2002) ,Bhatia (2003), Partridge (2012) ,to name a few, reconceptualized the concept of genre challenging the idea that form, content and style are the dominant criteria that determine the genre membership. Miller (1984), for instance, defines genre as ‘typified rhetorical actions based on recurrent situations’ (p. 159). In other words, genre evolves as a result of the repeated performance of similar communicative events; and once these events or activities are repeated, conventions, then, are established. For genre categorization, Miller (1994) argues for an open principle rather than a closed one based solely on structure, substance, or aim. She goes on to say that a sound definition for the notion of genre should not be based on ‘the substance or the form of discourse but on the action it is used to accomplish’ (p. 151). In the same vein, Bazerman (1988) argues that ‘genres are not just forms. Genres are forms of life, ways of being. They are frames for social action, they are environments for learning’ (p .19). Bazerman (2004), in a subsequent work, argues that genres arise as a result of the social processes between people. In everyday life, people try to understand each other while communicating in order to coordinate activities as well as to share meanings for their practical purposes. Genres typify many things that go beyond textual form, according to Bazerman, and which are parts of the way people give shape to social activity.

Swales (1981), looking at genre from a different perspective, defines genre as a more or less standardized communicative event with an aim or set of goals that the participants in that event are aware of. Martin (2009) describes genre as a staged, goal-oriented, social process, which is consistent with Swales' perspective.It is a ‘social process’ because people use language to interact with each other. It is also ‘goal oriented’ since people communicate to achieve a particular purpose, and it is ‘staged’ since people’s interaction takes a number of steps to achieve their purposes. Similarly, Paltridge (2012) regards genres as the ways in which people ‘get things done’ (p. 62) through their use of language in particular contexts.

Coe (2002) argues that genre is ‘neither a text type nor a situation, but rather the functional relationship between a type of text and a type of situation’ (p.197). While Hyland (2002, 2008) sees genre as an abstraction, claiming that it is socially recognized ways of using language. He goes on to explain that it is a term for grouping works together that illustrates

how writers frequently employ language to address reoccurring events. (2008). Therefore, genre is based on the premise that people within a community typically have little difficulty spotting similarities in the texts they use regularly and are able to draw from their repeated experiences with such texts to read, understand, and possibly compose them pretty readily.

Taking what has been stated above, it is important to mention that the different perspectives hold by the previous researchers denote not only that these views are based on different orientations but also that genre is a complex notion. Furthermore, although these views about genre appear to be different, these scholars have in common that genre is an abstract term used to classify social actions (written or spoken). The process of classification is limited by a number of parameters such as form and content.

Since there are a number of different perspectives and various definitions of the concept of genre, this study focuses only on those definitions related to ESP approach. This is because the perspective of the ESP approach towards the notion of genre, particularly Swales (1990, 2004) perspective, serves this study aim that examines academic writings written by postgraduate English learner and researchers in the field of applied linguistics.

Considered as the father of genre analysis particularly in English for specific purposes, Swales (1981, 1990, 2004) provides a widely known and a comprehensible definition for the concept of genre (Connor, 1996). In this matter, Swales argues that:

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 the choice of content and style. The communicative purpose is both a privileged criterion and one that operates to keep the scope of a genre as here conceived narrowly focused on comparable rhetorical action (Swales, 1990, p. 58).

In this definition, Swales (1990) defines genre by stating that it embraces a set of communicative events. He refers to any event where language plays a substantial and necessary part as a communicative event. He explains that it is a complicated idea that includes not just the speech but also its function as well as the context and culture that it exists in.

Based on this, activities in which talk is incidental, such as engaging in physical exercise, doing the household chores, or driving, will not be considered as communicative events. To put it in another way, only the activities where a language plays a dominant role are considered as a communicative event. Swale places much emphasis on the importance of the communicative purpose, claiming that it is the ‘privileged criterion’ by which genres can be distinguished. He contends that a common set of communicative goals transforms a series of communicative occurrences into a genre. Focusing on communicative purposes as a determinant of genre membership does not exclude other factors such as form, content, and style but these factors play a secondary role in determining the genre membership.

Another contribution made by Swales (1990) to genre in the ESP tradition is the concept of discourse community (see section 1.5.2). The discourse community, Swales (1990) argues, is “social-rhetorical networks that form in order to work towards sets of common goals” (p. 9). Swale links the notion of discourse community and genre tightly together, claiming that genres operate within discourse communities, whose members recognize the genre’s communicative purposes. To put it in other way, writers (or speakers) use language in a particular context not to communicate with all people but with members of a particular discourse community. Therefore, the way people use language in terms of content, form and style is shaped by the discourse community conventions and expectations. Genre, then, according to Swales (1990), ‘belongs to the discourse communities not to individuals’ (p. 9).

If we concur with Swales (2016) that the discourse community, not the individual, owns the genre, the concept of ‘conventions’, therefore, is a central part of the concept of genre. Since conventions determine the basic content and structure of any genre, they play an important role in Swales’ genre definition. To illustrate, writing a personal email has its conventions. One of the basic conventions is to greet the addressee at the very beginning. If the writer failed to include greeting expressions or substituted them by something completely different, the addressee (the reader) would be in doubt about the nature of the text in front of him or her. This doubt would still exist even if the rest of the email would live up to normal expectations. The same reaction would apply to any reader of any genre as he always expects some specific features of the text of a given genre. In the same way, the writer includes these features and he may or not be aware of doing this.

Although Swales’ definition of genre seems comprehensible, it is not without criticism. For instance, Swales downplays what Bhatia (1993) referred to as the “psychological elements. Therefore, the tactical aspects of genre construction were undermined. Bhatia (1993, p. 50) went on to say that the communicative purposes are reflected in the internal

structure of a genre. Any substantial changes in the communicative purpose will lead to a new genre, while minor changes generate sub-genres. Writing within a genre then entails following certain practices in order to respect the boundaries of the genre. However, expert writers are more at freedom to experiment and push the boundaries of the genre since they possess considerable knowledge on how a particular genre is constructed to achieve private purposes.

1.2.1.2. Genre, Register and Style

The distinction between the three terms namely ‘register’, ‘genre’ and ‘style’ is central to this study since they are often used interchangeably by most discourse analysts. One reason for this might be that these terms overlap to some degree particularly the terms ‘genre’ and ‘register’. The terms genre and register were employed to refer to language varieties connected with particular situations of use and particular communicative purposes. Biber, Connor, and Upton (2007) listed a number of studies which used either genre or register. For instance, the term ‘genre’ is exclusively used in studies such as Bhatia (2002), Bunton (2002), Love (2002), Samraj (2002), and Swales (2004) while studies such as Biber et al. (1999), Bruthiaux (1996), Conrad (2001), Hymes (1984), Heather & Longman (1994), exclusively used the term ‘register’. This variation in the use of these terms reflects the different conceptions about the terms ‘genre’ and ‘register’.

Many attempts were devoted to define and set clear boundaries between these terms. For instance, Lee (2001), in his article ‘Genres, Registers, Text types, Domains, and Styles: Clarifying the Concepts and Navigating a Path through the BNC Jungle’, provides a thorough description of the terms ‘genre’ and ‘register’. Through his exploration of how these terms are used in literature, Lee (2001) argued that the two terms describe different points of view on the text: While the term ‘genre’ is used when we talk about texts belonging to culturally recognizable text categories, register refers to language in the text, that is the representation of conventionalized the functional configuration of language commonly associated with situations. Genre, therefore, is an instantiation of a register (or registers). As being a ‘cultural artifact’, genre may ‘vary with the times, with fashion, and with ideological movements in society’ (p. 46).

Style is another term that commonly overlaps with the terms register. This is because they both refer to particular ways of using language in particular contexts (Lee, 2001). To account for this overlapping use of these terms, Coulthard (1985) argues that although register may seem very similar to style, a significant difference should be taken into consideration. Lee (2001) seems to agree with Coulthard arguing that the term style fundamentally has to do with an individual's use of language. Therefore, Lee (2001) clarifies, when we describe a text as having a very informal style, we are not describing the genre to which it belongs but rather how the text producer chose to use language in that specific situation. Contrarily, the term "register" refers to language in the text that is connected to a certain context.

Methodologically speaking, Biber and Conrad (2009) provided a comprehensible definition for the notion of register and set clear boundaries between the concept of register and the notions of genre and style by clarifying not only how these notions are interrelated but also how they differ. The authors state that genre analysis is similar to register analysis in that it aims to explain prominent linguistic features in functional terms in relation to the situational contexts in which they are produced and received. However, genre analysis differs from register analysis in terms of the kinds of linguistic features that each mode of analysis focuses on. While genre analysis focuses on linguistic features that may occur only once in a text, register analysis focuses on lexico-grammatical features that occur prevalently throughout a text variety, such as a preference for nouns over pronouns. Another difference between the two concepts is that genre analysis is performed on complete texts, whereas register analysis is performed on text samples. On the other hand, register analysis is similar to style analysis in the sense that they both focus on prevalent linguistic features; therefore, they both can be performed on text samples rather than complete texts. The difference between register and style, however, lies in the fact that register analysis relates characteristic linguistic features to the situational contexts of their production whereas style analysis interprets these features as individual or collective aesthetic preferences.

Based on what is stated above, it is important, however, to mention that the current study is carried out from the perspective of genre analysis. This is because, as it is mentioned in the introduction section, the aim of this study is to explore how linguistic patterns are used and organised by writers from different linguistic and cultural backgrounds and to explore the ways these writers use metadiscourse devices to accomplish particular communicative purposes in different socially and culturally recognized categories of text (PhD thesis, MD, and RAs). This study is neither meant to be a kind of register analysis in the sense that it does

not deal with a surface linguistic analysis of particular linguistic features used in particular situations nor it deals with particular ways of using language associated with particular individual's use of language in the text. The aim of this study is to explain 'why writers use the language the way they do' in different categories of texts. Therefore we adopt the term 'genre' throughout the current study to refer to social and conventional ways of using and organizing language in academic texts.

1. 2.1.3. Generic, Rhetorical and Move Structure

Reviewing a number of studies in the literature in the field of genre analysis and contrastive genre analysis, we came across a plethora of terms used to mean the organization of moves in particular genre. The terms such as *generic structure*, *move structure*, *rhetorical structure*, *schematic structure*, *overall structure*, *cognitive structure*, and *distinctive rhetorical structure...etc.* are often used interchangeably in most of the genre studies. However, these terms actually represent very different types of analyses. In this section, we try to trace the uses of the first four terms (i.e. *generic structure*, *move structure*, *rhetorical structure*, and *schematic structure*) since they are the most frequently used terms in genre studies, aiming to provide a clear view on how these terms are used in the current study.

In his book *Analyzing Genre: Language Use in Professional Setting*, Bhatia (1993), for instance, used the term *move structure* (23 times), *generic structure* (4 times), *cognitive structure* (10 times), and *discourse structure* (10 times) without providing a clear definition of these terms. The following Examples highlights how these terms were employed in Bhatia's (1993) book:

1. It is useful to think of moves as discriminative elements of **generic structure** and strategies as non-discriminative options within the allowable contributions

[V._K._Bhatia]_Analysing_Genre_Language_Use_in_Pr 1993.txt 0 1

2. As already discussed in Chapter 5, they have a typical four-move **cognitive structure**, consisting of identification of the case, description of the facts

[V._K._Bhatia]_Analysing_Genre_Language_Use_in_Pr 1993.txt 0 8

3. Example presents a typically interesting four-move **structure** for an abstract, which begins [V._K._Bhatia]_Analysing_Genre_Language_Use_in_Pr 1993.txt 0 12

Even though these terms are not explicitly defined, it seems that Bhatia uses both the term *generic structure* and *move structure* to mean the same thing .i.e., the organization of moves in particular genre without associating these terms with prototypicality. Kwan (2006) studies the literature review chapters in doctoral theses. In her RA entitled ‘The *schematic structure* of literature reviews in doctoral theses of applied linguistics’, she stated that one of her research objectives is to find out whether the literature review chapters in her corpus “share the same *move structure*’. She also wants to know whether the literature reviews in ILrMRD theses share a typical framework for rhetorical moves, and if so, what that structure is. Even though Kwan does not explicitly define the terms *move structure*, *rhetorical structure*, *rhetorical move structure*, and *schematic structure*, her usage of these terms implies they are similar referring to the organization of moves in a particular text. Later, she clarifies that these terms are used interchangeably in the literature, arguing that:

The terms are indeed used interchangeably often to mean how the moves in a genre are configured. For example, the CARS model, which is sometimes referred to as a **move structure** means the moves we can find in Introductions and the predictable order in which the moves appear. It is also sometimes called the **rhetorical structure** though rhetorical structure was originally used to mean how different parts of a text relate to each other to achieve a particular social action.... **Schematic structure** is sometimes used to mean move structure as well. But, the notion, I believe, came from cognitive psychology, i.e., the notion of schema, our mental representation of the connections among different concepts, actions, etc. So, one common attribute of the four notions of structure is the connectedness among the different parts of a genre. (B. Kwan, personal communication, January 10, 2018).

The terms ‘move structure’ and ‘rhetorical structures’ are used in Ozturk (2007, 2018) without providing any clear definition for these terms . In his study of RA introductions of two sub-disciplines, Ozturk (2007) used the term *rhetorical structure* to mean the overall structure of a particular genre. He stated that the current analysis did not cover theoretical publications or articles that were published in special issues. The constraint was made due to the fact that an article's general organization, or rhetorical structure, can change depending on its kind.

The use of the term ‘ rhetorical structure’ in this way creates a kind of doubt of whether it is used to mean the overall organization of a RA i.e. the IMRD pattern, or the prototypical

move structure of a particular genre. In viewing this, it implies that investigating the *rhetorical structure* is the same as investigating the overall organisation of a genre. In the same study, Ozturk (2007) used the term ‘move structure’ to mean the organisation of moves in particular texts without attaching the idea of typicality. In a subsequent study, Ozturk (2018) used the term rhetorical structure to mean the organization of moves in RA introductions without associating the term with typicality. Hence, he used both terms (rhetorical structure and move structure) to mean the same thing. Ozturk (2018) stated the following:

Although a larger corpus is needed for the generalizability of these findings, they still reveal that the existence of subsections has a substantial effect on the *rhetorical structure* of RA introductions (p. 59).

Turning now to the structural organization of RA introductions with subsections, first I present the results concerned with the *move structure* of the introductions in the corpus in Table 6 below (p. 60).

In contrast, Hyland (2004b) used the term ‘*generic structure*’ in his study of PhD and MD acknowledgements; however, he did not provide a clear definition of this term. In his study, Hyland stated that ‘this paper ... examines the *generic structure* of the acknowledgements accompanying 240 PhD and MD written by non-native speakers of English in a variety of disciplines at five Hong Kong universities’ (p. 333). Through his study, it seems that he uses the term *generic structure* to refer to the **typical** move structure of a particular genre. The associated meaning in Hyland study seems to conform with Paltridge (1996) study that employs the term *generic structure* to refer to the **typical** organization of moves of a particular genre. Paltridge (1996) explained that the *generic structure* accounts for the conventions of a particular genre such as “where the sender’s and receiver’s address should be placed” (p. 239) in the case of a formal letter. In his later work, Paltridge (2012) provided definitions for the terms generic structure, rhetorical structure, and schematic structure. Arguing that the term ‘*rhetorical structure*’ is the ‘typical organizational patterning of rhetorical types such as argument, description and problem–solution type texts’ while he sees the terms *generic structure* and *schematic structure* to be similar, stating that:

Schematic structure: Also referred to as ‘generic structure’, the typical organizational patterning of a genre in terms of a sequence of moves or discoursal acts. This can be seen as a system of conventions or resources of meaning for generating expected texts. (p. 245).

Similarly, in his widely cited definition of genre, Swales (1990) related the concept of genre with a shared set of communicative purposes, which “shapes the *schematic structure* of the discourse.”(p. 58). Swales also appeared to provide no explicit definition of the term *schematic structure*, but the use of this term in his definition has the implication that he associated the term *schematic structure* with the idea of prototypical organization of moves.

Based on the discussion above, it is clear that different terminology has been associated with the organization of moves in particular genre (or sub-genre) which creates a kind of ambiguity .Therefore, in the current study, the term schematic structure, following Swales (1990), is used to mean the prototypical organization of moves in a particular genre. The terms move structure and rhetorical structure are used to refer to how the moves in particular genre (or sub-genre) are organised. Lastly, the term generic structure is used in the current study to refer to the overall organization of a particular genre (thesis, dissertation, RA...etc). For instance, the generic structure of an experimental RA usually includes an abstract, introduction, method, result and discussion and a conclusion section.

1.2.2. Genre analysis

1.2.2.1. Overview of Genre Analysis

As it is mentioned earlier (p. 19), the interminable need for a more thorough and grounded description of situated language use has paved the way for a new development in discourse analysis. From that time, it became clear that discourse analysis, in its early days, provided good insights on how language is used in texts; however, it remained insufficient and did not suit the needs of the world. English learners, at that time, sought to have models on how language is used in academic and professional settings. A thorough description of how language is used in socio-cultural and institutional contexts rather than merely describing the formal features of language use is sought. As a result, a new era of language analysis has emerged, which has come to be known as genre analysis (Bhatia, 1993).

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1.2.2.2. Definition of Genre Analysis

The early 1980s saw the emergence of genre analysis as a powerful tool for studying spoken and written situated language. Genre analysis was defined as ‘a system of analysis that can reveal a system of organizing genre’ (Swales, 1981, p. 1). It is a powerful system of analysis in the sense that it shifts the attention of most discourse analysts from merely a surface description to a thicker description of functional varieties. In addition, genre analysis enlarged the scope of linguistic analysis from description to explanation, taking into consideration not only socio-cultural but psycholinguistic factors (Bhatia, 1993).

As an analytical method, genre analysis aims to identify the rhetorical moves and steps, the sequence of moves as well as the linguistic features of a particular genre. Then, it attempts to provide a thorough explanation on why writers of a particular genre chose and employed these linguistic features to achieve a communicative purpose (Bhatia, 1993).

Drawing on resources from linguistics, sociolinguistics and ethnographic studies, psycholinguistics and cognitive psychology, communication research, studies of disciplinary cultures and insights from members of such specialist communities, Genre analysis ,as a ‘study of linguistic behavior in institutionalized academic and professional settings’, tends to provide a thorough linguistic explanation and tries to answer the question, *why do members of specific professional communities use the language the way they do?* (Bhatia, 1997, 1)

Genre Analysis, as an approach to text analysis, seeks to find out the communicative purposes of the genre as well as the different stages writers go through to fulfill the function of genre. It seeks also to study the way the schematic structure of a given genre is realized linguistically (Richards & Schmidt, 2002).

Pedagogically speaking, genre analysis aims at providing learners, particularly nonnative English learners, with an explicit knowledge on how academic works are achieved. In other words, the results of genre analysis are focused on instructing students in the formal, staged characteristics of genres so they can identify these elements in the texts they read and use them in the writings they create. (Hyon, 1996). In the same vein , Swales

(2004) and Hyland (2007) state that helping advanced non-native English-speaking learners is the main focus of the ESP genre tradition, allowing them to have knowledge of relevant genres in order for them to act effectively in their target contexts.

In genre studies, different methods for analyzing genres were applied. Among these, *move analysis* is the most widely used method. It was first introduced by Swales (1981, 1990, 2004) to analyze the RA introductions then it becomes the most tool in the analysis of academic and professional genres (Tardy, 2011; Biber et al., 2007). Swales (1981) probed a number of RA introductions taken from different disciplines. His aim was to explain the communicative purposes of a text by categorizing the discourse units according to rhetorical moves. After the analysis, Swales (1981) argues that article introductions have a structure within which a series of moves appear in a predictable order. Each move, in turn, consists of a series of steps. According to Swales (1990), each move performs a specific communicative function, which in turn contributes to the overall communicative purpose of the genre. These purposes together constitute the rationale for the genre, which in turn "shapes the schematic structure of the discourse and influences and constrains the choice of content and style," with texts in a genre exhibiting "various patterns of similarity in terms of structure, style, content, and intended audience." (p. 58)

As an initial attempt to find out a typical scheme common to all RA introductions, Swales (1981) found that the introduction in RAs represents a set of rhetorical works through which writers attempt to convince readers that their works have a place in the community and as an attempt to add new knowledge by filling the gap in the previous research. These rhetorical works, according to Swales (1981), are realized through four rhetorical moves. In the first move, *Establishing the Field*, the writer tries not only to situate his research but demonstrating its importance. The second move, *Summarizing Previous Research*, summarizes the relevant and related research while the third move *Preparing for Present Research*, indicates a gap in the previous research. The fourth move, *Introducing Present Research*, states the purpose of the research. In his subsequent works, Swales (1990, 2004) refines and modifies his analytical scheme and offers a new model consisting of three moves. This new model came to be known as *Create a Research Space*.

Biber et al. (2007) presented different steps for analyzing a particular genre, demonstrating how a move analysis can be carried out. However, they emphasized that it is

neither obligatory for researchers to follow the sequence of these steps nor does every researcher necessarily do each of these steps. The steps are presented as the following:

- Step 1:** Determine rhetorical purposes of the genre.
- Step 2:** Determine rhetorical function of each text segment in its local context; identify the possible move types of the genre.
- Step 3:** Group functional and/or semantic themes that are either in relative proximity to each other or often occur in similar locations in representative texts. These reflect the specific *steps* that can be used to realize a broader *move*.
- Step 4:** Conduct pilot-coding to test and fine-tune definitions of move purposes.
- Step 5:** Develop coding protocol with clear definitions and examples of *move types* and *steps*.
- Step 6:** Code full set of texts, with inter-rater reliability check to confirm that there is clear understanding of move definitions and how moves/steps are realized in texts.
- Step 7:** Add any additional steps and/or moves that are revealed in the full analysis.
- Step 8:** Revise coding protocol to resolve any discrepancies revealed by the inter-rater reliability check or by newly ‘discovered’ moves/steps, and re-code problematic areas.
- Step 9:** Conduct linguistic analysis of move features and/or other corpus-facilitated analyses.
- Step 10:** Describe corpus of texts in terms of typical and alternate move structures and linguistic characteristics (Biber et al., 2007, 32).

In move analysis, according to Biber et al. (2007), the initial step is to have a general understanding of the overall rhetorical purpose of the text. The researcher goes on to look at the function of each segment in the text and to identify the local communicative purpose. The third step entails finding out the common functional and/or semantic themes represented by the various text segments that were identified. Finding out the functional and semantic themes is important because they reflect the different steps related to the general move type. Before segmenting the text into moves, it is important to start first with a pilot coding. The latter might be done with the help of at least two coders in order to avoid subjective classification and interpretation of different moves in the texts. Following these steps is not the only way to do a move analysis. There are actually numerous approaches, but what's crucial is that the move structure should illustrate the rhetorical movement of the functional-semantic goals of

the text segments that comprise the genre (Swales, 1990), and all corpus texts must be coded for these differences.

1.2.3. Approaches to Genre Analysis

Over the last four decades, genre analysis studies have yielded various insights on the concept of genre, these insights represented in different conceptions on the nature of genre, its development and its employment in different contexts and texts. Aiming to set clear boundaries of different views about the concept of ‘genre’, researchers working in the field of genre analysis (Bhatia, 1993, 1996; Hyon, 1996; Hyland, 2002; Johns, 2002; Bawarshi & Reiff, 2010) classified three main schools of genre studies namely English for Specific Purposes, Australian School, and North American New Rhetoric School. Although these schools are based on functional approach and pedagogically –oriented, they differ not only in terms of their focus on texts, situational contexts, functions, or communicative purposes but also in their methods of analysis and the pedagogical applications they offer.

1.2.3.1. The ESP Approach

English for specific purposes, as a branch of English language teaching, refers to a set of instructions for teaching English to high-level students or employees in different occupations with a particular focus on needed situational vocabulary and skills. Its origins go back to the end of the Second World War when the English language becomes as an international means of communication (for more details on its origin and development see Hutchison & Waters, 1987). There has been a debate among scholars whether the ESP is an approach or not. This debate is based on the fact that it is not easy to identify a theory of language or language learning associated with English for specific purposes. ESP practitioners never intended to associate ESP with a theory of language and language learning, Swales (1988) argued, because they ‘distrust theories that do not quite work out in the litmus-paper realities of classrooms’ (p. xvii). However, it is quite impossible to have a set of instructions and procedures for teaching language without any theoretical underpinning. In this matter, Dudley Evans (2000) stated that there are two potentialities of how ESP is associated with a theory of genre. The first one is that due to their shared emphasis on student and learning needs, language functionality, authenticity, etc., ESP and Communicative Language Teaching began to be associated with one another. The second is that every ESP activity must be connected to a perspective of the text in the same way that ESP teaching methods are linked to a view of language and learning.

The primary focus of this approach has been mainly to identify the recurrent lexical items in a particular situation, then transforming the findings into teaching materials to be taught to students on the basis of their situational needs.

Although it has a long history, and has long been the focus of different researchers and scholars in various fields, the term genre has not been given much attention in English for specific purposes studies until the 1980s. Swales (1981, 1990) was a pioneering figure who first established a theoretical underpinning for genre theory and related it English for specific purposes studies. The idea that English for specific purposes and genre analysis have become in many ways synonymous over the last few decades has been largely influenced by Swales' research and the studies inspired by his work (Bawarshi & Reiff, 2010).

According to Hyon (1996), Researchers working in the field of English for Specific Purposes (Bhatia, 1993; Flowerdew, 1993; Hopkins & Dudley-Evans, 1988; Swales, 1990; Thompson, 1994; Weissberg, 1993; to name a few) regard genres as a set of written and spoken text types characterized by common textual features and share a set of communicative purposes. The latter, according to Swales (1990), is the privilege criterion (considering textual features to be as important but as secondary criteria) that gives rise to and provides the rationale for a genre and shapes its internal structure. In ESP genre studies, the Communicative purpose is often the starting point for genre analysis.

Pedagogically speaking, the identification of the communicative purpose of a particular genre and making its textual feature visible are the main aims of ESP genre analysts. The outcomes, therefore, are directed towards novice non-native learners of English or what Swales (1990) called 'disadvantaged writers' for the sake of helping them acquire the functions and linguistic conventions of texts. Having this knowledge is central for novice writers in the sense that it may not only help them to read and write in their disciplines and professions but also determine their access to 'career opportunities, positive identities, and life choices' (Hyland, 2004, p. 43).

1.2.3.2. The Systemic Functional Linguistic Approach

The Systemic Functional Linguistic approach (known also as the Sydney school) was brought to light by systemic functional linguists and scholars in Britain and Australia. Practitioners of this approach sought to establish a genre-based pedagogy compatible with systemic functional linguistic theory. Based on the ideas of Saussure, Hjelmslev, and Firth

and developed by Halliday (1978) and Martin (1992), the Systemic Functional Linguistic approach operates on the idea that language structure, function, and social context are interrelated. From this perspective, language is a system of linguistic choices that people use to perform certain communicative functions. These linguistic choices are determined by the context of situational variables. Halliday (1978) identified three variables that determine the context of a situation: field (the activity or the subject matter), tenor (the relationship between the participants), and mode (the channel of communication, spoken or written) (Hyon, 1996). This model comes to be known as the "register." Although this social context model was influential in the development of systemic functional linguistics theory, little or no attention has been paid to the concept of genre (Hyon, 1996, 697).

Based on Holliday's ideas, the systemic functional linguistic practitioners developed a notion of genre. Martin (1984 as cited in Bawarshi & Reiff, 2010), a Hallidayan student, developed a new model in which genre plays a central role. In his model, Martin emphasizes that the meaning of a communicative event must be grounded in both the context of culture, which shapes the schematic structure of genre, and the context of situation, which determines the linguistic features. In this respect, genre represents the context of culture and register represents the context of situation (Bawarshi and Reiff, 2010, 33).

Following Martin (2009), genre has been conceived in the systemic functional approach as a "staged, goal-oriented social process" (p. 13). It is a social process, Martin argued, because people interact in social events; it is goal-oriented since they interact to achieve a particular purpose; and it is staged because it requires more than one step to achieve the goal.

While ESP practitioners focus on the analysis of academic and professional works and their pedagogical efforts are oriented towards helping tertiary non-native English learners, researchers in the Systemic Functional Linguistic approach give more attention to the analysis of pedagogical genres used in primary and secondary schools as well as those genres used in adult migrant English education and workplace training programs. As their focus was on primary and secondary schools, practitioners of this approach sought to develop an instructional approach that would help school students write different genres, including reports, narratives, procedures, expositions, and explanations. Helping school students write in different genres has been identified as a primary goal of this approach. (Hyon, 1996)

1.2.3.3. The New Rhetoric Approach

The New Rhetoric approach covers a number of North American research studies drawn from different disciplines including rhetoric, composition studies, and professional writing (Hyon, 1996). It came as a reaction to weaknesses and narrow views of genre and writing in traditional approaches to genre and composition studies. Traditional approaches to genre, for instance, were mainly concerned with literary writing leaving nonliterary to be neglected. Based on this orientation, genre was conceived mainly as a classificatory tool for categorizing literary texts into different types. Composition studies, in its turn, were heavily criticized particularly after the failure of both the product- based and the process-based approaches to account for the concept of writing. Studies in this trend focused more on the texts itself without giving attention to the role of the writer and the social contexts in which writing tasks are approached. These deficiencies and others together with the rise of sociocultural approaches to writing shifted the attention of North American researchers to new insights about the notion of genre, allowing for the emergence of a new reconceptualization of genre (Artemeva, 2004).

Scholars in the New Rhetoric approach emphasize the role of social context in the interpretation of genre; claiming that genre emerges from repeated social action in recurring situations which give rise to regularities in form and content (Bazerman, 1997; Berkenkotter and Huckin, 1995; Miller, 1984, 1994). Therefore, much attention in this approach has been given to the examination of the sociocontextual aspects of genres and the action a given genre aims to fulfill. New Rhetoricians aim also to explore how the sociocontextual aspects of genres might change through time, rather than emphasizing the isolated texts' formal characteristics (Paltridge, 1997). Based on these ideas, a reasonable definition of genre, according to Miller (1984/1994), should be “centered not on the substance or the form of discourse but on the action, it is used to accomplish” (p. 151). She went on to say that when people use genre, they are acting, they are engaging in accomplishing something, they work in the convention that a society establishes as ways of acting together.

The concepts of action, situation, and motive, therefore, are central to Miller's conceptualization of genre. Building on this, she goes on to state that “human action, whether symbolic or otherwise, is interpretable only against a context of situation and through the attributing of motives” (Miller, 1994, p. 24). The notion of action in her view implies both situation and motive, both of which are seen as being socially constructed. In this view, Miller

perceives genres as social actions mediated by both situation (an external force) and motive (an internal force).

Methodologically speaking, researchers in the New Rhetoric approach tend to use different methods of analysis compared to the previous approaches. Unlike the ESP genre researchers who focus on the analysis of formal characteristics of genre, the New Rhetoricians put much emphasis on the sociocultural aspects of genre. This emphasis has an impact on the methods used in this approach. While ‘move analysis’ method is used in the interpretation and analysis of texts in ESP and Systemic Functional Linguistic approaches, the New Rhetoricians are inclined to use ethnographic methods (such as observations, interviews ...etc) to explore the social and cultural context in which genres are produced (Hyon,1996). Using ethnographic methods is a useful way in the study of genre since it helps to get access to the communities where genre is situated. Moreover, it can help to gain insights not only on how different genre are produced in these communities but also why writers use the language the way they use it (Paltridge, 2004 as cited in Johns et al,2006).

Although the New rhetoric efforts are oriented towards teaching first language students and novice professionals about the language features and functions of academic and professional genres, few or no explicit instructional frameworks were established to achieve this goal (Hyland, 2002; Hyon, 1996). The explicit teaching of genre is believed to be fruitless since the nature of genre, according to Berkenkotter and Huckin (1993), as dynamic, complex and varied to be taken from their original rhetorical situations to be taught in the classroom. Knowledge of genres, therefore, can be achieved through participation in the activities of our ordinary and professional lives.

1.2.4. Main Concepts in ESP Genre

1.2.4.1. Communicative Purpose

According to genre scholars, particularly ESP researchers, (Bhatia, 1993, 2002; Swales, 1990, 2004 to name a few), a sound definition of genre should be centered on the concept of communicative purpose. In their view, it is the communicative purpose which determines the membership of genre and shapes its schematic structure.

Swales (1990) highlights the importance of the concept of communicative purpose, claiming that it is ‘both a privileged criterion and one that operates to keep the scope of a genre as here conceived narrowly focused on comparable rhetorical action’ (p. 58). Bhatia

(1993) holds the same idea, arguing that genre ‘is primarily characterized by the communicative purpose(s) that it is intended to fulfill. This shared set of communicative purpose(s) shapes the genre and gives it an internal structure’ (p.13). Communicative purpose plays, therefore, an important role in classifying texts in different genres; however, the centrality of this role has been challenged on a number of grounds.

The status of the concept of communicative purpose has been slightly declined and its role as ‘a privilege criterion’ has been challenged since the publication of Askehave’s (1999) well-cited article ‘Communicative Purpose as Genre Determinant’. In his article, Askehave (1999) stated that while much attention was given to the concept of communicative purpose, this concept received no clear definition in most of the works of genre researchers. The lack of a clear definition of communicative purpose makes it a vague concept; hence it undermines its privileged role. Moreover, he added that since genres may have multiple communicative purposes, it is unclear which of these purposes should act as a primary criterion for genre classification.

Furthermore, Askehave (1999) also appeared to be unsatisfied with Bhatia’s (1993) classification of sales promotion letters and job application letters as the same genre. In his study, Bhatia (1993) conceived, Askehave argued, these genres to be similar, and belong to the promotional genre since they share the same communicative purpose which is “promoting”. Responding to this, Askehave (1999) found it illogical to classify genres on the basis of such broad functions. In so doing, she presumed that “we end up defining company brochures, job applications, tourist promotion, magazine advertisements and book blurbs (and why not RAs?) as instances of the same genre – the promotional genre” (p. 22).

Another reason that tends to undermine the communicative purpose status has to do with the fact that writers and speakers of a particular genre rarely state their purposes overtly. The lack of explicitness in stating the purposes makes its identification a difficult task. As opposed to the original assertion from Swales, is it clear to say that discourse community members are generally aware of the purposes of the genres which they produce, with evidence available that, for example, the writers of RAs may see their papers as simple experimental reports, whereas detailed analysis suggests a persuasive function to be a more accurate description (Askehave& Swales, 2001).

To sum up, a good number of reasons, as it is mentioned earlier (p. 43), bring the concept of communicative purpose into question, however, Askehave and Swales (2001) retain the status of this concept as the ‘privilege criterion’ for genre classification. They argue that it is a useful concept in qualifying texts to particular genre classes; however, it cannot be independently and exclusively relied on in genre analysis unless it is accompanied with other discourse-related parameters such as the social situation, form, and content.

1.2.4.2. Discourse Community

If ESP genre studies focus on the analysis of the rhetorical patterns and lexicogrammatical features of a text in particular discourse community (DC), then the questions raised here are: what is meant by the discourse community, what is its nature, and what is the relationship between genre and DC? Swales (1990) elaborated that it is the ‘social-rhetorical networks that form in order to work towards sets of common goals’ (p. 9). These common goals are the basis for shared communicative purposes that members of DCs achieve and further through the creation and employment of genre. In this sense, a group of teachers has a common goal, which is trying to help students develop social and intellectual skills and abilities, is considered as a DC.

Originally the concept of DC comes from sociolinguistics. In Sociolinguistics, a group of people who share the same rules of language and language use is called a ‘speech community’ (Borg, 2003). Building on this idea, Swales (1990) developed the notion of DC. However, Swales (1990) argued that the two notions (discourse community and speech community) are not similar and listed three major reasons that highlight the difference between them. First, people in the speech community use spoken rather than written medium for their communicative interactions while in discourse communities people communicate, further and achieve their communicative goals using written language. Using writing rather than speech eliminates the condition of physical proximity i.e., members of DC are typically not constrained by geographic restrictions unlike the speech community, which requires close proximity. Second, the DC is a ‘sociorhetorical unit’ while the speech community is a ‘sociolinguistic unit’. To put this more directly, the DC brings together a group of people who pull together seeking objectives that are established prior to those of socialization and solidarity, both of which are characteristic of a speech community. Third, DCs are ‘centrifugal’ while the speech communities are ‘centripetal’. In other words, discourse communities ‘tend to separate people into occupational or specialty-interest groups’ whereas

speech communities ‘tend to absorb people into the general fabric of society’ (p. 24). Taking these reasons together make a DC a distinctive entity. However, it remains a vague concept without setting clear boundaries.

As far as the DC is concerned, Swales (1990, 2016) sets eight clear-cut, identifying criteria that restrict the boundaries of this concept. The identified criteria are the following:

- A discourse community has a broadly agreed set of common public goals.
- A discourse community has mechanisms of intercommunication among its members.
- A discourse community uses its participatory mechanisms primarily to provide information and feedback.
- A discourse community utilizes and hence possesses one or more genres in communicative furtherance of its aims
- In addition to owing genres, a discourse community has acquired some specific lexis.
- A discourse community has a threshold level of members with a suitable degree of relevant content and discourse expertise.(1990, 24-27).
- A discourse community develops a sense of “silential relations”.
- A discourse community develops horizons of expectation.(2016,9-10).

To demonstrate, swales (1990, 2016) argues that it is the common goals that make a group of people to be considered as a DC .These common goals can be formulated publically and explicitly , and they can be generally or partially recognized by the DC members. The latter, in addition to common goals, have and use mechanisms of intercommunication such as emails, blogs, tweets, conferences, meetings and so forth , to achieve their communicative goals, Swales(2016) goes on to say that these mechanisms are used not only to provide information and feedback but also to initiate activities and actions. For instance , a university department , in a meeting , may decide to drop a degree option because of low enrollment .In addition, a DC uses and possesses a set of genres in order to further and achieve its communicative goals. These genres must be recognizable to and defined by members of a DC (1990, 26). Later, he retreated from the idea that genres are owned by individual DC, arguing that ‘a discourse community utilizes an evolving selection of genres ... but they are rarely owned’ (2016, 8). Another criterion that characterizes a particular discourse community is that its members acquire some specific terminology. The latter includes not only abbreviations and shortened forms such as ESP, EAP, and SLA...etc, but also codes. Moreover, a discourse community has a particular system in which the members of a discourse community are

ranked according to relative status or authority including expert members, ‘who can pass on knowledge of shared goals and communicative purposes to new members’ (1990, 27). Besides, DC develops a sense of ‘silential relations’. In other words, while communicating, DC members have a sense of things that do not need to be uttered or described elaborately. Finally, the DC develops horizons of expectation.

The notion of a DC is central to genre and genre studies. Its centrality has been reflected in the literature through discussing the relationship between the two concepts by different genre researchers and scholars (Bhatia, 2002; Berkenkotter and Huckin, 1993; Hyland, 2002, 2005; Paltridge, 1997; Swales, 1990). Swales (1990), a pioneering figure in genre studies, highlights the relationship between discourse community and the generic forms produced by its members, suggesting that genres belong to the discourse communities, not individuals. Although he insisted that genre is a property of a discourse community, in his later work, he clarified that a DC makes use of a changing range of genres to achieve its objectives and to put its participatory procedures into action. As the genres are performed, repeated, and improved, these sets of genres are frequently particularized, yet they are rarely owned. Swales (2016)

Hyland (2002) highlighted the relationship between the concept of DC and genre, arguing that ‘by focusing on the distinctive rhetorical practices of different communities, we can more clearly see how language is used and how the social, cultural, and epistemological characteristics of different disciplines are made real’ (p. 121). He went on to say that it is the ‘powerful metaphor joining writers, texts and readers in a particular discursive space’ (Hyland, 2005, p. 139). DC brings attention to socially situated nature of genre. It serves as a beacon that through light on what writers and readers bring to text. Hence, it implies a certain degree of variation between communities and similarities within communities in terms of generic forms. DC, therefore, is a useful concept in genre studies.

1.3. Metadiscourse: An Overview

1.3.1. Origin

Metadiscourse (hereafter MD) is a term that covers a new sub-area in discourse analysis. The term has been introduced by Harris Zellig in 1959, and then developed by several applied linguists and discourse analysts. Since its inception, the term has received several definitions ranging from broad ones, such as “writing about writing” (Swales, 1981, p. 197; Williams, 1981, p. 40), “communication about communication” (VandeKopple, 1985,

p. 83), or “discourse about discourse” (Flowerdew, 2015, p. 17, Hyland, 1998, p. 437), to more specific ones, such as “writing about the evolving text rather than referring to the subject matter” (Swales, 2004, p. 121). Metadiscourse comes as a reaction to the traditional perspectives that language is a merely propositional and expository mode of representation and that the function of communication is to match words to ideas (Hyland, 2010, p. 127). To put it in another way, Interest in the term metadiscourse becomes apparent at the time when language is seen as not merely a vehicle for transmitting ideas and opinions, but as a tool that can refer to itself. In other words, language can be used to talk about language (Hyland, 2017).

Without giving a clear definition for the term, Harris commented on metadiscourse as ‘the way of understanding language use’, claiming that it is the secondary information that is not as important as content. In his attempt to account for the organization of discourse, Harris stated that discourse is constituted of four kernels, and metadiscourse is the fourth type of these kernels, that is “metadiscourse kernels which talk about the main materials” (cited in Beauvais, 1989, p. 15). The main interest of Harris was to develop a system for extracting important information from scientific articles in order to construct abstracts for those articles. In a further attempt to characterize metadiscourse, Harris noted that “MD sentences can be inserted in the discourse about which they speak” (Harris 1966, p. 608 as cited in Beauvais, 1989, p. 15). He went on to state that ‘we can conjoin this statement *about the discourse* to the discourse itself’. Communication, According to Harris, can be viewed on two levels. The first level is the main level of discourse (the propositional content) and the secondary level helps to interpret, organise the propositional level. The latter represents the metadiscoursal level which is less important than the main level. The term metadiscourse received, However, less attention until the 1980s (Flowerdew, 2015, Hyland, 2017; Wang and Zhang, 2017).

1.3.2. Defining Metadiscourse

Recently, the term metadiscourse has started to receive attention. This is motivated by the growing interest in discourse analysis studies and the view that writing is not an individual activity but a social one. This interest led many scholars and applied linguists to propose different definitions for the term, aiming to classify these metadiscourse devices into categories. Crismore (1983), for instance referred to metadiscourse as ‘the author’s intrusion into the discourse, either explicitly or non-explicitly, to direct rather than inform, showing readers how to understand what is said and meant in the primary discourse and how to ‘take’

the author” (p. 2). Williams (1981) conceives metadiscourse as 'whatever does not refer to the subject matter being addressed'. In the same vein, VandeKopple (1985) defined metadiscourse as the linguistic content that does not contribute propositional knowledge but rather indicates the presence of an author. He added that it is the discourse that people use to help readers connect, organise, interpret, evaluate and develop attitudes toward a referential material. According to VandeKopple (1985), the use of connectives (such as *first, second, in the third place*) does not add propositional information to our texts, but it does assist the reader in moving through them as smoothly as feasible and in constructing suitable representations of them in memory. While writing our texts, VandeKopple (1985) added, we sometimes feel that our readers require extra clarification of certain words or phrases used in the text. As a result, the usage of code glosses helps readers in comprehending the meaning of such ambiguous terms. Based on this, metadiscourse has no to do with the propositional information but it has to do with the relationship between the writer, the text and the reader.

The common point between all these definitions is that discourse operates on two levels, the primary level and the secondary level. In their view the primary level refers to the subject matter; it is the level where writers supply information about the subject of a text or propositional content. The secondary level, on the other hand, represents the metadiscoursal level. It is through this metadiscourse that writers help readers “to organise, classify, interpret, evaluate, and react to such material [content]” (VandeKopple, 1985, p. 83). In other words, writers use metadiscourse to act on readers and to guide and direct them rather than inform them. In this matter, VandeKopple considers metadiscourse as the linguistic element that add nothing to the discourse therefore it plays a secondary role in constructing the discourse. Crismore (1983) holds the same view considering metadiscourse as the ‘the author’s instruction into the discourse” (p. 3). He claims that rather than providing information, the primary purpose of metadiscourse is to guide readers in understanding what is said and meant in the primary discourse. Another common point between all these researcher regarding metadiscourse is that it is the level of writing that is ‘directive’ rather than ‘informative’ (Hyland, 2005, p. 14).

Linguistically speaking, most of the previous perspectives on metadiscourse are based on three functions of a language conceptualized under the theory of Systemic Functional linguistics of Halliday (1994). Halliday proposed a holistic view towards language functions. In his perspective, Halliday argued that language fulfils three important functions, namely the ideational, textual and interpersonal. The ideational function is synonymous to the

propositional role of language; the interpersonal is social engagement between the reader and writer; and the textual function of language is to organise the text coherently. However, these metafunctions are interdependent in conveying meanings. Many studies on metadiscourse coded data based on these three metafunctions, such as Crismore and Farnsworth (1989), Crismore et al. (1993), Vande Koppel (1985), and Hyland (1998).

Influenced by the speech act theory, Beauvais (1989) rejected the functional view of metadiscourse that distinguishes between what is propositional and what is metadiscoursal, questioning the unclear definition and function of metadiscourse set by previous researchers, ‘discourse about discourse’ that ‘indicates an author’s attempt to guide a reader’s perception of a text’(p. 11). As an attempt to overcome this conceptual flaw, he defined metadiscourse within the context of the speech act theory. Based on Austin’s (1962) ideas and Searl’s (1969) notion that ‘stating and asserting are acts, but propositions are not acts’, Beauvais (1989) differentiated between a statement that expresses proposition and a statement that expresses “an illocutionary act” (p. 15). Borrowing the concept of ‘expositive illocutionary act’ from Austin (1962), Beauvais (1989) asserted that metadiscourse has the function which Austin (1962) gives to expositives, which manifests how a proposition or statement fits into the context of a conversation, or a dialogue, and generally in context of exposition. In this sense, MD reveals the writer’s communicative intent in presenting the discourse within a purposeful text. Although Beauvais provided a significant contribution to MD studies, his claims still limit metadiscourse to illocutionary acts such as *I doubt, I believe*; he ignored other linguistic structures that reflect the writers’ stance and viewpoints (Hyland, 2005).

In his well cited book, ‘Metadiscourse: Exploring Interaction in Writing’, Hyland (2005) rejected both the view that conceives metadiscourse as a subsidiary and the view that limits metadiscourse to speech acts or cohesive devices. To explain the concept of metadiscourse, he went beyond prior definitions of metadiscourse, saying that metadiscourse is more than just "discourse about discourse" or "text about text." In his view, the term encompasses the interactive elements through which writers ‘explicitly organise their text , engage readers and signal their attitudes to both their material and their audience’ (p. ix).To put it in other way , defining metadiscourse simply as ‘discourse about discourse ’ is too narrow as not all metadiscourse features that seek to engage readers refer to the text, but instead directly address the reader and the reader’s assumed knowledge, background or preconceived opinions on the topic of the text. In the same book, Hyland (2005) rejected the view that limits metadiscourse to speech acts, or cohesive devices, for instance, or that seeks

to identify metadiscourse by linguistic criteria. He claimed that metadiscourse is tied to interaction, to the way ‘we create the social interactions which make our text effective’ (p. ix), and therefore we need to identify metadiscourse in functional terms (p. 25). Consequently, he argued that metadiscourse analysis must focus on features that serve an interpersonal function (p. 27). Based on this, he conceives metadiscourse as the umbrella term for self-reflective expressions that help writers (speakers) express viewpoints and engage readers as members of a specific community through the negotiation of interactional meanings in texts. (Hyland, 2005)

In summary, metadiscourse implies the writer's attempt to guide and direct the reader's interpretation of the discourse, to construct the text and to communicate with the reader. However, as mentioned above, until recently, the ambiguous meanings of the term and the distinctions made between "propositional" versus "metadiscoursal" and "primary" versus "secondary" material made it very difficult to grasp and apply the concept confidently. Nonetheless, Hyland's (2005) view of metadiscourse that centered on the interaction between writers and their imagined readers tends to be a more detailed and realistic explanation of metadiscourse. Therefore, in this study, we see metadiscourse as the discourse that is used to express the writer's explicit awareness and control of the ongoing discourse. It reflects the writers' attitudes towards the text and the imagined readers, helping writers to add their comments to make the arguments understandable for their readers.

1.3.3. Approaches to Metadiscourse

In order to fully understand and have a clear idea about the concept of metadiscourse, we present, in the following section, a close examination of two different approaches to metadiscourse. These two approaches are integrative and non-integrative approaches

1.3.3.1. The Integrative Approach

The integrative approach, also known as the broad approach, presents two dimensions of the discourse, namely the textual and the interpersonal. Its proponents have relied mainly on the systemic functional linguistic theory to categorize the metadiscourse elements. Researchers such as Crismore et al. (1983), Hyland (1998), VandeKopple (1985) and Williams (1981) have drawn mainly on Halliday's metafunctions of language to distinguish between the metadiscourse features and the proposition matter and to classify metadiscourse into categories. According to them, metadiscourse can serve the textual function by

organizing coherent discourse and the interpersonal function by conveying the writer's attitudes to the text. In this matter, the broad approach proponents argue that discourse operates on two levels. The first level is the propositional level which is similar to the ideational function of language as defined by Halliday. The ideational function is the fundamental one that represents the cognitive meaning, that is, language is to convey ideas and experiences. The second level is the metadiscourse features which serve both the textual and interpersonal functions. On the one hand, the textual function is related to linguistic features that organise and link the text to convey the content in a coherent manner. On the other hand, the interpersonal function is the language used to express the writer's feelings, opinions and evaluations towards the subject matter of the text so as to encode interaction between the writer, the text and the reader

1.3.3.2. The Non-Integrative Approach

The non-integrative approach , also known as the narrow approach and reflexive model(Adel, 2006), holds that metadiscourse operates only within the textual dimension , excluding the interpersonal dimension of metadiscourse (Adel, 2006; Mauranen, 1993).Unlike the integrative approach , proponents of this approach conceive metadiscourse as comprising only linguistic elements that are used to achieve textual functions ,i.e., only those linguistic elements that help to organise the text are considered to be metadiscourse. The exclusion of the interpersonal elements, according to this approach, is based on the belief that these elements are non-reflexive because they refer to the internal state of mind of the writer as an experience in the real world or as the writer of other texts. Mauranen (1993), for instance, prefers to call those linguistic elements of the textual organization as 'metatext' which literally refers to the text itself. To put it differently, metatexts is seen as the rhetorical strategy which organises the content of the text. In the same vein, Adel (2006) conceives metadiscourse as a form of linguistic reflexivity which mainly explicates the writer's awareness of the text itself rather than of the reader's and the writer's own stances. Nevertheless, she expanded the non-integrative approach of Mauranen and took a 'middle ground' (Adel, 2006, p. 180) by making specific references to the writer (I, we) and the imaginary reader (you) of the present text, thus avoiding references to events and agents in the world outside discourse.

In this study, we take a broad view of metadiscourse as both textual and interpersonal

linguistic elements, and we believe that all metadiscourse devices serve an interpersonal function. Our argument is based on the fact that even textual elements serve a pragmatic function in a particular discourse. Linguistic elements such as "in addition," "in contrast," and "see chapter two" are not only used to organise a text, but they also reflect the writer's awareness of taking the reader's expectations and knowledge into account.

As it is mentioned earlier (p. 37-38), the different views held by applied linguists and researchers in the field of metadiscourse are reflected not only in their definitions of metadiscourse but also in the way they categorize the metadiscourse devices. In the following section, we try to highlight only the categories that follow the broad approach such as Williams (1981), VandeKopple (1985, 2002, 2012), Crismore (1993) and Hyland (2005). Other taxonomies (such as Adel, 2006) do not serve the current study; therefore, they are not mentioned.

1.3.4. Metadiscourse Categories

So far, we discussed the definitions of metadiscourse provided by different researchers. In fact, debates among scholars in the subject of metadiscourse studies center not only on the nature of metadiscourse, but also on how metadiscourse is classified. Not surprisingly, researchers who based their views on different linguistic theories, the functional linguistics (adopted by VandeKopple and his followers), the speech act theory (adopted by Beauvais), and the rhetorical approach (adopted by Crismore and her followers), yielded taxonomies with different categories and functions. In the following section, we try to highlight briefly the prominent models of metadiscourse. It is worth mentioning that a good number of researchers in the field of metadiscourse studies proposed different taxonomies; however, in this study we will focus only four categorizations: the first three categories (Crismore, 1983, 1990, 1993; VandeKopple, 1985, Williams, 1981) are considered as the earliest attempt and the leading classification of metadiscourse devices while the fourth one (Hyland's (2005) model) is a recent model in metadiscourse studies.

1.3.4.1. Joseph Williams' (1981) Model

One of the earliest figures in metadiscourse studies was Joseph Williams. Williams (1981) put forward a model in which he attempted to categorize the metadiscourse devices. In fact, his model was the first model proposed in metadiscourse studies; hence, it is considered as the basis of other models (Hyland, 2005). Williams' model consists of six categories

attached to three main categories: hedges and emphatics, sequencers and topicalisers, and narrators and attributors. Each category includes a number of metadiscourse devices as demonstrated below:

Hedges and emphatics: This type of metadiscourse conveys the writer's certainty about the truth of the subject matter (the content). Hedges includes for example: *might, seem, possibly...* and emphatics include: *of course, it is obvious that...etc.*

Sequencers and topicalisers: these indicate the textual relationship demonstrating how the text is organised. Among these types we find for instance *next, first, the second points, however, therefore ...* as sequencers, and *in regard to, turning to ...* as topicalisers.

Narrators and attributors: they refer to the origin of the proposition or the source of what is presented. The difference between narrators and attributors, according to Williams, is that narrators reflect the writers as a source of the information while the attributors denote that the third person is the source of the information. Examples of narrators: *I was concerned, I have concluded, I think, I believe....* etc. Attributors include *were observed, were determined, according to x.*

1.3.4.2. VandeKopple's (1985, 2002, 2012) Model

In her article, 'Some exploratory discourse about metadiscourse', VandeKopple (1985) attempted to provide a new classification to metadiscourse. Based on Lautamatti's (1978) and Williams' (1981) taxonomies of metadiscourse, VandeKopple (2012) argued that what is common and the key point that differentiates between metadiscourse and proposition is that the metadiscourse elements,

1. Do not expand the propositional information of a text
2. Do not make claims about states of affairs in the world that can be either true or false
3. Do not convey a message which has specific reference to the processes, person, objects, abstractions, qualities, states and relations of the world (p. 35)

Vande Kopple (1985) went on to say that metadiscourse can convey either textual or interpersonal meanings. The textual metadiscourse elements help to show how individual units of those propositions are related to one another to make the whole text cohesive and coherent. The interpersonal metadiscourse resources, on the other hand, help writers to give

their opinions and attitudes towards the ideational content of their texts and to demonstrate the interaction between the writers and the readers about this content. Based on this, she classified metadiscourse devices into seven main categories namely, connectives, code glosses, illocution markers, validity markers, narrators, attitude markers, and commentary. She classified the first four categories as the textual metadiscourse while other categories, according to Vande Kopple, function as interpersonal metadiscourse.

In 2012, Vande Kopple refined and developed his 1985 taxonomy. Instead of seven categories, he classified metadiscourse into six main categories by removing validity markers. The sub-categories of hedges, emphatics, and attributors become under the interpersonal metadiscourse and labeled as epistemology markers. The latter includes other new categories namely the modality markers and evidentials. The terms modality markers and evidentials are presented to substitute hedges and attributors respectively, but emphatics were removed. Other sub-categories are added also to the first category, text connectives.

Based on these modifications, it can be argued that Vande Kopple (1985) model is not only a comprehensive taxonomy but also a significant contribution to metadiscourse studies in many ways. First, it reflects a real representation of his definition of metadiscourse and its overall functions. The first category of metadiscourse as outlined in Vande Kopple definition, helps the writer not only to organise the text but also helps the reader to understand, interpret the text while the second category signal the writer presence and his attitude towards the reader and the text as well as the relationship between them. Second, it is the first systematic attempt to introduce a model that triggered many practical studies (Crismore& Farnsworth, 1989, 1990; Cheng & Steffensen, 1996; Intaraprawat & Steffensen, 1995). Lastly, it gives rise to new taxonomies such as Crismore and Farnsworth (1990), Crismore at al. (1993) and Hyland (2005).

Although the 2012 model has many advantages, it received a number of criticisms. The first criticism has to do with the model categories, i.e., the categories in VandeKopple (1985) model remained vague and functionally overlap. This is apparently true and even VandeKopple herself stated that the function of some linguistic elements may overlap and may reflect different categories. For instance, “I hypothesize” may function either as illocution marker or as a validity marker, and to “conclude this section” probably function as connector and illocution marker depending on the context in which they are used. In addition to that, Beauvais (1989) criticized VandeKopple’s idea of classifying Narrators and

Attributers as two different categories, claiming that there are no major differences between these two categories. This multifunctionality makes the model difficult to apply in practice. The problem of difficulty occurs when we try to separate examples of illocution and validity markers where cases such as “we suggest that” and “I demonstrate that” seem to indicate both the degree of commitment that the writer hopes to supply in a statement and simultaneously the act that the discourse is performing at that point (Hyland, 2005).

1.3.4.3. Crismore’s (1983, 1993) Model

Crismore (1983) suggested another model of metadiscourse consisting of two main categories, the informational and the attitudinal metadiscourse. The informational category, according to Crismore, gives information about the primary discourse (p. 12). It is the category that is used by writers to signal meaning explicitly or implicitly. This category, in its turn, is divided into two levels, the global level and the local level as demonstrated below:

At the global level: Goals: e.g. *the purpose of this unit is....*

Reviews : e.g. *we have in this work attempted to....*

At the local level: Topicalisers: used to include a local shift in a topic such as *let us turn to...*

The second major category is attitudinal metadiscourse. As its name suggests, this type of metadiscourse helps writers explicitly or implicitly to ‘signal his attitude toward the content or the structure of the discourse and towards the reader’ (p. 13). This category is divided into four subcategories namely saliency, emphatics, hedges, and evaluative. Examples of each subcategory are provided below:

Saliency: they demonstrate the importance of what they refer to .e.g. *equally important, still more important*

Emphatic: they reflect the writer certainty about the proposition .e.g. *in fact, it is clear that*

Hedges: they help the writer to minimize the effect of the claim by demonstrating that he is uncertain .e.g. “Probably”, “perhaps”.

Evaluation: they reflect the writer attitude towards the claim .e.g. *it is interesting, luckily*

Table 1.1: *Crismore, Markkanen and Steffensen (1993) categorization of metadiscourse*

Category	Function	Example
Textual metadiscourse 1. Textual markers Logical connectives Sequencers Reminders Topicalizers 2. Interpretive markers Code glosses Illocution markers Announcements	Show connections between ideas Indicate sequence/ordering of material Refer to earlier text material Indicate a shift in topic Explain text material Name the act performed Announce upcoming material	therefore; so; in addition; and first; next; finally; 1, 2, 3 ^[SEP] as we saw in Chapter one well; now I will discuss . . . for example; that is ^[SEP] to conclude; in sum; I predict in the next section . . .
Interpersonal metadiscourse Hedges ^[SEP] Certainty markers Attributors Attitude markers Commentary	Show uncertainty to truth of assertion Express full commitment to assertion Give source/support of information Display writer's affective values Build relationship with reader	might; possible; likely certainly; know; shows ^[SEP] Smith claims that . . ^[SEP] I hope/agree; surprisingly you may not agree that . .

Although Crismore et al (1993) developed the model introduced by VandeKopple (1985); it still suffers from some serious issues. The first issue is that while Crismore conceives reminders as the linguistic elements that refer to an earlier part of the text and announcements refer to the later parts of the text, he classified the two types of metadiscourse into two different categories. In other words, he considers reminders to belong to the textual category while announcement as the interpretive property. The second issue in Crismore model has to do with vagueness of the distinction between propositional and non-propositional elements. Like VandeKopple (1985), he underscores the significance of the distinction between the two levels; though, they provide no clear clarification of how these two levels are distinctive.

1.3.4.4. Hyland's (2005) Model

In his earlier study, Hyland (1998) classified metadiscourse into two categories. Influenced by Crismore et al. (1993), Hyland (1998) conceived metadiscourse to be composed of textual and interpersonal metadiscourse. By textual metadiscourse, he means all the “devices which allow the recovery of the writer’s intention by explicitly establishing preferred interpretations of propositional meanings” (p. 342). Interpersonal metadiscourse, on the other

hand, is the set of linguistic features which ‘ alerts reader to the author’s perspective towards both the propositional information and the readers themselves’ and as such is ‘essentially interactional and evaluative’ (p. 343)

Subsequently, Hyland and Tse (2004) rejected the distinction between textual and interpersonal metadiscourse hold by the previous scholars. They argued that this distinction is counterproductive and misleading because it completely ignores the ways in which meanings can overlap and contribute to academic arguments in various ways. They asserted that textuality is a general property of discourse, perhaps similar to syntax, and the writer indicates his/her sensitivity to the context by referring to the text, the audience or the message and making assumptions about what the audience is likely to know and how they are likely to respond. Therefore, what is commonly referred to as textual metadiscourse is actually the results of decision by the writer to highlight certain relationships and aspects of organization to accommodate readers’ understanding guide their reading and make them aware of the writer’s preferred interpretations. Textual metadiscourse, according to them, contributes to the interpersonal features of the text (Hyland & Tse, 2004, p. 164).

One year later, Hyland (2005) found that the meaning and boundaries of metadiscourse need to be reconsidered in order to suggest an analytically valid and theoretically correct taxonomy of metadiscourse. Based on this, he preconceived the concept of metadiscourse as the umbrella word for the self-reflective claims used to negotiate interactional meanings in a text, enabling the speaker (or writer) to present a position and communicate with the audience as members of a specific community. (Hyland, 2005). He underscored the fact that theoretical aspects of metadiscourse can only be understood and considered relevant in the sense in which they exist, and that metadiscourse research should be carried out in terms of “community practices, values, and ideals” (p. 37) .

Most of the definitions and classification of metadiscourse devices are based on the notion of primary and secondary level of discourse. To have it in another way , the distinction between what is metadiscourse and what it is not metadiscourse is based on the idea that linguistic elements in the discourse are used either to talk about the subject matter (primary discourse) or to comment and add information to the subject matter (secondary level). Theoretically speaking, the distinction between what is and what is not metadiscourse seems to be easy, in practice, however, recognizing whether a particular linguistic element functions as a proposition or as a metadiscourse device is not an easy task. In this matter, Swales (1990)

made it clear that although it is quite easy to accept the concept of metadiscourse, it is more difficult to establish its limits. According to him, the decision to identify the linguistic element that function as metadiscourse is not an easy task. Ädel (2006) seemed to agree with Swales arguing that metadiscourse features can be multifunctional; hence, their identification is hard to achieve. This is because, according to him, they are context-dependent in academic discourse. Besides, being a linguistic element, metadiscourse is associated with socio-contextual meaning.

To overcome the issue of multifunctionality, Halliday (1994) proposed the test of falsifiability to demarcate propositions. He argued that the "propositional material is something that can be argued about, affirmed, denied, doubted, insisted upon, qualified, tempered, regretted and so on" (Halliday, 1994 cited in Hyland and Tse, 2004,p. 160). However, the metadiscoursal material can be also argued about. This idea is held by several researchers including Hyland and Tse (2004) and Mao (as cited in Hyland, 2005:19). Mao (1993) for instance, believes that metadiscourse and propositional content can both be falsified. In the same vein, Hyland and Tse (2004) rejected the test of falsifiability, claiming that it is sometimes difficult to distinguish what is content and what is not. They went on to say that the logico-semantic unit that can be given a truth value is known as a proposition; nevertheless, both propositional and metadiscoursal parts of texts are susceptible to the same flaws or errors.

The picture, therefore, remains vague. Hyland (2005) relied on Myers (1990) who claims that academic papers are sometimes rewritten by the editorials for different audience. When it happens the content is the same, but the meaning may change drastically through re-textualization (Hyland, 2005, 21-22). He, therefore, concluded that the "meaning of a text is not just the propositional material...It is the complete package"(p. 22). By "complete package" he means both proposition and metadiscourse content, and he believes that metadiscourse is an essential and inseparable part of the meaning. The point is that propositional-metadiscourse distinction is made for the sake of exploration and research (Hyland and Tse, 2004). For Adel (2006), a linguistic element to be qualified as metadiscourse, there should be four main conditions. First, linguistic elements should display the "explicitness" feature in the form of wording, not typographical marking such as italics and boldface. Second, it refers to "current discourse" or current text. For a linguistic element to be considered as metadiscourse, it should refer to "writer *qua* writer" and "reader *qua* reader" of the current discourse rather than

experiences in the real world. Lastly, it should refer to the “world of discourse” or discourse-internal phenomena rather than discourse-external phenomena (p. 29).

In this study, we broadly conceive of metadiscourse as any linguistic element concerning text organization and fostering writer-reader interactions in a text. For metadiscourse demarcation, three important keywords for drawing the boundaries of metadiscourse are "text," "writer," and "reader." In addition to that, the criteria proposed by Hyland (2005) and Ädel (2006) are used as the main basis in coding potential items as MD. However, we draw heavily on Hyland's (2005) criteria since his model for exploring metadiscourse is adopted in this study. More illustration on how the Hyland (2005) model works will be presented in chapter four, supplied by a good number of examples taken from recent studies.

Conclusion

This chapter attempted to establish a theoretical underpinning for our study. Concepts such as discourse analysis, genre analysis, genre, communicative purpose, discourse community, move-step structure, and metadiscourse were defined and highlighted. It is important to examine a genre not only in terms of the rhetorical organization but also in terms of the linguistic choices and preferences in order to completely comprehend how authors produce a certain genre. Conventions within the discourse community, however, are what led to the rhetorical organization and metadiscourse preferences. Consequently, the concept of discourse community should be included in any attempt to explain the differences and similarities across various groups of writers.



Chapter Two:

Contrastive Rhetoric and Genre Analysis

Introduction

2.1. What is Contrastive Rhetoric?

2.2. Contrastive Rhetoric Studies in Applied Linguistics

2.3. Influential theories behind contrastive rhetoric

2.4. Contrastive Genre Analysis and Language Learning

2.5. Culture and contrastive rhetoric

2.6. Dimensions of culture

Conclusi



Introduction

After discussing the concept of genre analysis in the first chapter, we now turn our attention to another area that is directly relevant to the study of academic writing across languages and cultures. In fact, there were common beliefs that language influences the way we perceive the world, that language structure and culture have an impact on the way we organise our writing and discourses, and that language is a matrix of thought. These beliefs and others were the inspiration for several researchers and applied linguists for decades. Researchers in the field of language learning in general, and writing in particular, have concluded that the best way to understand how people organise their discourse is to compare different languages. In doing so, areas of differences (and hence difficulties) should be highlighted.

The efforts made by applied linguists led to the emergence of different methods and tools that can help identify non-native English learners' writing difficulties. Contrastive analysis, error analysis, and Interlanguage analysis were among the most effective methods. It was argued that by comparing different languages, areas of difficulty would be identified; hence, EFL learners' writing would be enhanced. The focus of these methods, however, remains narrow in that it solely considers phonological and morphological distinctions. Furthermore, it is well known among applied linguists and scholars that second and foreign language learners have numerous challenges while writing in English. These difficulties are not reflected at the morphological and grammatical levels but also at the discursal level. To account for these difficulties, the concept of contrastive rhetoric was brought to light.

This chapter tries to provide background information about contrastive rhetoric as a field of study: definition, origin, criticism and recent development. The chapter also sheds some light on how different disciplines, including rhetoric, composition studies, and genre analysis, influence the field of contrastive rhetoric.

2.1. What is Contrastive Rhetoric?

2.1.1. Definition of Contrastive Rhetoric

Contrastive rhetoric (CR), as a newly emerging field of study, is an “ area of research in second language acquisition that identifies problems in composition encountered by second language writers and, by referring to the rhetorical strategies of the first language, attempts to

explain them” (Connor, 1996, p. 5). It explores how texts are influenced by factors such as first language, culture, and education, aiming not only to improve intercultural communication studies, but also to inform writers, editors, translators, and language and composition instructors and learners, among other users and producers of text (Connor, 2016).

The fundamental assumption behind CR is that language and writing are culturally determined; hence, the way we organise our ideas in texts is predetermined by culture. Based on this, CR aims at finding out the common similarities and differences in texts written by writers from disparate cultural and linguistic backgrounds (Connor, 1996, 2008). Closely connected to a specific teaching situation, CR, as a branch of applied linguistics, is an approach that uses different methods, including text analysis, corpus linguistics, genre analysis, and ethnographic approaches (Connor, 2004a). Initiated a few decades ago by the applied linguist Kaplan (1966), contrastive rhetoric maintains that language and writing are cultural phenomena. As a result, each language has rhetorical conventions unique to it. Additionally, the linguistic and rhetorical conventions of the first language, according to Kaplan (1966), have an impact on writing in English as a second language.

One way to define contrastive rhetoric is to state what it is not. Contrastive rhetoric is neither contrastive analysis nor error analysis; these analyses are limited to the formal analysis of language at the sentence level. However, contrastive rhetoric goes beyond looking merely at differences and similarities in terms of phonology and vocabulary. It focuses on how a particular discourse is organised and how different cultural discourses demonstrate different rhetorical patterns. Purposefully, it started as a magic tool that provides a solution to the rhetorical and organizational problems encountered by non-native students writing in English. Recently, it has become a multidisciplinary field, drawing on several related disciplines such as linguistics, rhetoric, composition theories, anthropology, and translation (Connor, 2008, p. 300). CR has become an established field of inquiry in applied linguistics and written discourse analysis (Flowerdew, 2001).

Besides, CR is not contrastive linguistics; the latter is a general term that covers all the theories and studies in which languages are compared. Within comparative linguistics, contrastive analysis (CA), as a sub-field, deals with similarities and differences between languages with a focus on the interference caused by the first language's phonological, morphological, and grammatical features compared to the second language. CA focuses more on the differences between two languages, aiming to find solutions to obstacles encountered

by L2/FL learners. CR, in contrast, deals with the ways writers organise their writing to influence the audience (readers). According to CR proponents, based on his culture's established norms of rhetoric, each audience has particular expectations about rhetorical structure. In other words, CR focuses on finding out the conventions that interfere with L2/FL in order to help L2/FL learners meet their potential readers' expectations. Although they have the same pedagogical orientation, CR and CA are different in terms of their focus. What follows is a thorough elaboration on the nature of CR.

Kaplan (1966) defined critical theory as a "notion": "People live in disparate cultural environments and conceive reality and construct their discourse according to their culture and life styles." Consequently, people will not only organise their spoken discourse in a particular way, but they will also organise their writing according to specific cultural conventions. Based on this notion, Kaplan (1987, as cited in Hamadouche, 2005) concludes that all languages possess several typical organizational patterns, and the use of one of these patterns depends on cultural tendencies and preferences.

Based on the tenet that first language (L1) cultural tendencies and preferences may interfere in L2 writing, CR seeks to identify the differences in terms of the rhetorical organization that might create writing difficulties for non-native speakers (Connor, 1996, 2008). According to Xing, Wang, and Spencer (2008), CR is an area of research that studies discourse differences between different languages and cultures as reflected in the writing of L2 and FL students. It looks at differences and similarities in text written by writers from disparate linguistic and cultural backgrounds. It started to examine high-level students' essays in its early days; however, its focus has shifted to look at preferred patterns of writing in many English for specific purposes (ESP) situations. (Connor, 2002, p. 1).

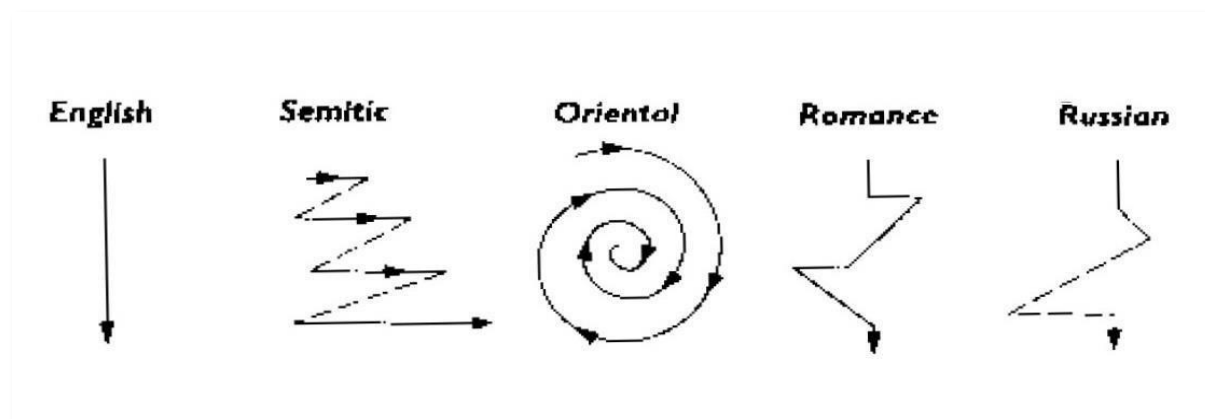
2.1.2. History of Contrastive Rhetoric

The mid of 1960s witnessed the birth of a new field of study that deals with uncovering the difficulties faced by English learners in their writing. CR, a research paradigm that was originally introduced in ethnographic studies, has been brought about "as a pedagogical solution to the problem of L2 organizational structures" (Matsuda, 1997, p. 45). Kaplan (1966) was the first pioneering figure in applied linguistic studies who introduced the notion of contrastive rhetoric. As a university teacher of writing, Kaplan (1966) observed that although university learners write in the English language and their writing is free of grammatical mistakes, they produced different compositions in terms of rhetorical pattern

organization. Motivated by pedagogical concerns, Kaplan (1966) examined six hundred essays written by university learners coming from different linguistic and cultural backgrounds. Comparing the essays written by L2 students with those produced by native English speakers in terms of paragraph organization revealed that learners' L1 and its culture have an impact on their writing in English, and those who come from different linguistic and cultural backgrounds tend to produce distinctive rhetorical patterns.

The cross-cultural study initiated by Kaplan (1966) revealed that while composing in English, university learners follow five rhetorical patterns. He characterized the way his participants organise the essays as follows: Native speakers of English, Kaplan argued, tend to compose in a linear logical progression from the beginning to the end of an essay; Asian learners (Chinese, Japanese and Korean) tend to write in a circular, illogical progression, whereas speakers of Semitic languages (such as Arabic) exhibit the inclination to use more coordinating words and complex parallel constructions; Romance languages (French and Spanish...etc) tend to deviate from the theme with irrelevant descriptions; Russian language learners write in a multi-iterative, back-and-forth progression (Kaplan, 1966). Based on this division, Kaplan (1966) presented five drawings illustrating the paragraph pattern structure of each culture (Figure 1). He characterized each culture paragraph pattern as the following: The English essay writing as a straight vertical line; a curved line moving inward for oriental languages; four horizontal lines tied by dashed lines for Semitic languages; a zigzagged vertical line for romance languages; and a zigzagged vertical line with dashed lines in the middle for Russian language (Kaplan, 1966).

Figure 0.1: *Rhetorical Patterns of Different Languages (Kaplan, 1966)*



Based on his analysis, Kaplan (1966) attributed the differences in discourse organization between English and other languages, including Semitic, Oriental, Romance, and Russian, to their respective cultures and thought patterns. His seminal work has been valuable in the sense that it has contributed to shifting the attention of ESL/EFL tutors and students from focusing merely on grammar and sentence-level difficulties to considering discourse organization difficulties. Simultaneously and perhaps, more importantly, his research laid the groundwork for the establishment of a newly emerging field, CR, which has grown rapidly in the last few decades.

2.1.3. Criticism of Contrastive Rhetoric

Kaplan's 1966 article, 'cultural thought patterns in inter-cultural education, has been conceived as the mark of the beginning of CR. Since then, it has exerted a great impact on the pedagogy of teaching English in general, and on teaching writing in particular. To put it in another way, his article was vital and influential not only in encouraging teachers and researchers to search for the connections between culture and rhetoric and using the findings to improve the way writing is taught, but also it discarded the old belief that writing is a gift which cannot be taught. The status of CR, in general, and Kaplan's study, in particular, however, has come under severe and consistent criticism since its early days (Connor, 2008). Kaplan's (1966) article has become 'one of the most widely known and criticized articles in the history of applied linguistics' (Matsuda, 2001, p. 257), leaving its advocates on the defensive, and leading Connor (2004) to wonder whether CR is frozen in the Kaplan's (1966) article. Researchers (Ferris & Hedgcock, 2005; Hinds, 1983; Kubota, 1997, 1999; Kubota & Lehner, 2004; Leki, 1991; Mohan & Lo, 1985; Raimes, 1991; Xinghua, 2011, Ying, 2000, 2001, and Zamel, 1997) have questioned CR on both external grounds (studies related to CR) and internal grounds (its theoretical underpinning). These criticisms can be summarized into three main themes having to do with its origin, the methodology followed, and its unwarranted generalizations and controversial conclusions.

One of the critiques received by CR touches on its origins. In taking account of the origin of CR, Connor (1996, 2004, and 2008), Hinds (1987) and Matsuda (2001) claimed that the theoretical underpinning framework on which Kaplan (1966) built his study was based on the Sapir-Worf hypothesis. This claim was disputed by several researchers (Kubota and Lehner, 2004 Ying, 2000, 2001). Ying (2000, 2001), for instance, argued that Kaplan's CR is "incompatible" with the Sapir-Whorf hypothesis because the way language influences thought

according to the Whorfian hypothesis is "diametrically opposed" (p. 263) to the way culture influences language and rhetoric according to Kaplan. In clarifying his argument, Ying (2000) claimed that the Whorfian hypothesis is based on the idea that language structure influences the way people perceive the world (language influences thought), while Kaplan's study is based on the notion that culture influences language and rhetoric. Ying (2000), instead, suggested that the origin of contrastive rhetoric went back to Hymes' (1962) ethnography of communication. Matsuda (2001) agreed with Ying in that the theory of linguistic relativity is not the only origin of CR, but he criticized Ying (2000) claiming that he did not elucidate what he meant by 'the relationships are diametrically opposed to each other. Matsuda (2001), based on his personal communication with Kaplan, asserted that Kaplan had not been influenced by Hymes' ethnography of communication and contrastive analysis which are the true predecessors of Kaplan's notion, but instead but he was influenced by Christensen's (1965) generative rhetoric of the paragraph.

Congruent with Ying's (2000) perspective, Kubota and Lehner (2004) argued that the theoretical underpinning behind contrastive rhetoric, as explained by CR proponents, is 'inconsistent with Whorf's critical view' of standard average European language and thought (p. 16). Kubota and Lehner (2004) explained that the basic aim of Worf in the 1950s was to counter and correct the narrow Eurocentric perspective towards other languages and cultures by analyzing the Hopi language. In contrast, CR, according to Kubota and Lehner (2004), seeks not only to essentialize the English language by considering it the norm but also to keep English in its place of authority and positions FL/L2 student writers as needing correction. Even though Kaplan mentioned the influence of the Sapir–Whorf hypothesis (Kaplan, 1972) and used the term 'neo-Whorfian' to refer to the underlying assumption of CR (Kaplan, 1988, p. 279), the Sapir–Worf hypothesis as the origin of contrastive rhetoric is still controversial (Matsuda, 2001; Ying, 2000, 2001).

Additionally, the CR study carried out by Kaplan (1966) was characterized by many methodological deficiencies (Hinds, 1983; Xinghua, 2011). First, Kaplan (1966) examined incomparable corpus, including EFL/ESL students' essays and professional writing. Analyzing texts in this way led him speculatively and prescriptively to infer the first-language organizational patterns from evidence in second-language writing (Hinds, 1983; Xinghua, 2011). In this matter, Hinds (1983) advocated that to fully understand how FL/L2 language learners write, it is better to analyze their L1 writing. Second, although Kaplan (1966) analyzed different types of texts (different genres), he attributed the differences in the

rhetorical patterns in students' essays to the influence of the students' L1 and its culture, neglecting the influence of the genre on the organisation of rhetorical patterns (Connor, 2002). Third, the essays analyzed by Kaplan had been written by students who were on their way to mastering English writing; therefore, his findings cannot be generalized since they do not reflect the writing of expert writers. Indeed, this generalization was refuted by many researchers in the field.

Mohan and Lo (1985), for instance, carried out a CR analysis in which they analyzed more than 3700 essays written by students in grades 8 and 12. The essays were analyzed on different levels, such as organization, length of sentences, and vocabulary. Mohan and Lo (1985) concluded that students from grade 12 outperformed students from grade 8, and there were no differences between the essays written by students from different cultural backgrounds. This conclusion was echoed in another study carried out by Hyland and Milton (1997). In their study, Hyland and Milton (1997) examined 900 essays, written by students not only from different linguistic and cultural backgrounds but also with different levels of proficiency. The essays were analyzed in terms of a number of lexical expressions of doubt and certainty. After the analysis, it was revealed that there were certain similarities and differences across the student groups. In explaining the source of these differences, the researchers attributed the differences to proficiency level rather than culture. In this matter, Hyland (2009) argued that the more skilled the authors, the more closely their work resembled that of native speakers. In this regard, he proposed that proficiency, rather than culture, is the primary cause of these inequalities. Another methodological deficiency touches on Kaplan's categorization of Chinese, Japanese, Korean, and Indonesian as oriental languages, though these languages are different in terms of their cultural and linguistic traits (Mulvey, 1992). These deficiencies and others make Kaplan's method not only a gross form of stereotyping but also methodologically unsound (Connor, 1996).

Hand in hand with these weaknesses comes the view that CR is too ethnocentric. It privileges the writing of native English speakers, and it conceives the L2 learners as culturally deficient (Matalene, 1985). The same view has been held by Kubota and Lehner (2004), who argued that traditional contrastive rhetoric has created static binaries between English and other languages and considered students as culturally inadequate, despite its admirable pedagogical aims to increase teachers' and students' cultural and rhetorical understanding in second language writing.

Despite all these weaknesses, Kaplan's (1966) pioneering work was innovative and valuable for many reasons. First, it drew attention to an important area of study, namely CR and the teaching of composition. Before Kaplan's seminal work, writing received not only less attention, but it was also thought to be a gift from God. Second, it drew attention to the relationship between culture and language structure. Although the relationship between culture and language was the focus of many researchers (Edward Sapir and Worf Lee Benjamin) in the past, it was Kaplan who highlighted and brought it to language teaching and learning in the 1960s. Since then, attention has not been given only to the syntactic structure but also to the flow and the organization of the information in the text, and teachers and students need to have 'a grasp of idea and structure in units larger than the sentence' (Kaplan, 1966, p. 15). The emphasis on large discourse features paved the way for a new area of investigation in applied linguistics, in general, and in writing studies, in particular.

All in all, the criticisms mentioned earlier and others did not impede the development of CR. Its influential power in the field of writing pedagogy still flourishes and continues to play a role. What follows is a brief review of how the field has survived and developed in the last few decades.

2.1.4. From Contrastive Rhetoric to Intercultural Rhetoric.

Although CR has witnessed a plethora of criticisms since its inception, it has markedly undergone a number of theoretical adjustments and refinements based on efforts made by two leading researchers, namely Kaplan and Connor. These CR researchers challenged the validity of most of the previous criticisms, leading to the dispelling of some misunderstandings held by CR opponents. In response to the previous criticisms oriented towards traditional contrastive rhetoric, Connor (2002) argued that such criticism stems partly from the "lack of understanding of the contemporary outlooks and of the drastic changes that have occurred in this discipline" (p. 66). She added that Kaplan himself called his initial stance "a notion" and that his study was hindered by the unavailability of advanced text analysis techniques at the time when Kaplan carried out his seminal study in 1966. Kaplan (1967, 1987, 1997, 2000), in a series of his publications, admitted the limitations in his CR study, namely contrasting expert writing by native speakers with L1 learners' writing and ignoring other factors that might influence student writing, such as the topic, the genre, and text length. Kaplan presented several ways and strategies that can be used to enhance the development of CR.

2.1.4.1. Kaplan contributions to contrastive rhetoric.

Following his seminal work in 1966, Kaplan (1967) discussed a variety of ways that CR can be used to teach writing. He suggested that "pattern drills," "rearranging scrambled paragraphs," and "filling an outline following given topic sentences" can be used to help L2 students become familiar with the models of English paragraph development. He cautioned English teachers, meanwhile, of the risk of being accused of brainwashing students by forcing them to view the world through English-colored lenses. Previously, Kaplan (1966) argued that the aim of contrastive analysis (CA) of rhetoric is to show that there are various paragraph developments besides those that are typically thought of as good in English. Though Kaplan deliberately named the research aim of CR to avoid criticism of prioritizing English norms, it is very likely that he believed that the English language is interwoven with the English style of paragraph development, and thus the English rhetoric should be taught together with the language.

To test the assumption that the rhetorical preferences of the native language influence the organization of compositions written in other languages by participants who are not native speakers, Kaplan (1976) reviewed a number of contrastive rhetoric studies in which the paragraph development in the English writing of native speakers of Arabic, Chinese, and Thai is contrasted with the English language. Kaplan (1976) concluded that the assumption "survived analysis" since the studies revealed distinctive linguistic features in L2 writing that are related to L1 (p. 12).

Two decades after his original work, Kaplan (1987) asserted that the manner of paragraph development, which he previously assumed to be linked to particular languages, exists in all languages. Despite the fact that all paragraph development strategies are conceivable in a language, Kaplan (1978) claimed that certain strategies are more commonly used in a particular language than others. Based on his revision of his 1966 article, Kaplan (1987) found himself obliged to express his regrets about making strong claims about writers of different cultural backgrounds having unique ways of developing paragraphs. In his earlier work, Kaplan (1966) established a link between the indirect approach and oriental languages such as Chinese and Japanese, while he subscribed to a parallel way of paragraph development for Semitic languages such as Arabic. In this matter, Kaplan clarified that:

In that study, I tried to represent, in crude graphic form, the notion that the rhetorical structure of languages differs. It is probably true that, in the first blush of discovery, I overstated both the difference and my case. In the years since the article first appeared, I were accused of reductionism – of trying to reduce the whole of linguistics to this single issue. It was not my intent then, and it is not my intent now, to claim more for the notion than it deserves. (1987, p. 9)

However, he still maintains that his theory has some merit, arguing that some forms are more often employed than others in a given language. To put it another way, Kaplan argued that the unique features of rhetoric that he had previously discovered by comparing paragraph structures might not be generalizable to all writers speaking the same first language, but that differences in rhetoric did exist between writings in different languages and that a better way of comparing rhetoric was needed. In this matter, Kaplan (2000) noted that his 1966 article was based on an admittedly relatively poor research design, but thirty years later, the question is not "Were the "doodles" accurate as specified?" Of course, they were not; they perhaps tended to suggest stereotypes. Texts reflecting any of the doodles can and do occur in every language, but particular languages may have particular organizational preferences (Kaplan, 2000, p. 83). Although Kaplan (2000) admitted that the original study "erred in attempting to represent cultural rhetoric as unique generalizations that were perceived as stereotypes," he maintained that whether the generalized patterns are accurate or not is not as important as the discovery that "there are differences between languages in rhetorical preference" (p. 84–89).

In summary, Kaplan contributed considerably to CR. This was reflected in his studies, which were carried out to verify the initial assumption of contrastive rhetoric. Drawing on evidence and criticisms of the original assumption, Kaplan made considerable revisions to the model. First, he reformulated the hypothesis by emphasizing the preferences of the rhetorical organization rather than stereotypes (Grabe & Kaplan, 1996; Kaplan, 1986; 2000). Second, he emphasized the importance of genre, proposing that comparisons be made between texts of the same genre (Kaplan, 1986; 2000). Third, he acknowledged the cultural influence of social communities, which is regarded as a different influence from L1 culture (Kaplan, 1986; Kaplan & Grabe, 1991). The remaining issue, which is considered to be the critical problem of the field, is to find an appropriate theoretical model for contrast (Kaplan and Baldauf Jr., 2005), that is, the method of discourse analysis to analyze and compare texts following different rhetorical conventions. In her research on Intercultural Rhetoric, Connor expanded on the research methods as well as the theoretical perspectives of CR (Connor, 1998; 2002; 2004a; 2011a).

2.1.4.2. Connor Contributions to Contrastive Rhetoric

Ulla Connor, a well-known figure in the field of CR studies, has also been an active proponent and researcher. She is also one of the most well-known scholars who worked hard to refine the concept of contrastive rhetoric. She not only contributed to the growth of the field but also supplied responses and counterarguments for the defense of CR. Her theoretical advances and modifications in contrastive rhetoric have influenced its definitions and goals in general. What follows is a summary of her contributions to CR.

Attempting to update and broaden the perspective of Kaplan's ideas, Connor has put in a great deal of effort. This effort has been reflected in a good number of her publications (Connor, 1996, 2002, 2004, 2008, 2011). In her book, *Contrastive Rhetoric: Cross-cultural Aspects of Second Language Writing*, Connor (1996) redefined CR, trying to establish it as a legitimate area of research in second language acquisition studies.

She also listed the five new orientations that CR has adopted. These include contrastive text linguistics, writing as a cultural activity, classroom-based contrastive studies, genre-specific contrastive studies, and contrastive studies on intellectual traditions and ideologies. Connor (1996), as a proponent of the CR field, warned that the research design of many studies in contrastive rhetoric is ethnocentric. According to her, even though native English writing is seen as logical and straightforward to English speakers, it is not necessarily the case for speakers of other languages whose coherence patterns differ from those of English. Based on this, she suggested the concept of cross-cultural collaboration to help avoid ethnocentrism. Previous studies in CR, according to Connor (1996), also failed to establish a common ground of reference, or "tertium comparitionis" (p. 163). As a result, she proposed that "appropriate comparisons in contrastive rhetoric must be established at a variety of levels depending on the purpose of the study" (p. 164). In addition to that, controlling for authorship, controlling for genre and content, and ensuring inter-rater reliability are the other three difficulties that researchers need to address when establishing a shared foundation for comparisons.

In her article "New Directions in Contrastive Rhetoric," Connor (2002) reviewed several studies that highlighted the merits and faults of contrastive rhetoric. She lamented the previous critics, asserting that these objections resulted from a lack of knowledge of contemporary perspectives in contrastive rhetoric and advances that had occurred in this field over the past ten years. In her response, Connor (2002) addressed three main criticisms of CR. First, she clarified that while the learners' essays were the subject of most of the traditional

contrastive rhetoric; recent empirical studies of CR analyze and examine not only academic works but also business and professional genres, which are more frequently used in real-world global communication. Second, in response to previous criticisms of the narrow concept of culture in traditional contrastive rhetoric; Connor adopted Atkinson's (2004) and Holliday's (1999) postmodern definitions of culture. The latter differentiated between "large culture" and "small culture." Large culture refers to national or ethnic cultures, while small culture refers to cultures in smaller groups, such as disciplinary culture, youth culture, and student culture. Connor legitimizes the position of the small culture in the field without ignoring the large culture. Third, some critics claim that CR acknowledges English conventions, considering them as teaching norms. Responding to this, Connor argued that CR aims to help writers become aware of the reader's expectations and write in a reader-friendly way. She went on to say that non-native speakers' conventions should be highlighted and considered as teaching norms since native speakers may not always be the readers.

In her subsequent work, Connor (2004a, 2004b) attempted to move contrastive rhetoric away from textual analysis, which focuses on text cohesion and coherence, to context-based studies, which emphasize the social context. In doing so, Connor suggested several new methods to better understand the social context. She introduced the use of genre analysis, corpus analysis, and ethnographic approaches in CR studies. In the same work, Connor (2004a) proposed a new name for CR, claiming that "intercultural rhetoric" is the best name that suits studies in recent CR. She chose this new term after seeing the dynamic relationship between writing and culture, and how writing in a particular culture is directly related to its intellectual history and social structures. In this regard, Connor (2004a) made the following claims:

Changing definitions of written discourse analysis—from text-based to context-sensitive—and of culture—from static to dynamic—contribute to the changing focus of intercultural rhetoric research, a new term that better reflects the dynamic nature of the area of study. (p. 302)

Following that, Connor (2008) believes that the focus of intercultural rhetoric should be to explain the immense complexity of cultural, social, and educational aspects influencing a writing situation. This point was made in response to those critics who think CR is reductionist and essentialist. In the same work, Connor (2004a) differentiated between "intercultural" and "cross-cultural" studies, claiming that intercultural studies are concerned with writers writing in a second language environment, while cross-cultural studies are related to writers writing in

a foreign language situation. According to Connor, "cross-cultural" refers to notional entities that exist across cultural boundaries, but "intercultural" examines a real-world interaction between two persons who come from distinct linguistic and cultural backgrounds.

Moving from cultural rhetoric (CR) to intercultural rhetoric (IR) entails new modifications and refinements. In this matter, Connor (2011) examined three relevant components of the new paradigm, namely "text in context," "culture as a complex interaction between small and large cultures," and "text in intercultural interactions" (p. 278). She explained that the study of writing entails not only the study of text but also the study of the social context in which the text is produced. Besides, she considers culture a complex notion that embodies national culture (large culture) and other cultures such as disciplinary, youth, and classroom cultures (small culture). IR researchers should take into consideration both small and large cultures. The last component, according to her, is the intercultural discourse encounters—spoken and written—which entail interaction among interlocutors and require negotiation and accommodation.

2.2. Contrastive Rhetoric Studies in Applied Linguistics

In this section, three approaches relating to L1 interference are highlighted, namely contrastive analysis, error analysis, and interlanguage analysis. We do not intend, however, to provide a thorough description of these approaches, as they are not the focus of this study, but we try to demonstrate how these approaches are related to and to what extent they influence the field of CR. What follows is a brief description of contrastive analysis, error analysis, and interlanguage analysis.

2.2.1. Contrastive Analysis

Contrastive analysis (CA) emerged as the first attempt made by applied linguists to find solutions for L2 learners in the early 1960s. At that time, it was believed that mistakes made by L2 learners were caused by their native language. In learning a second language, learners may face many challenges. These difficulties might go back to the differences in the phonological and grammatical features of languages. The basic solution is to examine and compare different languages to discover their similarities and differences. By doing so, it was believed that CA could predict the difficulties that might challenge L2 learners. Based on this assumption, CA drew on the areas of difference, which equaled difficulty, to provide solutions for L2 language instruction (Johansson, 2000). According to Fries (1945, as cited in

Richards and Schmidt, 2002), the most efficient teaching materials are based on a systematic analysis of the target language features and comparing them to those of the L1. The three main assumptions underlying CA could be summed up as follows:

- a) *"The main difficulties in learning a new language are caused by interference from the first language";*
- b) *"These difficulties can be predicted by contrastive analysis,"* and
- c) *"Teaching materials can make use of contrastive analysis to reduce the effects of interference"* (Richards and Schmidt, 2002: 119).

Although contrastive analysis was a magic tool for providing solutions to language learning problems encountered by second or foreign-language learners of English, its focus was mainly on phonological and grammatical aspects. This shortcoming, fortunately, was the inspiration for CR in general, and Kaplan's (1966) work in particular. Kaplan believes that the mother tongue does not only determine the L2/FL learners' pronunciation, grammar, and interpretation of meaning but also their way of organizing their text and its rhetorical interpretation.

The basic idea behind contrastive analysis was that "difference equals difficulty." In other words, whenever there is a difference in the grammatical structure of the languages, there is a learning problem. This basic principle stimulated Kaplan in CR; he believes that if the English rhetorical style differed from the rhetorical style of the learner's native language, then there would be a potential learning problem.

2.2.2. Error Analysis

By the end of the 1950s, an alternative approach to CA was developed. At that time, errors were no longer seen as a hindrance to language learning. In contrast, errors were believed to be not only a device that learners use and from which they learn a language but also imply valuable information about the learning strategies of L2/FL learners (Corder, 1972; Richards, 1974; Taylor, 1975). Based on the changing views about the effect of errors on language learning, error analysis (EA) was developed.

The basic assumption behind EA is that the influence of the mother tongue (L1) on L2/FL is more complex. Errors made by L2/FL learners are caused by many complex factors,

including the L1 factor. In this matter, Richards and Schmidt (2002) classified the errors encountered by L2 learners into seven categories as follows:

- a) Overgeneralizations:** Extension of target language rules to inappropriate contexts.
- b) Simplifications:** Learners producing simpler linguistic rules than those found in the target language.
- c) Developmental errors:** Natural stages of development.
- d) Communication-based errors:** Strategies of communication.
- e) Induced errors:** Transfer of training.
- f) Errors of avoidance:** Failure to use certain target language structures because they are thought to be too difficult.
- g) Errors of overproduction:** Structures being used too frequently (Adapted from Richards and Schmidt, 2002: p. 201).

Unlike contrastive analysis, which was more theoretical in nature and aimed solely at predicting learner errors, error analysis was more practical, aiming to identify and classify language learners' errors. The growth of error analysis also altered linguists' perceptions of language learners' errors. According to proponents of error analysis (Corder, 1967; Richards, 1974; Selinker, 1972), L1 interference is not the only element that causes language learners to make mistakes; other factors (such as the social setting, classroom instructions, and so on) could also be a source of errors in language learners' production. These ideas and others made a significant contribution to language teaching and learning on the one hand, and were the driving force behind the development of CR on the other.

2.2.3. Interlanguage Analysis

The term "interlanguage" is defined by Selinker, Swain, and Dumas, 1975 (as cited in Connor, 1996) as the "system" that is different between the native language and the target language. The concept was first put forth by Selinker (1972), who views it as a distinct language system based on the visible output that comes from a learner's attempt to produce a TL norm. The main promise behind interlanguage analysis is that second language learners are likely to develop a new system that is different from both their first and target languages.

The central tenet of the interlanguage hypothesis is that, although both L1 and L2 influence the language of foreign language learners, the language of adult and child learners has its own linguistic system that is independent of both (Selinker, 1972; Selinker, Swain, and

Dumas, 1975). It will be methodical in its variations from the native speaker system, preventing random disparities between learner production and the goal norms. The interlanguage will be mutually understandable among learners of similar kinds who share errors that define these differences to some extent over time.

Although this stage of development in applied linguistic studies contributes to a great degree to L2/FL learning, it has not so much to do with contrastive rhetoric. The latter, according to Connor (1996), did not enter this stage. To put it another way, contrastive rhetoricians never analyze or describe stages in L2/FL learners' writing acquisition, but they move ahead to examine the rhetorical structure across cultures and genres.

To sum up, the three approaches reviewed earlier stressed the structuralist tradition of linguistic study regarding phonology, syntax, morphology, and semantics to enhance L2/FL learning. Contrastive analysts focus on the negative impacts of the mother tongue on the L2, claiming that it is the source of all the difficulties encountered by learners while learning a language other than their L1. Error and interlanguage analysis go beyond the native language as the main cause of errors, considering other factors as the source of L2 learners' errors. What is important to mention here is that each approach builds on the weaknesses of the previous one. While making errors, for instance, was seen as a negative factor in CA, errors became a positive factor in EA and IA. Besides, while only the first language was considered as the main influence on learning L2, other factors such as culture, linguistic background, learning processes, and social factors were underscored in error and interlanguage analysis. These ideas and others are believed to have inspired the development of the field of CR.

2.3. Influential Theories behind Contrastive Rhetoric

In this section, more elaboration on how CR was developed together with three influential theories behind CR is presented. The three theories, namely linguistic relativity, rhetoric and text linguistics are thoroughly discussed.

2.3.1. Linguistic Relativity

The linguistic relativity theory, or the Sapir–Whorf hypothesis, was first introduced by the applied linguist Edward Sapir in 1950. Then, it was developed by his student Benjamin Lee Worf. This theory basically assumes that language structures influence the way we see the world. It holds three main ideas. First, it presupposes that languages can differ

significantly in the meanings of their words and syntactic constructions. Second, the theory holds that the way in which people perceive and conceptualize the world can be influenced by the semantics of a language. Lastly, having in mind that language can affect thinking; the theory holds that speakers of different languages think differently.

This theory has two versions, the weak version, and the strong version. The former states that thought and perception are influenced by language while the latter implies that thought and perception are controlled by language. We don't need to go further in explaining the history and the development of the theory, but what is important here is that this hypothesis is said to be the backbone of the contrastive rhetoric field. To put in other words, the weak version of this hypothesis has inspired Robert Kaplan's (1966) original idea. In this regard, according to Connor (1996), the Sapir-Whorf hypothesis of linguistic relativity is fundamental to contrastive rhetoric since it postulates that various languages have varying effects on perception and thought.

Although several researchers denied the influence of the linguistic relativity theory on Kaplan's ideas (Ying, 2000, 2001), and others went to accuse CR for essentializing writers by suggesting that someone thinks, speaks or writes in a certain way because of his/her linguistic background (Kubota, 1999, 2001), Connor (2002) asserted again that the Sapir-Whorf hypothesis has an impact on the CR theory. She added that the weak version of the hypothesis (i.e., that language influences thought), rather than the once dominant strong version (i.e., that language controls thought and perception), is regaining respectability in linguistics, psychology, and composition studies, resulting in a renewed interest in the study of cultural differences.

The Sapir-Whorf hypothesis proposed that language is not only a means through which people communicate. Further than communication, every language provides its speakers with a unique vision of the world and a different way of analyzing experiences (Shaheen, 1991 as cited in Hamadouche, 2005). Therefore, each cultural group has a distinct perception of the world, and each culture is unique in itself. Based on this, it appears that the weak version of the hypothesis has been the inspiration of Kaplan (1966) original work.

2.3.2. Rhetoric

Another theory that has a strong impact on contrastive rhetoric is the theory of rhetoric (Connor, 2002). The concept of rhetoric dates back to Plato and Aristotle's era. Aristotle, for

instance, defined rhetoric as the ability to see what is possibly persuasive in every given case (Rapp, 2010), while Dawson (1998) perceived rhetoric as the art and study of the use of language with persuasive effect in any given field; as such, rhetoric connotes the art of trickery, a way of masquerading qualities and obscuring information. Rhetoric is basically interested in evaluating the direct or indirect effects of communication on hearers or readers (Connor, 1966).

Kaplan 1966 seminal study and most of the earlier studies in CR were influenced mainly by the Aristotelian traditional view of rhetoric. Kaplan defined the concept of rhetoric as "the method of organizing syntactic units into larger patterns" (1967, p. 5). Through his definition, it appears that Kaplan holds a restricted view of rhetoric in the sense that he reduced the notion to the organization of finished expository texts. But rhetoric involves more than an organization; it embraces the interaction of the writer or speaker, the audience, and the world that leads to the production, over time, of language designed to communicate with and affect others. If we look thoroughly at Aristotle's definition, we will find that Aristotle defined it as a complex, dynamic process that involves five elements: invention, memory, arrangement, style, and delivery. Consequently, Kaplan's early definition of rhetoric was static. As a result, only one of Aristotle's five elements remained: arrangement, more specifically, paragraph arrangement. Kaplan confused style and arrangement, seeing style as arrangement, and disregarded memory, delivery, and—most importantly—invention. He also paid no attention to the compositional process, just concentrating on the end result.

2.3.3. Text Linguistics

During the 1970s and 1980s, there was a sense of dissatisfaction among linguists and applied linguists concerning the analysis of written texts. At that time, texts were examined using traditional morphological and syntactic tools. Although these tools were valuable in explaining texts, there was a need to develop new discourse tools. This need was reflected in the emergence of a new theory that came to be known as text linguistics (Connor, 1996).

Text linguistics is defined as the study of linguistic devices for cohesion, coherence, and discourse structures within the text (Enkvist, 1984). It is also concerned with the processes involved in the production and interpretation of texts. With the emergence of this theory, attention was rapidly shifted to the text as the basic unit for text analysis rather than the study of constituent elements (such as sentences) of language separately. In this case, according to Shaheen (1991), the focus on morphemes, words, or isolated sentences as study units for

language has been abandoned, and the claims for "text," an alternative above-the-sentence unit, as the right unit of inquiry were upheld.

Connor (2004) listed three major schools of thought that helped to shape contrastive text linguistics, namely the Prague School of text linguistics, systemic linguistics, and the new school of written discourse analysis. While the first school, i.e., the Prague school, was concerned with the study of "theme" and "rheme" in the text, systemic linguistics, developed by Halliday and Hassan (1976), was concerned with the study of "cohesion" and "coherence." The third school was interested in the teaching of scientific and English for academic purposes (EAP) writing rather than pure linguistic inquiry. The three schools have a strong impact on text linguistics, which in turn provides a great contribution to contrastive rhetoric.

2.4. Contrastive Genre Analysis and Language Learning

CR is the study of discourse organization in an academic and professional setting (Connor, 1996). CR tries to identify the difficulties encountered by L2/FL learners in their writing activities with the goal of providing solutions and making writing tasks easier. It is based on the notion that "differences lead to difficulties." Since its inception, however, most CR studies, including Kaplan's 1966 study, were criticized for examining texts taken from different incomparable genres, a fact that raises many questions about its methodology and leads CR to receive a number of criticisms (see section 2.1.3). With advances in research methods for studying writing in genre analysis, new insights were brought to text analysis, which in turn has had an impact on CR theory.

Connor et al. (2011), in their article entitled 'Intercultural Rhetoric,' summarize a number of genre analysis contributions to contrastive rhetoric. First, genre analysis provides contrastive rhetoric with adequate methods and techniques for text analysis. Move-step analysis (introduced and developed by Swales in 1980, 1990, and 2004) is one of the best methods widely used in CR studies. Second, genre analysis forces researchers in the field of CR to compare textual and contextual features of comparable genres across cultures. Traditional CR studies, including the Kaplan 1966 study, examined texts extracted from different genres, which made their findings invaluable. Third, the development of genre analysis theory led to new refinements and developments in IR. The latter began to include other academic genres (such as PhD theses, RAs, MDs, and book reviews) and professional genres (such as business letters, letters of recommendation, etc.). Swales (1990) introduced

the concept of discourse community as another genre analysis contribution to CR. This concept brings attention to audience, purposes, and context in CR studies. To put it in other words, questions such as who writes, to whom, when, where, and what for are taken into consideration in recent contrastive rhetoric studies. Finally, since genre analysis deals with the study of situated language in academic settings, it helps researchers in the field of CR by significantly improving their understanding of the use of language for academic and specific purposes across cultures. These contributions and others help not only to refine intercultural rhetoric theory but also provide applied linguists, researchers, and L2/FL teachers with a good understanding of how writing is learned and taught.

It is common among contrastive genre analysts that writing is culturally bound. In other words, the way we organise our discourses (academic discourses) is influenced by many factors, one of which is culture. Therefore, academic writers may use different structures, different strategies, and different lexico-grammatical features while accomplishing their academic works. This idea is elaborated by Leki (1991), who stated that:

It seems reasonable to assume that different cultures would orient their discourse in different ways. Even different discourse communities within a single language, such as those constituted by different academic disciplines, have different writing conventions: preferred length of sentences, choice of vocabulary, acceptability of using the first person, the extent of using passive voice, the degree to which writers are permitted to interpret, amount of metaphorical language accepted. If different discourse communities employ differing rhetorics ... then contrastive rhetoric studies might reveal the shape of those rhetorical skills and strategies in writers from different cultures. (p. 124)

If we agree with Leki (1991), the analysis and comparison between academic genres written by learners from different linguistic and cultural backgrounds would be invaluable for language teaching and learning. Studies in contrastive genre analysis revealed a number of cross-cultural aspects of second-language writing. Their findings were also valuable for second- and foreign language pedagogy. The contributions of contrastive genre analysis studies to the teaching of writing are highlighted by a number of researchers, including Connor (1996) and Leki (1991). First, making the differences and similarities between different academic works more explicit can help teachers of second and foreign language writing understand why second and foreign language learners write the way they do. Furthermore, comparative genre analysis studies provide information about reader

expectations in different languages and discourse communities, which can help teachers guide their students.

2.5. Culture and contrastive rhetoric

In the previous section (see section 2.1.2), it has been noted that the field of contrastive rhetoric has witnessed a plethora of criticisms. These criticisms were oriented towards its origins, methodology, and controversial conclusions. In this section we intend to highlight the place of culture in the field of contrastive rhetoric, focusing on how contrastive rhetoricians conceive culture and how they used it to interpret their studies results. For the purpose of this study, we do not provide a thorough discussion about culture, but we try to highlight it from the anthropological point of view since it is the view that has been adopted by traditional contrastive rhetoric. In addition to that, we intend to mention the new voices which invoke new conceptualization of culture. This section closes with a summary of cultural dimensions which considered very important in intercultural studies as well as for this study since it help the researcher to interpret the current study findings.

In his well-known study “*Cultural Thought Patterns in Intercultural Education*”, Kaplan (1966) asserted that logic and rhetoric are both interdependent and culture specific. As a result, different cultures impose different perspectives of the world, and different languages have different rhetorical patterns. In clarifying his ideas, Kaplan (1966) went to say that each language and culture has its own distinctive system for arranging paragraphs; therefore mastering a language's logical structure is an important element of learning it. Although Kaplan ideas were very important in teaching and learning writing, they brought a number of strong criticisms. One of these criticisms was about the narrow view of culture held by traditional contrastive rhetoric. In light of this, the question raised here is what is and what not culture is?

It is so easy to find a plethora of definitions for the concept of culture. By surfing the net, reading books and articles, we can find not only many but different views about culture. In this matter, Atkinson (2004) argues that culture in the English language is one of the most complicated concept .In their attempt to trace the definition of culture, Kroeber and Kluckhohn (1952, cited in Atkinson, 2004), for instance, culled more than 160 definitions of culture, and more than three hundred definitions were analyzed in 1954 by the same scholars (Merrouche, 2006). This complexity is due to many reasons. One of the important reasons is

that culture has been the central concern of many researchers, namely, linguists, ethnographers, scholars, anthropologists, educators and social scientists and; therefore, its definition depends on each researcher's field of interest and study.

In most of the studies in which culture is relevant, researchers presented their definitions of culture by stating the historical uses of the term .As Merrouche (2006) noted, the term culture originated in agriculture where the term was used to mean 'cultivate' the land, or to take care of animals, while biologists tend to associate the concept of culture with a grouping of bacteria. In its popular meaning; however, the term culture is used to mean all characteristics that make a group of people distinctive from another group. From the Anthropological point of view, culture was taken to mean different things. Considered as the first anthropologist who tried to define culture, Tylor (1871 as cited in Merrouche, 2006) argued that:

culture or civilization, taken in its wide ethnographic sense, is that complex whole which includes knowledge, belief, art, law, morals, custom, and any other capabilities and habits acquired by man as a member of society. (p. 16)

Even within the discipline of anthropology, the term culture remains controversial and still denotes and holds different meanings. Some refer to it as the invisible things that exist in human minds. The cognitive anthropologists have retained this point of view, emphasizing culture as knowledge that is "abstracted from actual behavior and practice" and is made up of "knowledge structures" (Roberts et al., 2000, p. 50).Cognitive anthropology focused on the "*learned* behaviour — that is behaviour based on cultural knowledge" (Roberts et al, 2000, p.50). This approach is most closely associated with Goodenough who stated:

A society's culture consists of whatever it is one has to know or believe in order to operate in a manner acceptable to its members. ... Culture is a not a material phenomenon; it does not consist of things, peoples, behaviour, ore motions. It is rather an organization of these things. It is the form of things that people have in their mind, their models for perceiving, reacting and otherwise interpreting them. (Goodenough, 1964, p.36)

According to Goodenough (1964), culture, as an insider's point of view, is a mental model in people's minds for perceiving things and people. He proposed the ideational-material dichotomy by referring to culture as the "pattern of life within a community—the regularly recurring activities and material and social arrangements." (p. 521). In contrast, sociologists believe that culture is the association of material and non material culture,

arguing that culture does not consist only of the physical objects people create but also of non-material culture, the ideas associated with these objects, such as their language, norms, customs, values, and beliefs. According to them, non-material culture provides meaning and must be inferred from material culture, and material culture helps define people's perceptions and behaviors, which are greatly influenced by non-material culture at the same time.

Although the anthropologists' points of view appear to be different, they have two main things in common. First, most anthropologists conceive of culture as a set of patterns and rules, whether visible or invisible, shared by a particular community and which serve to make a community distinctive from other communities. Second, anthropologists tend to see culture as a static, homogeneous construct.

In fact, the same view of culture was held by most researchers and scholars in traditional CR. This narrow view of culture; however, was criticized severely by a number of researchers in the field. Zamel (1997), for instance, disapproved of the tendency of contrastive rhetoric to conceive of culture as "discrete, discontinuous, and predictable" (p. 343). Similarly, Spack (1997) criticized the CR conception of culture as static and homogeneous, claiming that this simplistic view of culture contributes to exponential stereotyping of English language learners. Spack (1997) went on to say that in order to understand English learners' processes of learning how to write, CR researchers and tutors should see English learners as individuals, not members of cultural communities. Sharing the same point of view, Atkinson (2004) stated that CR studies held a narrow view of culture, claiming that traditional CR drew on an "underdeveloped," "received," "monolithic," and "deterministic" view of culture in order to explain differences in written texts.

In response to all these criticisms oriented towards the narrow view of culture held by traditional contrastive rhetoric, Atkinson (1999, 2004, 2011), in a series of articles, called for a new conceptualization of culture. Adopting Holliday's (1999) notion of small and large culture, Atkinson (2004) argued that the distinction between large culture (national culture or ethnic culture such as British, Japanese, and Arabic) and small culture (disciplinary culture, classroom culture, youth culture, student culture, etc.) is invaluable to contrastive rhetoric. However, Atkinson (2004) lamented traditional CR for adopting only the received culture (large culture), claiming that intercultural rhetoric studies needed to take into account the complex interaction of small and large cultures. The interactions between these cultural forces (small and large cultures) may contribute to the complexity of writers' cultural thoughts and

their realization in textual forms. Congruent with Atkinson (2004), Connor (2008) advocated for researchers, particularly contrastive rhetoricians, to take into consideration a new conceptualization of culture, claiming that the changing definitions of "culture" must be taken into consideration by major approaches, corpus-based text studies and qualitative contextual studies. These definitions range from the "received" definition of culture as static (referring to "big," ethnic cultures) to alternative definitions of culture as dynamic (often referring to small cultures, such as disciplinary, classroom, and local cultures).

Connor (2008) appeared to underscore the importance of small culture in intercultural studies without ignoring the importance of large culture in interpreting the intercultural studies results. Although both Connor and Atkinson ideas are valuable, the problem remains as how these small cultures interact, intermingle and influence the way writers organise their ideas and argument in different genres.

2.6. Dimensions of culture

2.6.1. Individualism and Collectivism.

Hofstede (1991) categorized the world population into two broad cultural categories: collectivism and individualism. Individualism vs. collectivism is a term that refers to how people value themselves and their group. In a collectivist society, individuals have a sense of belonging to a group, and it is the group that takes care of the individual. In contrast, in an individualistic society, individuals look after themselves and their immediate family. One difference between collectivism and individualism is the impact of family on the individual. In collectivist culture, the group is the source of identity, and children are brought up as members of the "we" group, to which they must be loyal and on which they depend for protection against the hardships of life. Individualistic cultures, in contrast to collectivist cultures, prioritize the interests of the individual over the interests of the group. Family is the nuclear unit in individualistic culture where children are raised to think of themselves as "I," which is the source of their identity. Another difference between collectivist and individualistic cultures is the type of social tie. In collectivist culture, there are strong ties between individuals and the group to the extent that there is a very limited division between personal time and life and work time, as well as living within a group. The relationship between people is more important than the task in collectivist culture. In contrast to collectivist cultures, individualistic cultures have a tenuous connection between the individual

and the group. People feel free to express their views and opinions, and there is no interference from extended families in their behaviors. The same belief was held by Feghali (1997, cited in Hamadouche, 2005), who argued that social life in the Arab region is characterized by "situation-centeredness," in which loyalty to one's extended family and larger "in-group" takes precedence as opposed to "U.S. Americans' self-reliant and "individual-centered" approach to life" (p. 352).

According to Hall and Hall (1990), individualistic cultures have low context (see section 2.6.2) and communication is more explicit and linear. They consider the USA and Great Britain to be among the individualistic cultures, while Arab countries and most of the Asian countries are considered to be among the collectivist cultures. Linguistically speaking, it is believed that the individualism and collectivism dimensions have an impact on students' writing. This idea, according to Hall and Hall (1990), can be observed in the sequencing of ideas and elements, citing sources, putting one's ideas forward strongly and arguing for them, and the whole idea of putting the author in the center. One of the examples of the influence of collectivism on student writing was provided by Smith (2005), who argued that 'solidarity' is demonstrated in learners' writings through the use of pronouns such as "we" and "us" to show their group orientation and unity with their classmates in particular and members of society in general.

2.6.2. High context and low context.

The degree of context (high or low) was used by Hall (1983) to differentiate between cultures. He described the communication systems of cultures as "high context" and "low context." According to him, "high context" or "low context" "refers to the amount of information that is in a given communication as the function of the context in which it occurs" (p. 210). This indicates that in high- context communication, most of the meaning is in the context and very little is in the message transmitted. In contrast to low context communication, the meaning is explicitly coded in the message. Based on his study, Usunier (1993) stated that Arabs and Japanese are at the top of the high context scale, while Great Britain and the USA are somewhere in the middle, followed by North Americans. High-context messages, according to Hall (1983) reflect homogeneity, close and intimate social relations, collectivism and a high degree of dependency. Communicators in high-context cultures, therefore, assume a lot of shared knowledge with their audience and do not see the need to make their messages explicitly coded.

2.6.3. Reader vs. writer's responsibility.

Another cultural dimension that should be taken into consideration in CR studies is reader versus writer responsibility. It is widely believed that this dimension leads to different rhetorical styles in different societies, which has to do with the way in which different cultures attach a varying degree of responsibility to the writer and the reader in the communication act. This notion was introduced by Hinds in 1987 and is considered one of the most significant contributions to CR and intercultural studies. This notion is based on the fact that some languages are reader-responsible, while others are writer-responsible. In this matter, Hinds (1987) stated that "there are different expectations with regard to the degree of involvement of the reader and that this degree of involvement will depend on the language of the reader." (p. 141). Hinds (1987) went on to say that some languages, such as English, are writer-responsible while others, such as Japanese and Chinese, are reader responsible. Native speakers of English, according to Hinds, are expected to produce a well-organized and clear discourse and to use precise expression; poetry and proverbial sayings are not accepted as means for expressing the truth. Any violation of these conventions would lead to miscommunication. The classification of the reader and the writer as responsible is discussed in terms of coherence and unity. English readers accept and need landmarks along the road, according to Hinds (1987), and transitional phrases are crucial. It is the writer's responsibility to provide suitable transitional clauses so that the reader can follow the logic thread that runs through the composition.

Contrary to writer-responsible languages, transition statements in reader-responsible languages are subtle and expected to be supplied by the reader, whose role is more active than that of the English reader reading English texts. Additionally, English native readers, according to Hinds (1987), conventionally use either the inductive or deductive organizational pattern, respectively. To make the idea clear, if the English-native readers do not find the statement in the initial position (deductively), they expect to find it in the final position, i.e., the text follows the inductive organizational pattern. In contrast, reader-responsible languages follow a different organizational pattern whereby the statement is buried somewhere in the text. This may suggest that non-native English writers may not feel the need to use their conclusions explicitly, which leads to less use of conclusers in non-native English texts.

Conclusion

CR was initially developed as a theory to address the writing issues faced by L2/FL learners, but it has since grown to become one of the main fields of study in L2 writing studies. As interdisciplinary field of study, the relationship between CR and genre analysis is highly valued as the later provided CR with CR vital methodologies and procedures for evaluating discourse. Although there are disagreements on the relevance of the findings of CR to language teaching and learning, the comparison and contrast of discourse written by authors from various linguistic and cultural backgrounds, which is the basic idea behind CR, is rich in the field.



Chapter Three:

Genre and Metadiscourse Studies on

Academic writing Introductions

Introduction

3.1. Academic writings

3.2. Studies on research article introductions

3.3. Studies on PhD Thesis introductions

3.4. Studies on Master Dissertation Introductions

3.5. Algerian studies on the rhetorical structure

3.6. Key findings and critical review

Conclusion



Introduction

RAs, PhD theses, and MDs contribute to scholarship through publicizing research findings, boosting scientific communication, and sharing knowledge. On the other hand, writing these academic genres necessitates substantial knowledge, effort, and command of language abilities, particularly writing. One of the most important causes for the rise in the number of analytical research on the rhetorical structure and metadiscourse use in recent decades has been to assist students in writing academic papers (Hyland, 2005; Swales, 2004). The interest in the rhetorical structure (hereafter, RS) of academic genres began with the work of Swales (1981) who analysed several RA introductions, aiming to find how writers rhetorically structure their RA introductions. Based on his study, Swales (1981, 1990, and 2004) provided the CARS model that reflects how a RA introduction is structured and organised. Following Swales (1990), several analytical studies on the RS of academic genres were carried out. These include studies on the rhetorical organization of RAs (Aggoun, 2018, 2020; Ahmed, 1997; Al-Quahtani, 2006; Anthony, 1999; Fredrickson & Swales, 1994; Hirano, 2009; Samraj, 2002), PhD thesis introductions (Bunton, 1998, 2002; Kawase, 2018; Olivares, Salom&Monreal, 2009; Ono, 2017), and MDs (Amara, 2009; Choe& Hwang, 2014; Jin, 2016; Samraj, 2002). For more elaboration on these studies, section (3.2.1) is devoted to previous studies on the RS of RAs, section (3.3.1) for previous studies on the RS of PhD theses, and section (3.4.1) for previous studies on the RS of MDs.

Concerning Metadiscourse, analytical metadiscourse studies were motivated and brought to light by the works of several leading figures in the field of metadiscourse theory. Researchers such as Williams (1981), Vande de Kopple (1983, 2002, 2012), Crismore (1983, 1993), Mauranen (1993), Adel (2006), Hyland (1998, 1999, 2004, 2005, 2008, 2009, 2010, 2017) , Hyland and Zou (2020) and Hyland and Jiang (2021) attempted to offer not only good insights on metadiscourse knowledge but also different analytical frameworks for identifying and analysing metadiscourse devices (as seen in chapter 1, section 1.3.4). Drawing on these insights, cross-cultural and cross-disciplinary studies have flourished in the last few decades. Researchers in the field of metadiscourse have investigated the use of metadiscourse in different genres. These include studies on metadiscourse in RAs (Cao & Hu, 2014; Hu & Cao, 2011, 2015; Hyland, 1998, 2005, 2017), PhD theses (Al-Shahrani, 2015; Hyland, 2004; Kawase, 2015), and MDs (Hyland, 2004; Ozdemir & Longo, 2014; Mestre-Mestre, 2017; Akbas & Hardman, 2018). These researchers and many others have offered significant

insights into the ways writers structure their academic works. A thorough description of these studies is presented in sections 3.2.2, 3.3.2, and 3.4.2.

In the following section, a brief review of academic writings, their types, and their importance in academic communities are discussed. The remaining sections of this chapter are devoted to cross-cultural and multidisciplinary research on the RS of RAs, PhD theses, and MDs, with a particular focus on the introductory chapter of each genre. Previous research on the use of metadiscourse in academic works is also highlighted, with an emphasis on studies related to academic work introductions. This chapter closes with key findings and a critical review of these studies. Importantly, reviewing the previous studies helps us highlight how writers from various languages and cultural backgrounds construct their arguments and use metadiscourse in their academic work introductions. Moreover, it helps us discuss and interpret the findings of this study.

3.1. Academic writings

In the academic setting, academics and university students mostly write texts intended either for publication, such as journal articles, scientific reports, books, grant proposals, and chapters in edited collections, or as a requirement to obtain their university degrees such as RAs, PhD theses, MDs, grant proposals, textbooks, essays, and many others. In this study, we define academic writing as any piece of writing created to describe specific research in a particular subject and intended for publication in national or international journals (such as RAs), as well as any piece of writing prepared to obtain a particular academic degree (PhD thesis and MD). What follows is a brief review of these academic writings.

3.1.1. Research Article

A research article is a piece of writing authored by academics, university students, and professionals from many disciplines. It is an essential work in academic communities because it is a means of disseminating knowledge. Its role also lies in the fact that writing and publishing a RA may boost the writers' reputation, prominence, and peer acceptance, all of which can help writers develop their academic career (Hyland, 2016). A RA can also be a key factor for doctoral students to be able to defend their PhD theses. For example, PhD students in the Algerian universities are required to write and publish a RA in either an international or national journal as an essential and necessary part of their doctoral thesis defense.. Accordingly, a RA is the primary means of knowledge transmission in academic societies and

a key artifact in the establishment of a profession's legitimacy and the reputation of its practitioners.(Hyland, 1998). Among other academic research papers, a RA is considered as a genre as it can be identified 'by a recognizable communicative purpose and by the presence of characteristic features with standardized form, function, and presentation that are part of its general conventions' (Thomas &Hawes, 1994, p. 129).

The most common types of publications in professional journals are experimental RAs, review articles, and theoretical articles. Writers of the experimental RAs describe one or more new empirical studies they have conducted. They provide a research question, explain why it is interesting, examine existing research, discuss their methodology and findings, and draw conclusions. Experimental RAs delineate research results obtained from direct observation or different sorts of experimental studies, including the controlled scientific experiments, questionnaire surveys, case studies, and studies that use computer-generated models to explain or predict phenomena observed in the laboratory or nature. Experimental RAs are usually evidence-based rather than theory-based, and they can usually be replicated in subsequent investigations (Weissberg and Buker, 1990). With regard to their structure, they usually include an introduction, a methodology section that tells how the experiment was set up and conducted, a result or discussion section, and usually a conclusion section. This structure comes to be known as the IMRAD format (Swales, 2004).

Review articles briefly synthesize and evaluate previously published research on a particular topic and, in most cases, propose new ways of organizing or explaining the findings. Review articles, according to Giannoni (2009), are written to defend 'what is right or wrong, certain or uncertain, desirable or undesirable in their (researchers) field' (p.17). The writers' aim in the review article is to keep the community members up-to-date with recent research (Hyland, 2016). Concerning its structure, Cargill and O'Connor (2013) stated that the abstract, introduction, body section, and conclusion (AIBC) structure is the most followed format in the review articles. In this type of articles, the introduction and conclusion are basic elements while the body section is divided into subheadings that serve as an effective "roadmap" for the research paper. When a review article is primarily concerned with proposing a new theory, it is referred to as a theoretical article. The latter, most of the time examines a particular topic through an interdisciplinary lens and rearranges concepts in novel ways. It is similar to the literature review in that it lacks empirical evidence and focuses largely on past research. Theoretical articles, on the other hand, recast ideas and topics in new ways. While literature reviews draw findings from past research, theoretical articles present a

novel way of approaching a subject from a different angle and draw upon existing research to create a new theory or explore theories in new ways.

As there are different types of RAs, each category has its structure and linguistic features (Crookes, 1986; Swales, 2004). Based on this, the current study relies mainly on experimental RAs for the analysis of the rhetorical structure and metadiscourse devices in RA introduction authored by Algerian EFL learners and English native writers.

3.1.2. PhD Thesis

The PhD thesis is the highest form of student writing being assessed in the sphere of Higher Education (Thompson, 2012). For many graduate students, it has been viewed as the most difficult assignment. (Dong, 1998). The terms ‘thesis’ and ‘dissertation’ are used in different ways in different parts of the world. In British universities, the term ‘dissertation’ is used to mean the academic work submitted by master students while ‘thesis’ is used to refer to academic works written by doctoral students. In the US, the use of these terms is reversed, while in Australia both terms are used interchangeably (Paltridge, 2002).

PhD theses are not often written only in a certain format specified in the universities writing regulations but also various formats. According to Dong (1998), a PhD thesis can be classified into three basic thesis formats. The first format is the traditional introduction-literature review-methodology-results-discussion format, while the second is the article-compilation format, which is essentially an anthology of individual publishable research papers with their Introduction, Methodology, Results, and Discussion sections. The last format begins with an *Introduction* and closes with a chapter entitled *Conclusion*, with chapters in between entitled according to the writer's investigation topics and sub-topics. Later on, Thomson (1999) characterized the PhD thesis into four main types: simple traditional, complex traditional, topic-based, and a compilation of RAs. In defining each type, Paltridge and Starfield (2020) argued that the simple traditional thesis reports on a single study and has a typical macro-structure of *introduction*, *review of the literature*, *materials and methods*, *results discussion* and *conclusion* (see Table 3.1). The simple traditional type is the most common thesis type in the fields of applied linguistics and education. The second type of theses, complex traditional, reports on more than one study. It typically begins with *introduction* and *review of the literature* sections, as with the simple traditional thesis. It might then have a general methods section followed by a series of sections that report on individual studies. The thesis concludes with a general overall

conclusion section. The third type, a topic-based thesis, begins with an introductory chapter followed by a series of chapters with titles based on sub-topics of the topic under investigation. The thesis then ends with a *conclusion* chapter. The last type of thesis is the compilation of RAs (or thesis by Publication, Paltridge, & Starfield, 2020). As its name suggests, this type starts with an introduction, a set of RAs, and closes with a conclusion (for more elaboration on the overall structure of these see Dong, 1998; Paltridge, 2020; Thompson 1999).

Table 3.1: A summary of Thesis Types and their Typical Organizational Structures (Paltridge and Starfield, 2020, p. 97-98).

Traditional: simple	Topic-based
Introduction	Introduction
Literature review	Topic 1
Materials and methods	Topic 2
Results	Topic 3, etc.
Discussion	Conclusions
Conclusions	
Traditional: complex	Thesis by publication
Introduction	Background to the study
Background to the study and review of the literature (Background theory)	Literature review
(General methods)	Methodology
Study 1	Research article 1
Introduction	Literature review
Methods	Method
Results	Results
Discussion and conclusions	Discussion
Study 2	Conclusions
Introduction	Research article 2
Methods	Literature review
Results	Method
Discussion and conclusions	Results
Study 3 etc	Discussion
Introduction	Conclusions
Methods	Research article 3 etc
Results	Literature review
Discussion and conclusions	Method
Discussion	Results
Conclusions	Discussion
	Conclusions
	Discussion
	Conclusions

3.1.3 Master's Dissertation

A master's dissertation is an academic research paper written by a university student for an academic degree. In other words, a MD is produced to persuade the graduate committee (the scientific council or the graduate committee) that the dissertation writer has achieved an independent study and got enough knowledge and research skills about his specialized field. A completed dissertation that fits the discourse community requirements also demonstrates that its author is qualified for a degree.

Unlike the PhD thesis, Studies on MDs as a whole or its subsections such as the introduction section tend to be rare. Samraj (2008) stated that researchers have not focused as much on master's theses as they have on PhD dissertations though the amount of studies on academic writing genres has recently increased. This piece of writing is a neglected genre in discourse and genre analysis due to many reasons (Monreal, 2016; Samraj, 2008). First, the scarcity of research on this academic genre is attributed, according to Swales (2004), to the length of the text. Second, genre studies on MDs were motivated only by the need to create relevant English for academic purposes material for master students who will not usually be involved in the writing of RAs. These reasons and others made the MD a less investigated genre in genre analysis studies. The following section presents several previous studies on MDs with more emphasis on its introductory chapter.

There are several factors that make The PhD thesis, MD, and RA to be different genres. First, these academic works have different communicative purposes. While the RA is meant to disseminate new knowledge in the literature to be reviewed by other researchers in a particular field, the MD is written to convince the jury members that the writer of this academic work has achieved a certain degree in English learning. Second, each academic work belongs to a particular discourse community and is shaped by the conventions and expectations of that discourse community. The RA, for instance, is shaped by the conventions and expectations of a particular discourse community (international or national journals) while the PhD theses and MDs are written following particular local discourse communities. The PhD thesis board of examiners usually includes more than four expert members while in the MD board of examiners only three members take part in the MD defense and they are usually teachers of the writer.

Obviously, there are many possible differences between these academic writings in terms of length, audience, and academic level, which prevent a direct comparison of their

written work, and this, should be taken into consideration while discussing and presenting the results. However, there are several considerable similarities between these academic writings, particularly between the introduction sections of these genres. First, in his well-cited books, Swales (2004) stated that in the research world genres form intertextual relationships with other genres. To elaborate his argument, Swales argued that a presentation (as a specific genre) can lead to a RA. Similarly, a RA can lead to presentation. In addition, RAs, according to Swales (2004), can both precede and follow theses, and further, RAs can be combined to form a thesis (p. 22). The process of transforming one genre into another genre came to be known as ‘recontextualization’ (Swales, 2004). The latter was defined as the ‘extrication of some part or aspect from a text or discourse, or from a genre of texts or discourses, and the fitting of this part or aspect into another context [...] and its use and environment (Swales, 1998, p. 145). Accordingly, a close relationship between the RA, PhD thesis, and MD does exist since each genre can be recontextualized in another genre. Second, all these academic writings have an obligatory part that introduces the topic under investigation known as the introduction section. So, the introduction sections in these academic papers are similar. Several previous studies (Bunton, 1998, 2002; Feak, Swales, & Irwin, 2011; Paltridge & Starfield, 2007; Samraj, 2008; Swales, 2004) have indicated that the introductions of PhD theses and RAs are similar in their rhetorical features. In her study of RAs and PhD thesis introductions, Samraj (2008) stated that Studies of introductions in RAs and PhD theses have shown that justification of the study being described is a key rhetorical function of introductions. In the same vein, Swales (2004) argued that the overall structure of the PhD thesis introduction ‘in broad outline is comparable to that of research articles’ (p. 117). Based on this, we believe that the introduction section in these genres is comparable.

3.1.4. Introduction in Academic writings

In academic writings such as RAs, PhD theses, and MDs, there is always an introductory chapter headed ‘Introduction’ (Bunton, 2002; Paltridge & Starfield, 2020; Swales, 2004). According to Bhatia (1997), the introductory part in academic works serves the exclusive and dominant purpose of outlining a written or spoken academic event. In other words, it introduces the subsequent texts by pointing out connections between what has happened before in the given or related fields of study. It is valuable in conveying the importance and worth of the study that will be presented. Furthermore, the introduction must attract readers to the planned research and explain its quality to earn a degree, and this characteristic is common in RAs, conference papers, dissertations, and other academic

publications. It is one of the crucial genres since it demonstrates how the study that will be discussed in the academic article relates to earlier research in the area. Additionally, it establishes the readers' expectations and can facilitate their navigation of the paragraphs that follow (Bhatia, 1993). Paltridge and Starfield (2020) argued that the thesis introduction is of strategic importance as its key role is to create a research space for the writer. They assert that writers state the importance or significance of the relevant study in the introductory part and start to outline the main points of the thesis. In RAs, the introduction is essential in positioning the writer as having something to say that is worth writing in the competitive academic environment to get papers published in respected international journals. In a thesis or dissertation, writers, who seek to join a community of scholars, need to establish in the introduction how their research relates to and builds upon previous research in a given field (Paltridge & Starfield, 2020). The valuable roles of the introductions in academic writings together with the difficulties encountered by non-native learners of English in writing the academic writing introductions led us to investigate this sub-genre in RAs, PhD theses, and MDs. The following section summarizes the main and well cited studies on the RS of introduction in RAs.

3.2. Studies on Research Article Introductions

3.2.1. Studies on the Rhetorical Structure of Research Article Introductions

One of the earliest and prominent figures in genre analysis studies was Swales (1981, 1990, and 2004). Swales (1981) analysed forty-eight RA introductions taken from different disciplines. His study was conducted with two goals in mind. First, he attempted to describe the communicative aims of the RA introduction by categorizing the discourse units according to rhetorical moves. Second, he hoped that by conducting this research, he would be able to assist non-native ESP learners in reading, writing, and publishing academic research publications. Swales (1981) discovered a pattern in all of the RA introductions from various fields after conducting the research. According to him, writers of RA introductions demonstrate a common pattern of four rhetorical acts in this form. They begin by attempting to persuade the audience that their research is essential. Second, they go over previous relevant research for two reasons: to demonstrate the research existing capacity and set the stage for the upcoming study in the larger context. Third, writers indicate where the study should go into the incomplete research discussed by pointing out a gap, posing a question, or demonstrating the need for a new perspective. In the last act, writers present the solution to

the problem. Based on this, swales (1981) presented his first four moves model for analysing RA introductions. Table 3.2 demonstrates the first introduced model for analysing moves and steps in RA introductions.

Table 3.2:*A Move-Step Model for RA Introductions developed by Swales (1981)*

Move 1	Establishing the territory
Step 1	Showing Centrality
	a. by topic-prominence
	b. by interest
	c. by importance
	d. by standard-procedure
Step 2	Stating Key Characteristics
Step 3	Stating Current Knowledge
Move 2	Summarising previous research
Move 3	Establishing a niche
Step 1	Indicating a Gap
Step 2	Question-Raising
Step 3	Hypothesis-Raising
Step 4	Questioning Validity
Step 5	Airing a Problem
Move 4	Occupying the niche
Step 1	Describing the Present Research
Step 2	Outlining Purpose
Step 3	Announcing Principal Findings
Step 4	Extending a Finding
Step 5	Indicating RA Structure

Inspired by swales (1981), Dudley-Evans (1986) examined seven MDs in the field of Plant Biology. Using Swales' (1981) model, which later used to develop the CARS model, Dudley-Evans explored the rhetorical structure of the introduction sections of MDs. The study revealed a number of interesting findings. First, in analyzing the corpus, Dudley–Evans stated that MD introductions are longer than RA introductions and the moves and steps are characterized by the cyclical organisation. Based on this, he thought that writers of MD introductions require a large space to situate their research. Accordingly, he extended the model introduced by Swales (1981) into a six-move model (Table 3.3). The first move in Swales' (1981) model was extended to include three moves in Dudley–Evans' (1983) model while move 2(*Summarising previous research*) was renamed as *Defining the Scope of the Topic*. Move 5 in Dudley-Evans model is similar to move 3 in Swales' (1981) model while move 6 substituted move 4.

Table 3.3: A Six-Move Model Developed by Dudley-Evans (1981, cited in Bunton, 2002, p. 60)

Move 1	Introducing the field
Move 2	Introducing the general topic (within the field)
Move 3	Introducing the particular topic (within the general topic)
Move 4	Defining the scope of the particular topic by: (i)Introducing research parameters (i)Summarizing previous research
Move 5	Preparing for present research by: (i)Indicating a gap in previous research. (ii)Indicating a possible extension of previous research
Move 6	Introducing present research by: (i) Stating the aim of the research or (ii)Describing briefly the work carried out (iii) Justifying the research

In his subsequent study, Swales (1990) elaborated on some aspects of the previous model. One of these aspects was the ecological analogy. In this matter, Swales (1990) claimed that the ecological analogy captures several characteristics of the RA introductions: the need to re-establish in the eyes of the discourse community the significance of the research field itself; the need to “situate” the actual research in terms of that significance; and the need to show how this niche in the wider ecosystem will be occupied and defended (p. 142). This change cleared the ground for the development of the CARS model, a brand-new taxonomy. In fact, he altered his new design once more in 2004, adding new improvements. Table (3.4) below presents the 1990 CARS model; For more details on this model see chapter four, **section 4.3.1.1**.

Table 3.4: *Swales' (1990) CARS Model for Research Article Introductions.*

Move 1	Establishing a Territory
Step-1	Claiming centrality and /or
Step-2	Making topic generalization and /or
Step-3	Reviewing items of previous research
Move 2	Establishing a Niche
Step 1A	Counter-claiming or
Step 1B	Indicating a gap or
Step 1C	Question-raising or
Step 1D	Continuing a tradition
Move 3	Occupying the Niche
Step 1A	Outlining purposes or
Step 1B	Announcing present research

Step 2	Announcing principal findings
Step 3	Indicating RA (Research Article) structure

Following Swales (1990), Anthony (1999) carried out a study in which he analyzed RA introductions in the software engineering discipline. His initial aim was to investigate whether the CARS model applied to twelve RAs that received awards in software engineering. Anthony (1999) concluded that the CARS model did not account for some important features of the introduction since several rhetorical strategies were missing in Swales' (1990) model, including *evaluation of the research presented*, *definitions of terms*, and *exemplifications of difficult concepts*. These rhetorical strategies, according to Anthony (1990), are essential in some disciplines as an alternative to 'preach the cannibals' (Anthony, 1999). The term 'cannibals' was used to refer to the interdisciplinary audience who are not necessarily up to date in this rapidly developing field (Dudley-Evans, 2000), but they acquire the results into their subject frameworks (Anthony, 1999). Therefore, Anthony (1999) refined the CARS model by adding some essential and necessary rhetorical strategies. In this case, he added the 'evaluation of research' step to move three. Apart from this, Anthony's model is somehow similar to the Swales' model except for the flexibility of the element added into selected steps (e.g. 2-1A, 2-1B, 2-1C, and 3-1A) by adding the word 'and'. This indicates that more than one rhetorical strategy could be used at a particular place; it may raise disagreement yet it was necessary to categorize it separately in software engineering (Anthony, 1999).

Table 3.5: *The Modified CARS Model (Anthony, 1999)*

Move 1	Establishing centrality
Step 1	Claiming centrality, and/or
Step 2	Making topic generalization, and/or
Step 3	Reviewing topic research;
Move 2	Establishing a niche
Step1a	Counter claiming, and/or
Step 1b	Indicating a gap, and/or Step 1C: Question arising, and/or
Step 1d	Continuing tradition;
Move 3	Occupying the niche
Step1a	Outlining purpose, and/or
Step 1b	Announcing present research,
Step 1	Announcing principle findings
Step 2	Evaluation of research
Step 3	Indicating RA structure

Genre analysis studies in other languages rather than English have also their share in literature. Fredrickson and Swales (1994), for instance, analyzed 26 RA introductions written by Swedish scholars and published in an academic journal on the modern Swedish language. After the analysis, they found that only 54% (fourteen RA introductions) of the examined introductions have all the three moves predicted by the CARS model, while only five introductions followed the 1-2-3 move pattern introduced in the 1990 CARS model. Surprisingly, the second move (indicating a gap) was missing in most of the examined introductions and substituted by a ‘story’ move in other introductions. Forty percent of RAs have one or more missing moves. This variation in the RS, according to Fredrickson and Swales (1994), is attributed to either the influence of the local discourse community or the lack of competition in creating a research space in a small discourse community. They went on to explain that in small discourse communities where there seems to be no competition for creating a research space, Swedish scholars use ‘telling a story’ as a rhetorical strategy to compete for readership. For Swedish writers, according to Fredrickson and Swales (1994), telling a story is a good strategy for making their RAs attractive to readers.

Correspondingly, Ahmed (1997) analyzed twenty RA introductions written in Malay by Malaysian writers. His corpus was collected from local journals in the fields of biology, chemistry, engineering, and agriculture. Using Swales’ (1990) model, Ahmed found that most (60 percent) of the examined RA introductions have the rhetorical pattern commonly found in English RAs. Besides, only 35 percent of the introductions demonstrated the lack of move two (indicating a gap). Interestingly, in the remaining introductions, which included move two, writers did not criticize or evaluate, but they only described and summarized previous research. Furthermore, Malay RA writers were found to be, to some extent, cautious and hesitant in delivering move 3 (occupying a niche) in their RA introductions. This could be seen in the lack of other rhetorical strategies that assist the realization of move 3. Malay writers tended to briefly describe the purpose of the study as the sole rhetorical step that realize move 3, avoiding giving readers any other textual indications about what to expect. Similar to Fredrickson and Swales’ (1994) claims, Ahmed attributed these findings to the influence of the local discourse community. He claims that Malay RA authors are not under any pressure to compete for research space, especially when they are writing in Malay for a small local readership. Although Ahmed’s (1997) study revealed a number of good insights on how non-native English writers rhetorically organise their discourse and how the social factors such as the discourse community affect the way RA authors write their research, he

did not control other variables that may affect his study findings. For example, his corpus was collected from different sources (seminars and journals), different disciplines (agriculture, biology, applied science and engineering) and different types of research (experimental, case study..., etc).

Swales' CARS model was found to be applicable to RA introductions written by non-native speakers of English. This finding was revealed by a study carried out by Jogthong (2001). Jogthong examined forty RA introductions in the field of education and science written by Thai academic writers. The findings revealed that the move structures of the RA introductions were compatible with the CARS model, but some particular moves and steps in the introductions were not relatively consistent with the model. In other words, Thai writers showed a tendency to avoid criticizing and evaluating others' academic works. Instead, they used different strategies in establishing a niche, such as pinpointing prior difficulties or problems. Another finding revealed by this study is that Thai writers preferred to indicate the value and implications of their research studies when announcing their current research. In addition to that, Jogthong's (2001) study revealed that Thai writers used less linguistic features such as reporting verbs and passive voice compared to English native writers.

Cross-cultural comparisons have also been made in genre analysis of RA introductions. Hirano (2009) examined twenty RA introductions in applied linguistics. His corpus included ten RA introductions written in Portuguese by Brazilian writers and ten RA introductions in English. Using Swales' (1990) model, Hirano examined the RS and the rhetorical strategies followed by writers in their RA introductions. The findings revealed that RA introductions written in English followed the RS proposed by the CARS model while Portuguese RA introductions did not. Besides, step 1A in move two, *indicating a gap*, was found to be absent in 70 percent of the RA introductions written in Portuguese. Based on this, Hirano (2009) disputed the claims made by earlier researchers (Ahmed, 1997; Fredrickson and Swales, 1994), who believed that in smaller discourse communities, which are more typical of developing countries, authors are under less pressure to publish and therefore do not need to compete for research space. Instead, Hirano (2009) attributed this rhetorical variation to cross-linguistic and cross-cultural factors. The lack of move two, according to her, might go back to the fact that Brazilian writers tend to favor solidarity, avoiding conflict with the local discourse community. In other words, Brazilian writers feel uncomfortable identifying gaps and shortcomings in previous research.

Similarly, Al-Qahtani (2006) examined fifteen RA introductions in the field of educational psychology. His corpus comprised three groups of texts. The first group included five RA introductions written by Arab scholars who had earned their graduate degrees in the Arab world, the second group consisted of five RA introductions written by Arab writers who had earned their graduate degrees in the USA, and the third group included five RA introductions written by English native speakers (USA). Using the CARS Model (Swales, 1990), Al-Qahtani (2006) explored the RS of RA introductions, aiming to find out whether the educational background, as the main variable, has an impact on the way writers write their RA introductions. His study followed a three-way comparison as demonstrated below:

Arab-world-educated Arabs group	↔	US-educated Arabs group
US-NESs group	↔	US-educated Arabs group.
US-NESs group.	↔	the Arab-world-educated Arabs group.

Interestingly, His study revealed a number of interesting findings in terms of both the macrostructure and the move-step structure. First, the RA introductions, which were written by Arabic writers (Arab-world-educated Arabs group), partially deviated from the CARS model; they included a number of problematic statements that could not be assigned to any of the CARS model moves. These statements, according to Al Qahtani, were of a specific-cultural-religious nature bound with the Arabs' background and totally irrelevant from a Western point of view. These include Islamic opening statements, Holy Qur'an and the prophet (peace be upon him) sayings, and acknowledgments and prayers for the helpers at the end of the introduction (Al-Qahtani, 2006: 78-9). Second, RA introductions written by the Arab writers educated in the US exhibited a deviation from the CARS model: This group of writers tended to skip some moves while giving more space to others. Third, the American writers (NE) followed the move structure proposed by the CARS model. The results also showed that the performance of Arab scholars trained in the US fell somewhere between that of those educated in the Arab world and that of native English speakers. This result was attributable to their Arabic background and schooling in an English-speaking nation. According to Al Qahtani (2006), educational background has a significant impact on the way academic writers construct their papers. In light of this, he claimed that Arabs who received their education in the US were transitioning from their rhetorical style to that of the English language. As opposed to Arabs living in an Arabic-speaking nation where English is only taught as a second or foreign language, they were living in a local social setting.

For interdisciplinary genre studies, Samraj (2002) examined twelve RA introductions from two related fields, Wildlife Behavior (WB) and Conservation Biology (CB). Using Swales' (1990) model, her study findings revealed some disciplinary variation in the generic structure of the RA introductions. First, move 2 was missing in most of the RA introductions of CB. In some cases, writers in this discipline preferred to realise move 2 by indicating a problem in the real world instead of indicating a gap in the research world. Moreover, CB writers fulfilled a greater promotional function than did those of the WB introductions. This promotion was achieved through the use of steps, such as *centrality claims*. With regard to the applicability of the CARS model, the results demonstrated that a greater degree of embedding was needed in the CARS model to account for the generic structures found in the introductions examined. These findings led Samraj (2002) to add some modifications to Swales' (1990) model. In the CARS model, the '*reference to previous literature*' step exists only in the first move; However, Samraj claimed that this step could be found in both move 1 (M1) and move 2 (M2). She went on to say that this step can play a prominent role in M2 when it is used to support gaps in previous research. Instead of a cyclical pattern of a literature review followed by a gap, Samraj suggested that the literature review can be subsumed under the rhetorical function of the gap being created. Additionally, the discussion of previous research can be subordinated to the function of providing a topic generalization.

The *review of literature* in introductions is a step that can also be subordinated to another step in a different move, e.g., the specification of the goal of the study in move 3 (M3). In addition, a greater degree of embedding in the rhetorical structure of the examined RA introductions compared with the CARS model was revealed. Samraj (2002) suggested that the function of the *discussion of previous research* is not only to establish the territory but it could also be used to realize the steps in other moves. Consequently, according to Samraj (2002), the *discussion of previous research* should not be a part of any particular move in the model. Instead, it should be a *freestanding sub-step* that can be employed in the realization of any step in the introduction. A discussion of previous research (*a freestanding sub-step*) accounts for the presence of reference to previous research throughout an introduction as well as the variety of rhetorical functions that is accomplished by a discussion of previous research. This has implications for the constituent structure of Move 1. Samraj (2002) asserted that the first move (M1) consists of two steps: claiming centrality and providing background information. The latter frequently starts with comments that were previously classified as subject generalizations and has a broad to specific structure. The weight given to

considerations of earlier material in Step 2 of M1 varies between RA introductions. Swales' (1990) model can be expanded with additional possibilities suggested by Samraj's (2002) study. The steps of *centrality claims* and *gap specification*, for instance, can be in terms of the research world or the real world in different disciplines. She also suggested adding the *positive justification* step to M2, claiming that this step never appears by itself but always in conjunction with another step. For move three, Samraj (2002) suggested adding a sub-step- *presenting goals of the present research* to the first step of M3 which could be also a component of the step *background information on the topic* in M1. Finally, Samraj (2002) concluded that the variation in the hierarchical status (move or sub-step) and linear position of this rhetorical function even within introductions from one discipline illustrate the difficulty of postulating a single organizational framework for a particular genre/sub-genre. Therefore, some discursal aspects of a genre may exhibit a greater degree of flexibility in their position within the overall organization of that genre.

Hard and soft disciplines RA introductions studies were also carried out by Iranian researchers. Kashiha and Marandi (2019) examined the RS and the use of interactional metadiscourse in RA introductions of applied linguistics and chemistry. Forty RA introductions were examined using Swales (1990) and Hyland (2005) models. The researchers found some similarities and differences between hard and soft disciplines in terms of the RS and metadiscourse use. According to them, both move 1 and move 3 were obligatory moves in RA introductions of hard and soft disciplines, while move 2 tends to be partially absent in both sub-corpus. For metadiscourse devices, the researchers found some variation in the use of these linguistic features. This variation was attributed, according to the authors, to the nature of the RA introductions, the distribution of moves in the introductions, and the nature of the disciplines.

3.2.2. Metadiscourse Studies on Research Article Introductions

Intercultural similarities and differences in the use of metadiscourse in different genres and disciplines have also attracted a number of researchers' attention. Martinez (2005), for instance, investigated the use of the first person pronoun in a corpus of RAs written by NNE writers and RA manuscripts produced by NE writers. Martinez (2005) studied the distribution and functions of the first-person pronoun in various sections of the RA. The findings revealed some heterogeneity in the use of under-use, over-use, and phraseological issues in the corpus of NNE writers. The first person occurred in all sections of both corpora, with significant

differences of use across sections. The most notable differences occurred in the results section, where NE writers used the first-person mainly to show that they assumed responsibility for the methodological decisions that led to the results obtained.

Sultan (2011) examined the use of metadiscourse in English and Arabic linguistics RAs using Hyland's (2005) model. His aim was to find out how writers from different cultural and linguistic backgrounds use interactive and interactional metadiscourse devices in their RAs to understand the cultural differences between English-speaking and Arabic-speaking scholars. In doing so, he collected seventy discussion sections of linguistics RAs written during 2002 and 2009 by both NE and Arab writers. The study revealed a number of interesting findings. First, the use of metadiscourse, according to Sultan (2005), plays an essential role in both English and Arabic RAs. Second, although Arabic and English scholars used both types of metadiscourse devices, Arabic scholars significantly used more interactive markers than English scholars to put emphasis on textuality. Focusing more on textuality, according to him, may reduce the reader's involvement when compared with the writing of English scholars who portrayed more impersonal and attitudinal voices through interactional markers. This finding is attributed to the fact that Arab writers usually pay as excessive attention to the formal aspects of the text as to the content, and to the Arabic tendency to go to greater lengths to establish coherence in the text in order to assist the reader in understanding the purpose of the text.

Chinese writers were also found to rely heavily on the interactive metadiscourse in their RA introductions compared to NE writers. This finding was revealed by the study conducted by Kim and Lim in 2013. In their study, the researchers examined the use of the interactive and the interactional metadiscourse employed in a corpus of forty RA introductions written by Chinese and NE writers specialized in educational psychology. The high tendency to use the interactive metadiscourse by Chinese writers was justified by the fact that this group of writers cared about bridging information in the texts to make their arguments explicit to the target readers. In contrast, NE writers used more interactional metadiscourse markers such as hedges, attitude markers, or self-mentions to interact with the readers.

Similarly, RA introductions in applied linguistics were also investigated in terms of the use of metadiscourse. Drawing on Hyland's (2005) model, Mu, Zhang, Enrich, and Hong (2015) examined metadiscourse in English and Chinese RA introductions. The authors found that NE writers of RA introductions showed a high tendency to use more metadiscourse

devices than Chinese writers. While both NE and Chinese RAs used more textual metadiscourse than interpersonal metadiscourse, the use of interpersonal metadiscourse was more frequent in the RA introductions authored by NE writers than in the Chinese RA introductions. Transition markers and hedges were the most frequent markers in both English and Chinese corpora. Comparing the two corpora, Chinese writers tended to use evidentials, boosters, and self-mentions (*we*) more often than English authors, whereas NE writers hedged more often than Chinese writers did. The authors concluded that the employment of metadiscourse devices in Chinese and English RAs is shaped by a more collectivism-oriented Chinese culture and a more individualism-oriented Anglophone culture respectively.

Another interesting study relevant to metadiscourse studies was carried out by Gong, Liu and Cao (2021). The authors investigated the use of hedges, boosters and self-mentions in English and Chinese RAs written by the same Chinese writers. Using Hyland (2005) analytical framework for metadiscourse analysis, they aimed to compare whether this group of writers use interactional metadiscourse differently in their Chinese and English RAs. The analysis revealed that while the Chinese writers used similar frequencies of boosters in both their Chinese and English RAs, they used more frequently hedges in their English RAs than in their Chinese RAs. With regard to self-mention markers, the Chinese writers were found to use more self-mentions in their English RAs than in their Chinese RAs. Based on these differences, the authors came to the conclusion that in their English and Chinese publications, the same Chinese authors constructed different epistemic orientations and authorial identities. Different writing norms and literacy traditions rooted in Chinese and Anglophone sociocultural environments, according to the authors, were responsible for these variations.

Table 3.6: *A Summary of Studies on the Rhetorical Structure and Metadiscourse in Research Article Introductions*

Author	Year	Type	Focus	N° of data	Model	Language	Field (s)
Swales	1981	(RAI)	RS	48	/	English	Different disciplines
Dudley-Evans Fredrickson and Swales	1986	MD	RS	7	Swales (1981)	English	Plant Bology
Anthony	1994	RAI	RS	26	Swales (1990)	Swedish	Art
	1999	RAI	RS	11	Swales (1990)	English	Software engineering
Ahmed	1997	RAI	RS	20	Swales (1990)	Malay	Biology, chemistry, engineering, and agriculture
Jogthong	2001	RAI	RS	40	Swales (1990)	Thai	Education and science
Samraj	2002	RAI	RS	12	Swales (1990)	English	Wildlife Behaviour and Conservation Biology
Hirano	2009	RAI	RS	20	Swales (1990)	English/ Brazilian/ Arabic	Applied linguistics
Al-Qahtani	2006	RAI	RS	15	Swales (1990)	/English	educational psychology
Kashiha and Marandi	2019	RAI	RS	40	Swales (1990)/ Hyland (2005)	English	Applied linguistics and chemistry
Martinez	2005	various sections of a RA	Metadiscourse	1 million words	Hyland (2002)	English	Biology
Sultan	2011	Discussion section of a RA	Metadiscourse	70	Hyland(2005)	English	Linguistics
Kim and Lim	2013	RAI	Metadiscourse	40		English /Chinese	Educational psychology
Mu, Zhang, Enrich, and Hong	2015	RAI	Metadiscourse	40	Hyland(2005)	English /Chinese	Applied linguistics
Gong, Liu and Cao	2021	RA	Metadiscourse	44	Hyland(2005)	English /Chinese	Applied linguistics

3.3. Studies on PhD Thesis introductions

3.3.1. Studies on the Rhetorical Structure of PhD Thesis Introductions

The PhD thesis as a whole and its sub-components has been the subject of genre studies. Several studies examined the abstract (Kondowe, 2014), acknowledgment (Hyland, 2004), introductions (Bunton, 1998, 2002; Kawase, 2015, 2018; Olivares, Salom, and Monreal, 2009; Ono, 2017), literature review (Jin, 2016; Kwan, 2006), discussion, and conclusion (Al-Shahrani, 2015). In the following part, we try to highlight some of these studies with more focus on the PhD thesis introduction.

With regard to the genre analysis of the PhD thesis introduction, Bunton (1998, 2002) carried out a genre analysis of 45 PhD thesis introductions written by Chinese scholars in English. His focus was not only on the move analysis at the macro-level but also on the micro-level including references, headings of sections, and subsections of introductory chapters. Interestingly, all the moves and steps in Swales' (1990) and Dudley-Evans' (1986) models were identified in his corpus. However, Bunton (2002) identified and proposed some more steps such as *Research Questions*, *Hypotheses*, *Definitional Clarifications*, *Theoretical Position*, *Method*, *Chapter Structure*, and *Materials or Subjects*. These steps, according to Bunton, were missing in both models suggested by Swales (1990) and Dudley-Evans (1986). In addition to that, Bunton (2002) found that the most frequent cycle of move occurrence was M1-M2 instead of M1-M2-M3. An average of 2.5 (M1-M2) cycles, 1.4(M1-M2-M3) cycles, and 0.7 (M1-M3) cycles per introduction were found. Although Bunton's study was valuable to genre studies as it provides researchers and teachers with conventional structural schemes of PhD theses and MDs, it lacks a thorough linguistic analysis of how moves and steps are realized. In addition, no thorough explanation was provided on how academic writings from different disciplines vary in terms of generic structure (Hyland, 2005).

Olivares, Salom, and Monreal (2009) analyzed the RS of 21 PhD thesis introductions using Bunton (2005) model. The PhD theses were written in Spanish by Spanish students who specialized in Computing. After the analysis, the researchers concluded that the structure of the Spanish PhD thesis introduction was complex due to the nature of the research topic and the various objects under study, and the need of the graduate writer to contextualize the research and explain the organization of the PhD thesis. Although the researchers found that Bunton's 2005 model was applicable in the analysis of PhD thesis introductions, some deviations from the model were highlighted. The researchers found also other steps that are specific to Spanish writers. These include, for instance, explaining the institutional/ research group context in which the PhD research was carried out. In their subsequent work, Monreal, Olivares, and Salom (2011) analyzed 20 PhD thesis introductions in the discipline of computing using the same corpus of the 2009 but with a different RS model, i.e., the Swalesian model. The researchers concluded that writers of the PhD theses written in Spanish tended to organise their arguments in M1-M3 order, while the writers of PhD thesis written in English demonstrated a high tendency to follow the Swalesian model (i.e., M1-M2-M3) . Variations in the rhetorical structure aside, the complexity of the combinations of moves, steps, and embedding were also found in PhD thesis introductions written in English.

In a comparison between Japanese and English PhD thesis introductions, Ono (2017) examined the RS of 99 introductions. Her study was also accompanied by interviews with Japanese and NE supervisors. Ono's (2017) study revealed some similarities and cross-cultural differences between the two groups of writers. Concerning the similarities, the author found that the move-step structures of the introductory chapters of literature PhD theses were shared, to some extent, across the countries and languages. Steps such as *approach*, *aim*, *presentation*, *review*, *w-statement* (*writer-centred statement*), and *c-structure* (outlining the structure of chapters) were used frequently by both groups of writers. Additionally, M3 is a significant move in introduction writing, and this reflects the common expectations of the discourse community regardless of language, according to interviews with supervisors. In other words, throughout language-based societies, the thesis genre creates the disciplinary unity. Cross-cultural differences were also highlighted in Ono's (2017) study. These differences were prevalent in the use of move two. While Japanese writers and supervisors exhibited a high tendency to underscore move two, English writers and supervisors tended to emphasize move one. This variation is attributed, according to Ono (2017), to the differences in educational traditions and cultural norms rather than to differences in disciplinary practices. In other words, the variation between PhD thesis written by Japanese and NE writers is ascribed to the influence of the differences in context-based 'small cultures' including thesis-writing norms and conventions as well as PhD supervision in each given context. Ono (2017) went on to say that as the small cultures change, the existing PhD thesis genre keeps 'adjusting' its genre norms and conventions, directly or indirectly influenced by the changing society, time, and language.

In order to ascertain whether texts created at universities where English is the primary language may serve as more normative samples without regard to its ethical or political ramifications, Kawase (2018) examined the RS of 20 PhD thesis introductions in applied linguistics. To achieve his aim, he collected the PhD thesis introductions from Australia, Canada, the United Kingdom, and the US. Using Bunton's (2002) model, Kawase (2018) examined the collected corpus and compared the finding with other studies in which a PhD thesis introduction was the focus. Based on his analysis, Kawase (2018) came up with interesting findings on how applied linguistic writers organise their PhD introductions. First, applied linguistic writers strongly conformed to the Bunton's (2002) model by including most of the moves and steps proposed by Bunton (2002) in their PhD introductions while demonstrating a deviation from the CARS model introduced by Swales (2004). Applied

linguistic writers, according to Kawase (2018), organised their introductions by repeated use of steps of the three moves in various combinations. They began their introductions by introducing their studies in general terms. They described the more specific features of the study or the thesis by establishing explicit linkages with previous research in the main or body part and closed their introductions with an option of presenting chapter previews. Second, while most applied linguistics writers acknowledged a gap in the previous research, they tended to suggest fewer problems or needs. This is due to the nature of the applied linguistics field, which does not expressly deal with real-world problems or technology needs as other disciplines do. Third, Similar to Bunton's (1998) findings, writers of the PhD introductions in social sciences and humanities were inclined to describe their studies more thoroughly in their introductions than writers of science and technology theses. In addition to that, applied linguistic writers demonstrated a greater tendency to refer to research materials and subjects and to include research questions or hypotheses, while they demonstrated a lesser tendency to include methodology-related descriptions. This finding is also attributed to the nature of applied linguistics discipline as a soft field.

3.3.2. Metadiscourse studies on PhD thesis introductions

Kawase (2015) investigated the use of metadiscourse in the introductions of 8 PhD theses and 8 RAs. The RAs were written by PhD candidates after they finished writing their PhD theses. Using Hyland's (2005) model, she identified and compared the use of both the interactive and the interactional metadiscourse. She aimed to find out whether writers of the PhD thesis introductions make more use of metadiscourse devices than in their RA introductions as suggested by several previous studies. Contrary to what was believed, the results revealed that writers of the RA introductions employed more metadiscourse elements when compared to the use of these devices in their PhD thesis introductions. Regarding metadiscourse sub-categories, writers of RA introductions employed more evidentials, code glosses, and hedges but less frequent use of endophoric markers and authorial presence. The reason behind using more code glosses in RA introductions was that writers tended to describe and clarify methodological information from the beginning. In their PhD thesis introductions, writers used more endophoric markers to present chapter previews and summaries of the chapters. Based on this, Kawase (2015) concluded that the belief that research writers make greater use of metadiscourse and metatext¹ in PhD theses than in RAs

¹ The term 'metatext' and 'metadiscourse' used interchangeably by some applied linguists such as Bunton(2002,2005)

might not be applicable with regard to the introductions. In addition to that, there were some variations in the use of the two types of metadiscourse between PhD thesis and RA introductions. To put it in another way, writers of RA introductions did not use specific metadiscourse items in the way they did in their thesis introductions. According to Kawase (2015), these differences are attributable to the PhD thesis' status as an educational genre and the RA's status as a professional genre where authors must prevail in fierce competition in order to have their papers accepted for publication.

Alshahrani (2015) examined 80 discussion and conclusion chapters of a PhD thesis written by Arab and English native students. The author examined not only the metadiscourse frequencies in general but also different writing styles based on frequent types of markers. The findings revealed that English native students were inclined to use more textual and interpersonal metadiscourse in their texts when compared to the Arab students' texts. Both groups of writers, Arab and English doctoral students, employed more additive markers than comparative and consequential markers. In other words, both groups of writers preferred the progressive writing style (adding arguments in the same direction employing additive markers) over a retrogressive style (explicitly showing contrasts and consequences of ideas using comparative and consequential markers). Al Shahrani (2015) concluded that the Arab graduate writings appear to be influenced by the discipline of particular genres and the expectations of the institute and examiners of producing successful theses. However, the Arab writers' L1 interference view of the writer's role is reflected in their use of a limited number of transitions, frame markers, and evidentials of transitions, frame markers, and evidentials. In contrast, NE writers use more transitions, frame markers, and evidential markers to help the reader to navigate through the texts.

Table 3.7: *A Summary of Previous Studies on the Rhetorical Structure and Metadiscourse in the PhD thesis (with a focus on the introduction section)*

Author	Year	Type	Focus	N° of data	Model	Language	Field
Bunton	2008	PhDTI	The rhetorical structure/references, headings of sections, and subsections	45	Swales (1990) Dudley-Evans (1986)	English	Different disciplines
Olivares, Salom, and Monreal	2009	PhDTI	The rhetorical structure	21	Bunton (2005)	Spanish	Computing
Ono	2017	PhDTI	The rhetorical structure	99	Swales (1990,2004)	Japanese/English	literature
Kawase	2018	PhDTI	The rhetorical structure	20	Bunton (2005)	English	Applied linguistics
Kawase	2015	PhDTI/RAI	Metadiscourse	16	Hyland (2005)	English	Applied linguistics
Alshahrani	2015	Phd (discussion and conclusion sections)	Metadiscourse/ different writing styles	80	Hyland (2005)	Arabic/ English	Linguistics

3.4. Studies on Master Dissertation Introductions

3.4.1. Studies on the Rhetorical Structure of Master's dissertation Introductions

As it was mentioned previously, genre studies on the RS of a MD as a whole, in general, and on its sub-sections, in particular, were found to be rare in the literature. One of the remarkable studies on MD was Samraj (2008) who investigated the RS of MD introduction, aiming to find the differences in terms of discourse features between this genre and RA introduction. Using Swales CARS (1990, 2004) model, Samraj (2008) carried out a contrastive analysis of the RS (moves and steps) of the introduction sections of twenty four MDs across three disciplines, including Biology, Philosophy, and Linguistics. Samraj's (2008) study was different from previous studies in the sense that she employed both discourse analysis and a semi-structured interview with subject specialists. The findings indicated that there were some variations in terms of the RSs. It also emphasized the intradepartmental variation of the introductions in the Linguistics discipline.

Jin (2016) examined the RS of the introductions and literature reviews of MD in applied linguistics, aiming to find out the possible factors in the context and learner's

experience that may have contributed to the variation in genre practices. Her corpus included 90 introductions which were collected from three countries namely china, New Zealand and America. The findings demonstrated significant differences in the genre practices not only among the three communities but also within communities. First, Four moves were identified as the common communicative functions of the introduction section of MDs. These include *familiarizing readers with the field (M1)*, *providing rationales (M2)*, *establishing a theoretical framework (M3)* and *presenting the study (M4)*.

Although a common pattern in MD introductions was identified, some differences in terms of the writers' focus and the length of these moves were identified. These differences lie in three moves, namely *Providing Rationales*, *Establishing a Theoretical Framework*, and *Presenting the Study*. For instance, Chinese writers of MD introductions, according to Jim (2016), paid more attention to *theoretical frameworks* and less attention to *rationales*, especially empirical rationales than their New Zealand and American writers. Other differences were also observed in the individual practice within the communities. For instance, learner factors such as former community and preferences of the supervisor were discovered to have contributed to the difference.

Choe and Hwang (2014) analyzed the RS of 200 introductions in different educational genres. Aiming to find out whether educational background, as the main variable in his study, has an impact on writers' academic works, he extracted 50 PhD theses, 50 MDs, and 50 RAs written by ESL learners, and 50 RAs written by NE writers. The researchers used the CARS model (Swales, 1990) to examine the RS of the previously mentioned academic works. Their study revealed interesting insights into how Korean writers with different educational backgrounds construct their academic work introductions. First, MD writers and PhD thesis writers, according to Choe and Hwang (2014), partly did not follow the regular form of the CARS model, whereas most RAs written by Korean and NE writers maintained linear patterns. On the other hand, Korean writers of RAs followed the CARS model most accurately, while NE writers conveyed a rather liberal form of the move structure. These findings, according to the authors, might be explained by the fact that the CARS model is best suited for the RAs as it is originally intended to be. In addition to that, the linear pattern followed by both Korean and NE writers may reflect the writer's high level of expertise in the organization of academic writing. Experts, according to them, had more opportunities to read and write research papers than master's and doctoral students. Hence, their expertise which was internalized and acquired over a long period of time consequently produced a huge gap in

comparison with the student writers in terms of academic writing skills. Second, PhD thesis and MD writers were inclined to use a weak move two (WM2) as a rhetorical strategy.

In this move, which is not found in the Korean and NE writers of RAs, PhD thesis, and MD Korean writers tended to criticize the local educational system instead of offering direct criticism to previous research. These frequent statements about the Korean educational system, according to the authors, might be attributed to the Korean culture and to the notion of collectivism that characterizes Korean society. In other words, Korean writers, particularly PhD and master writers, showed more concern about group issues rather than individual interests and values. Third, although Korean writers of RAs appeared to follow the CARS model; the influence of the cultural and language background was reflected in their RA introductions. Korean writers of RAs tended to include the weak move instead of indicating a gap move proposed by Swales' (1990) model. At the same time, NE writers tended to follow more the liberal form in which the second move is partially absent in some introductions. Based on these explanations, Choe and Hwang (2014) concluded that the educational background and the L1 and its culture have a strong impact on student academic writing, however, due to several limitations in their study; the researchers advocated that more studies in contrastive genre analysis are needed.

3.4.2. Metadiscourse studies on Master's dissertation Introductions

Hyland (2004) compared the use of metadiscourse in MD and PhD theses written by Chinese students. The corpus was collected from hard and soft disciplines. The former includes texts from biology, computer science, and electronic engineering while the latter includes texts from applied linguistics, business studies, and public administration disciplines. The findings revealed that hedges and transitions were the most frequent markers in the thesis corpus. Doctoral writers used substantially more textual metadiscourse (especially evidentials and transition markers) and interpersonal metadiscourse (especially engagement markers and self-mentions) than master's students. One possible explanation is the fact that PhD theses are often twice as long as MDs. As a result, PhD thesis writers have to make greater use of interactive devices to organise more discursively complex arguments. Additionally, the greater metadiscourse frequencies in PhD theses seem to indicate writers' more determined and sophisticated attempts to interact with readers and project themselves as capable and respectable academics deeply rooted in their fields' beliefs and practices (Hyland, 2005).

With regard to soft and hard disciplines, the findings revealed that writers in soft disciplines tended to use more metadiscourse than in hard disciplines. In terms of metadiscourse individuals, hedges, attitude markers, and self-mentions were used more in soft disciplines than in hard disciplines. Hyland (2004) attributed this variation to the fact that writers in soft disciplines need more metadiscourse particularly interpersonal metadiscourse to explicitly state their personal interpretations. In contrast, in hard disciplines, writers used less metadiscourse as in this type of discipline, according to Hyland, facts talk about themselves; hence, writers did not feel the need to justify, reinforce or tone down their arguments. This study pointed out that the use of metadiscourse features was not only varied according to the discipline but also the levels of writers' proficiency and experience in writing. Although Hyland's (2004) study is fascinating and helpful in that it explains how metadiscourse differs across genres and disciplines, it does not go into detail into how metadiscourse devices differ across genres within a discipline. In other words, it did not reveal how doctoral and master's students in a particular area, such as applied linguistics, differ in their use of metadiscourse.

Aside from interdisciplinary studies, Akoto (2020) investigated the use of metadiscourse in 10 MD introductions and literature review (LR) from one single discipline. In analysing the use of metadiscourse using Hyland's (2005) model, Akoto aimed to investigate the similarities and differences in the introductions and LRs of the sociology MDs. Similar to Hyland (2004), Akoto (2020) found that hedges and transitions recorded the highest frequencies in the two chapters. With regard to the differences between the two sub-genres, it was revealed that the LR chapter included slightly more interactive devices as well as significantly more interactional devices than the Introduction chapter. Specifically, while the LR chapter used more transitions, evidentials, hedges, attitude markers, boosters, and continuants (continuants are the linguistic choices which provide textual space for readers to continue the knowledge production task), the Introduction chapter used more code glosses, frame markers, endophoric markers, and engagement markers than the LR. The differences in metadiscoursal device use between the two chapters can be attributed, according to Akoto (2020), to their various communicative purposes, as well as their position in the thesis.

Aiming to explore the cultural variations in the use of metadiscourse in academic writing including stance markers, Ozdemir and Longo (2014) investigated the amounts and types of metadiscourse devices in MD abstracts written in English by Turkish and US postgraduate students. The researchers took into consideration both the interactive and

interactional devices introduced in Hyland's (2005) metadiscourse model. Using quantitative and qualitative analysis, they identified certain cultural similarities and differences in Turkish and American students' MD abstracts. First, in terms of metadiscourse types, the Turkish master students demonstrated a high tendency to use more interactive metadiscourse. On the contrary, American master's students used more interactive devices. Considering the interactive devices, the researchers stated that the frequency of evidential, code glosses and endophoric markers were very low in Turkish students' abstracts compared with American students' abstracts. Among interactive metadiscourse markers, transitions and frame markers were the most frequently used ones by both Turkish and American students. With respect to interactional metadiscourse, there was no significant difference in the frequency of hedges used by Turkish and American students. American students utilized substantially more boosters than Turkish students, i.e. they used boosters 26 times more than Turkish students. The frequency of attitude markers was higher in American students' abstracts. Self-mentions were totally absent in Turkish students' abstracts, while very few were used by American students. According to Ozdemir and Longo (2014), this cultural variability is due to the incapacity of non-native students to regulate the degree of personality in argumentation like affinity statements and attitude.

The discussion and conclusion chapters of MD were also the focus of comparative genre studies. Mestre-Mestre (2017) explored 30 MDs written by Spanish and American students. The study findings revealed a number of interesting differences. First, Spanish student writers tended to employ more textual metadiscourse in their theses while more occurrences and types of interpersonal metadiscourse were found in the American students' theses. In terms of metadiscourse individuals, Spanish writers employed more evidentials which reflect greater distance and detachment to previous works, since they use exclusively "according to". Frame markers also were found to be used differently by both groups of writers. While Spanish students showed a great emphasis on sequencing arguments with heavy use of *finally* and *to conclude*, American students made substantial use of the marker *my purpose is...* to announce major discourse goals. Second, with regard to interpersonal metadiscourse, the researcher found that NNE writers focused exclusively on the successes that can be found in their works, avoiding any reference to surprises, mistakes, or misinterpretations and this is reflected in the scarcity of attitude markers. Self-mention markers were also rare in MD written by NNE writers, particularly the pronoun 'I'. Writers of the dissertations, according to the researcher, used "we" to refer to their work and their

results. This is particularly significant in the case of MDs, in which the idea is that students can show the knowledge and expertise they have obtained at the end of a period of study. In contrast, NE writers were found to use more interpersonal metadiscourse such as attitude markers, hedges, and boosters which reflect their involvement in their academic texts.

With a particular focus on hedges and boosters, Akbas and Hardman (2018) compared MD discussion sections written by native speakers of Turkish (TL1) and English (EL1) and Turkish speakers of English (EL2). This study reported that the TL1 writers preferred using boosters to hedges when writing dissertations in Turkish. In contrast, when writing dissertations in English, the Turkish writers of English were similar to their EL1 counterparts in making greater use of hedges than boosters. Both EL2 and the EL1 writers preferred using modal verbs to verbs and the formulaic expressions (*is likely due to, it is possible that*).

Table 3.8: *A Summary of Previous Studies on the Rhetorical Structure and Metadiscourse in Master's dissertations (with a focus on the introduction section)*

Author	Year	Type	Focus	N° of data	Model	Language	Field
Samraj	2008	MDI	RS	24	Swales(1990-2004)	English	Biology, Philosophy, and Linguistics
Jin	2016	MDI	RS	90		English	Applied linguistics
Choe and Hwang	2014	PhDI/MDI/RA I	RS	200	Swales (1990)	English	Hard and soft disciplines
Hyland	2004	PhD/MD	metadiscourse	240	Hyland (2004)	English	
Ozdemir and Longo	2014	MD Abstract	Metadiscourse	52	Hyland (2005)	Turkish/ English	Linguistics
Mestre-Mestre	2017	MD (discussion and conclusion)	Metadiscourse	30	Hyland (2005)	English/ Spanish	Different disciplines
Akbas and Hardman	2018	MD (discussion section)	hedges and boosters	90	Sheldon(2009)	Turkish/ English	Education, Psycholog
Akoto	2021	MD introduction and literature review	Metadiscourse	10	Hyland (2005)	English	Socilogy

3.5. Algerian Studies on the Rhetorical Structure

Aggoun (2018) analyzed the rhetorical structure and linguistic features in RA introductions extracted from Algerian scientific journals and international journals. Using the CARS model introduced by Swales (1990), 30 RA introductions in applied linguistics were

examined in terms of their RS and linguistic features. The analysis revealed that the CARS model was applicable to the analysis of RA introductions as all introductions in the corpus included the moves introduced in the CARS model. With regard to the differences between Algerian RA introductions and international RA introductions, there were some discrepancies in the number of steps in each move. In move 1, for instance, Algerian writers of RA introductions preferred to use step 2 (topic generalization) to introduce their research topic, while reviewing the previous research step was the most preferred rhetorical strategy used in the international RAs. Algerian writers of RA introductions showed no tendency to review previous research or to present literature related to their research. According to Aggoun (2018), the lack of this strategy in the Algerian corpus decreased the quality of their research. In move 2, Algerian writers resorted to step 1b (indicating a gap), while the international writers used step 1a (counter claiming) more frequently to *indicate a gap* step in their research. Move 3 was slightly similar in both corpora with little difference in terms of its realization. Concerning the linguistic features used in both corpora, Algerian writers of RA introductions were found to pay little attention to linguistic features and lexeme interest. This contrasts with the international corpus, in which linguistic elements were carefully selected to realize the rhetorical functions of moves. Both Algerian and international writers were found to rely more on non-integral citation (the name of the writer appears in the sentence itself) than on integral citation (the writer's name appears in parenthesis after the statement, usually using the writer's last name and the year of publication) to cite the previous research.

Although Aggoun's (2018) study provides a wealth of information about how Algerian writers organise their RA introductions, it has several flaws that limit the generalizability of its findings. One of these issues has to do with the compilation of the international corpus, as the RA introductions were written by writers of diverse nationalities (Chinese, Finnish, Arabic, Iranian, and so on), making it impossible to control the L1 and cultural variables. Second, in terms of the research topic (writing, listening, pragmatics, literature, motivation, language education, and so on), the RA introductions in both corpora were collected from diverse research publications, making the topic in the RAs a variable that cannot be controlled once more.

In her subsequent research, Aggoun (2020) examined 140 RAs written by Algerian high-level learners and published in 11 Algerian scientific journals. Using the CARS model introduced by Swales (1990), Aggoun (2020) compared the RS of 70 RA introductions in applied linguistics and 70 RA introductions in physics. After the analysis, she concluded that

the CARS model is a useful analytical tool to highlight differences related to the rhetorical organization of RA introductions. Aggoun's (2020) study yielded several findings in terms of the differences in the rhetorical structure between soft and hard disciplines. First, the results showed that move 2 was partially absent in both sub-corpus. In the applied linguistic corpus, M3 was the prominent move, which made it the obligatory move. In the physics sub-corpus, Algerian writers preferred to employ more M1 and M3. Second, with regard to move sequence, Algerian writers of RA introductions were found to follow the linear pattern (i.e., M1-M2-M3); however, some differences in terms of the presence of moves were found. For example, applied linguist writers were found to frequently use the M1-M2-M3 sequence, whereas physics RA introduction writers tended to use the M1-M3 sequence. Move cycling was also present in both sub-corpus, but it was highly present in Physics RA introductions when compared to applied linguistics RA introductions. Third, M1 (establishing the territory move) was frequently used in physics RA introductions with an extensive review of literature, which made their RA introductions more explicit, detailed, and precise. In applied linguistic RA introductions, M1 was characterized by a lack of citation, though it was the most prominent move in the sub-corpus.

Differences between applied linguistics and physics RA introductions were also highlighted in terms of the function of citation. While in physics RA introductions, the main rhetorical function of citations was to compare the findings and contextualize the study within previous studies, applied linguists employed citations to reinforce statements and give evidence to back up those arguments. Within citations, physics writers were found to extensively use reporting verbs that reflect the writers' neutral view of the cited information while in applied linguistics RA introductions, reporting verbs were used to situate the writers' position with respect to other similar positions expressed in the past. According to Aggoun (2020), differences in the use of citations and reporting verbs between applied linguistics and physics RA introductions made the physics RA introductions more objective than the applied linguistics RA introductions.

Algerian researchers were also interested in the analysis of 'Magister' dissertations. For instance, Amara (2009) investigated the rhetorical structure of abstracts, introductions, and acknowledgments extracted from Magister dissertations written by Algerian learners of English as a foreign language. Her study relied on three analytical frameworks: the Samraj(2008) model for MD introductions, Samraj (2002) model for abstracts and Hyland and Tse's model for acknowledgment sections. With regard to the introductions, the findings

revealed that there was no common rhetorical pattern among the Algerian magister dissertation introductions. In other words, the moves in the examined introductions were structured into different patterns, which made finding a common pattern impossible. Moreover, only 50% of the examined introductions conformed to Samraj's (2008) model. Amara (2008) indicated that M1 (*Establishing a territory*) was totally absent, whereas M2 (*Establishing a niche*) and M3 (*Presenting the present work*) were extensively used in the corpus. Unlike the study carried out by Aggoun (2020), M2 was the most preferred move in the examined introductions in Amara's (2009) study. Although this move was prevalent, the realization of move 2 was different from what was indicated in Samraj (2008). Instead of using *indicating a gap* or *raising questions* to realize move 2, the Algerian writers of the Magister dissertation extensively described the problems that occur in a specific situation. In other words, instead of indicating a problem in previous research, Algerian writers preferred to indicate a problem in the real life. According to Amara (2009), the use of *indicating a problem in real life* Step is attributed to the nature of the genre itself and the emerging Algerian research context. In this context, the need for research cannot be met by the available number of researchers.

Another interesting finding in Amara's (2009) study was that she identified a new step in move1. The step, known as the "storytelling step," was used by Algerian writers of Magister dissertations to substitute the *claiming centrality* step introduced in Samraj's (2008) model. In this step, writers described their experiences in the research area where their studies were conducted. Amara (2009) could not explain the reason for using this new step, claiming that it is unlikely to be the result of cross-cultural variation. She concluded that more genre studies on the RS of academic writings are needed to gain insight into how Algerian learners rhetorically construct their academic writings. This conclusion is based on the fact that most of the Algerian writers in her study deviated from the Samraj's (2008) model and used new steps in the magister dissertation introductions

3.6. Key Findings and Critical Review

The cultural and cross-disciplinary studies discussed previously have offered significant insights into the ways writers from different linguistic and cultural backgrounds organise their discourses and generate discipline-specific knowledge. Based on this, certain key findings can be extracted:

- Despite some differences in the micro rhetorical strategies, previous research on the RS of academic writing introductions validated the CARS model, considering it to be an apt description of the schematic structure of RA and dissertation introductions from a wide range of disciplines and non-native English-speaking communities.
- Another point to be made here is that most of the previous studies devoted much attention to the analysis of RAs. Apparently, most of the studies on metadiscourse have focused on analyzing metadiscourse in RAs as a whole or taking one section as the focus. Unfortunately, the other academic genres, the PhD thesis and particularly MD, tend to be neglected. Considering that a MD is the first formal practice to participate in the professional academic discourse communities, it is important to provide good knowledge and to raise awareness about how metadiscourse is employed in these academic genres. Employing appropriate metadiscourse resources is considered to be rather important in discourse community socialization. The inclination of previous research to focus more on RAS is not only my observation, but it is also the observation of many researchers in the fields of genre analysis and metadiscourse studies (see for instance, Hu and Cao 2011; Yoon & Römer 2020)
- Previous studies on the RS of introductions in academic works revealed that non-native writers have the tendency to avoid criticizing others' work (absence of move two). Instead of evaluating others' work, non-native writers include a 'story' or only a brief description of some previous studies in their academic writing introductions (Ahmed, 1997; Frederickson & Swales, 1994; Kashiha & Marandi, 2019; Ono, 2017).
- NE writers of RA introductions follow the model introduced by Swales (1990, 2004) while NNE writers show a tendency to deviate from Swales' model, particularly in terms of the rhetorical steps (Al-Qahtani, 2006; Hirano, 2009; Samraj, 2002).
- Most cross-cultural and interdisciplinary studies on metadiscourse, mentioned earlier, were carried out using the frequency approach to investigate metadiscourse occurrences in each context. Individual types and functions within each subcategory have received less attention. Among the previous studies, only Hu and Cao (2011, 2014, and 2015) studies provided an elaborate description of the types and functions of metadiscourse in RAs.
- Another important finding from metadiscourse research is that NE writers frequently use more interactional metadiscourse and less interactive metadiscourse in their academic works. In contrast, NNE writers do the opposite. This finding is attributed, according to the previous

studies, to the fact that NE writers are characterized as reader- responsible while NNE writers are writer-responsible (Kim & Lim, 2013; Mu et al., 2015; Sultan, 2011)

- Based on the previous studies on metadiscourse, it can be noted that there are a number of essential factors that influence the use and distribution of metadiscourse features in academic writing. A variation on the use of metadiscourse is attributed to generic differences, disciplinary and contextual variations.

Although previous cross-cultural and interdisciplinary studies have provided interesting insights on how writers from various cultural backgrounds organise their arguments and use metadiscourse in their academic works, they have several flaws that are reflected in their methodology and contradictory results.

Previous research (Swales, 1981, 1990; Ahmed, 1997; Al Qahtani, 2006; Fredrickson & Hirano, 2008; Kashihan & Marandi, 2019; Swales, 1994, etc.) has attempted to determine the similarities and differences in terms of the rhetorical structure of academic writings, with the goal of determining who, NE or NNE writers, has the tendency to follow and conform to a particular rhetorical model for a particular genre. Other studies, on the other hand, have compared and contrasted the amount and types of metadiscourse in academic writing produced by NE and NNE in various contexts (e.g., Chinese vs. English (Kim & Lim, 2013); Arabic vs. English (Alshahrani, 2015; Sultan, 2011); Turkish vs. American (Ozdemir & Longo, 2014); Turkish vs. English (Akbas, 2012; Akbas. Such studies; however, have provided contradictory results. In other words, some studies revealed that NE writers conform to the generic structure set out by a particular rhetorical model (for instance, Swales' (1990) model or Bunton's (2002) model) while NNE writers do not.

Other studies, however, revealed the opposite, i.e., it is the NNE writers who follow the rhetorical model. With regard to metadiscourse, some studies found a higher incidence of metadiscourse in NE writers' texts than in NNE writers' texts while other studies found the opposite. This implies that NE writers and NNE writers display a variety of rhetorical preferences and styles of writing in different contexts. Regardless of other potential factors, it could be too cautious to conclude that NE writers are more likely than NNE writers to conform to a particular rhetorical model and metadiscourse use, or vice versa. Therefore, it appears more sensible to investigate the variation in metadiscourse and the writing of conventions in other individual L1 and S/FL contexts in order to reveal the underlying factors

in those contexts that contribute to similarities or differences in the use of metadiscourse and writing rhetorical conventions. Although the number of genre analysis studies and studies on the use of metadiscourse in academic works is increasing, academic writings written by Algerian learners of English as a foreign language do not appear to have attracted much attention. To fill this gap, the present study was proposed to explore the rhetorical structure and metadiscourse use in the introductions of PhD theses, RAs, and MDs written by Algerian learners of English and RA introductions written by NE writers.

Conclusion

As the aim of the present study is to examine the RS and metadiscourse use in introductions of academic writings written by Algerian and NE writers, this chapter summarized the relevant previous studies. In other words, several influential studies on both the rhetorical structure of academic writing introductions and studies on the use of metadiscourse devices were highlighted. The summary of the previous studies provides us with further ways to reflect on different academic writing styles based on different degrees of writer and reader responsibility for establishing interactions in the texts besides their responsibility for organizing texts. The review of previous genre analysis and metadiscourse use studies has not only indicated the insufficiency of these studies on postgraduate academic works, particularly in the EFL context but has also shown some trends on the ways writers structure their text and their use of metadiscourse in other contexts and disciplines, which the present study can draw on. As was mentioned earlier, the summary of the previous studies is very important in genre analysis studies as it helps us interpret the present study findings. In the following chapter, we deal with the methodology of the current study.



Chapter Four:

Methodology

Introduction

4.1. Research Aims and Questions

4.2. Corpus construction

4.3. Analytical Models

4.4. The validation of Data Analysis Findings

4.5. Pilot study.

Conclusion



Introduction

The studies discussed in the previous chapter revealed the extent of research carried out on the RS, rhetorical strategies, and metadiscourse use in academic works, underscoring the importance of looking at these characteristics in academic genres. In addition, previous research on metadiscourse devices brought to light that academic writing is more than just a collection of facts and ideas. Academic writing is actually a collaboration of three essential elements: the writer's feelings, opinions, and position; the text; and the reader. The pursuit of student writers, especially EFL learners, is undoubtedly a solid comprehension and awareness of the conventional rhetorical structures used in academic writings. Student writers should strive to master those conventional ways because they are the only ones that lead them to write acceptable academic works. The purpose of this study is to examine the extent to which the use of rhetorical strategies and linguistic resources differs in the introductions of RAs, PhD theses, and master's dissertations (henceforth, MDs) in the applied linguistic field and more specifically to linguistics and language teaching. This should lead to a better understanding of how writers use resources to develop arguments that meet genre and discipline requirements.

In the general introduction of this thesis, the research questions were outlined with an overview of the methodology followed to answer the research questions. In the present chapter, a more elaborated way is adopted to illustrate specific methods and instruments for data selection and analysis. Moreover, the methodological values of choosing these methods and instruments instead of others are justified. To achieve the aims of this study, qualitative and quantitative approaches were adopted to answer the research questions. The frequencies and forms of moves and steps as well as the frequencies, forms, and discourse functions of metadiscourse devices are examined, discussed, and compared. The chapter then covers the methodology of the study on the whole. It starts by offering an overview of the research design, data collection, and corpus creation, including a rationale for the corpus design and the method of corpus compilation. A discussion of several issues related to the size of the corpus and the types of the selected texts is also included. Then, it moves on to describe different analytical frameworks for analyzing moves and metadiscourse devices. Besides, the chapter discusses the notions of inter-coder reliability and the analysis procedures of moves.

4.1. Research Aims and Questions

The nature of the current study is purely descriptive. It aims to describe and explain how rhetorical arguments (move-step structure) are structured and how metadiscourse devices are employed in introductions of academic writings. The findings were compared to show the similarities and differences between academic writing introductions authored by Algerian and NE writers in terms of the rhetorical practices and the ways writers address the discourse and their potential readers.

The research is twofold; while the first part aims at answering questions one and two, the second one seeks to respond to the third and fourth ones. The former have to do with how introductions are structured rhetorically in academic research papers whereas the latter tackles the metadiscourse in academic work introductions.

a) rhetorical Structure Questions

1. What are the move-step structures of RA introductions written by NE and Algerian writers?
 - 1.1. To what extent do the move-step structures in RA introductions written by Algerian writers differ from those written by NE writers?
 - 1.2. Do the move-step structures of RA introductions written by Algerian and NE writers conform to Swales (2004) model?
2. What are the move-step structures of PhD thesis and MA dissertations introductions written by Algerian writers?
 - 2.1. To what extent do the move-step structures in PhD thesis introductions differ from those in MD introductions?
 - 2.2. Do the move-step structures of PhD thesis introductions written by Algerian writers conform to Swales (2004) model?
 - 2.3. Do the move-step structures of MD introductions written by Algerian writers conform to Swales (2004) model?
3. What are the major differences between academic writing introductions authored by Algerian and NE writers in terms of the move-step structures?

b) Metadiscourse Questions

4. What are the metadiscourse devices used by Algerian and NE writers in their RA introductions?
5. To what extent does the use of metadiscourse devices in RA introductions written by NE writers differs from those employed by Algerian writers?
6. What are the metadiscourse devices used by Algerian writers in their PhD thesis and MA dissertation introductions?
7. To what extent does the use of metadiscourse devices in PhD thesis introductions differs from those employed by MD writers?

4.2. Corpus Construction

The construction of the corpus started with the selection of the discipline from which the texts under investigation were extracted. In the present study all the data belong to the applied linguistics discipline (see section 4.3.1. for more details). The corpus consists of sixty electronic academic writings. This includes 15 dissertation introductions written by Algerian master EFL learners, 15 thesis introductions written by Algerian doctoral EFL learners, 15 RA introductions written by Algerian writers, and 15 RA introductions written by NE writers (British writers). All the academic writing introductions (Algerian and English native academic writings) were written during the years 2013-2020. Only the academic writings produced during this period were selected since the generic structures are subject to variation across time (Swales, 2004). It is, therefore, expected that the corpus reflects the current practices of academic writings written by these groups of writers. The RAs written by Algerian learners were collected from the Algerian Scientific Journal Platform (ASJP) while the RAs authored by NE writers were collected from three international journals (Journal of English for Specific Purposes, System, and Applied Linguistics). The Algerian PhD theses and MDs were selected from different Algerian universities. The sources from which the corpus of the study was collected are shown in Table 4.1.

Table 4.1: The Sources of the Selected Academic Writings.

Genre		Source	No
Algerian Research Articles	ASJP		15
NE Research Articles	Journal of English for Specific Purposes, System , Applied Linguistics		15
Algerian PhD Theses	Algerian Universities (Constantine, Ouargla and Tlemcen)		15
Algerian Master Dissertations	Algerian Universities (Constantine, Ouargla and Tlemcen)		15

4.2.1. Rationale behind a Small Sample

In discourse analysis, in general, and in corpus studies, in particular, the issue of corpus size is always present when collecting data for any research. The selection of an appropriate and representative corpus remains for researchers an essential requirement, not to say a "must," in that some studies entail collecting a large number of texts while others may simply use a small corpus. In other words, the question of whether the corpus is appropriate and representative should be a prerequisite step before the analysis process. Importantly, when examining the size of the corpus, one should take into account two aspects: the number of words and the number of texts. The two aspects related to other studies found in chapter three (see review of literature) are to be addressed in this section.

Considering the first aspect, the number of words, Bowker & Pearson (2002) state that "well-designed corpora that are anywhere from about ten thousand to several hundred thousand words in size have proved to be exceptionally useful in LSP studies" (p. 48). This first aspect is reflected in most of the genre and corpus studies, which were highlighted in chapter three. In exploring the form and function of citation in the discussion section of MDs and RAs, Samraj (2013), for instance, relied on a corpus of eight MDs and eight RAs containing 18,888 words and 13,169 words, respectively. Hyland (2005), in turn, analyzed 465 abstracts collected from RAs, PhD theses, and MDs belonging to six disciplines, through which he aimed at exploring the frequencies, forms, and functions of 'evaluative that' in academic work abstracts. In the corpus he collected, the number of words reached 105,000.

In a similar recent study, Hyland and Zou (2019) used a corpus of 30 academic blog posts and 30 RAs containing 31,089 and 180,666 words, respectively, to trace how writers reconstruct a different writer persona and relationship with their readers using the stance and engagement model. Similarly, other researchers have used the second aspect, which consists of a small corpus of texts, such as Ozdemir (2013), whose study compared Turkish and

American students in terms of metadiscourse use in PhD theses abstracts. In his investigation, Ozdemir has employed 52 abstracts of PhD theses (26 abstracts for each group). The comparison gave a total of 12,101 words in the USA corpus, while it gave only 7,046 words in the Turkish corpus. Drawing on a small corpus, Al Quahtani (2006) examined only 15 RA introductions authored by different groups of writers (5 Arab writers, 5 Arab writers educated in the US, and 5 NE writers).

Taking these together, it appears from the already-mentioned studies and other studies summarized in the previous chapter that a number of factors affect the decision-making process about collecting texts for the corpus. These include the number of disciplines, the type of genre, and the subject of the analysis. For instance, the corpus entails a large number of texts if the number of disciplines is more than one, and the aim of the analysis is just to explore a specific linguistic feature. Hyland (2005), for example, used 465 texts (abstracts) containing 125,000 words from six disciplines, while Samraj (2013) used only 16 texts (discussion sections) to explore the use of citation in MDs and RAs.

Based on what was discussed above, it can be argued that a small corpus may help researchers get good insights about the patterns of language and the writer's rhetorical practices. The reason behind this is that small corpora help researchers make a careful and thorough examination of the linguistic elements and the lexical features in a particular piece of text. According to Flowerdew (2004) and Handford (2010), adopting a small corpus leads to a much closer link between the corpus and the context in which the texts in the corpus were created. Koester (2006) holds the same idea arguing that 'smaller corpora are more suitable than large multi-million corpora to identify the connections between linguistic patterning and specialized contexts of language use' (p. 67).

Furthermore, it has been suggested that using a small corpus in similar studies is easier to manage because researchers can thoroughly investigate the dataset and obtain detailed information about the subject in question, particularly in terms of the use of common rhetorical patterns and different linguistic elements in context. Based on these givens, it is assumed that a corpus of 60 introductions (58,538 words) of PhD theses, MDs, and RAs from the discipline of Applied Linguistics is within the standard range for our specialized corpus when investigating the RS and metadiscourse use. In addition, conducting a thorough analysis of introduction sections in academic research remains ultimately an essential aim to achieve since the corpus selected in the study is thought to be adequate to work with.

4.2.2. The Corpus of Research Articles

As this study examines RA introductions extracted from national and international journals, a description of how the journals and RAs were selected is presented in the following sections.

4.2.2.1. Selecting Journals

As a matter of fact, the process of selecting international journals from which to obtain RAs produced by NE authors was not an easy task. This is because a number of various methods need to be taken into consideration. To begin with, a number of quantitative variables, such as total citations, impact factor, cited half-life immediacy index and SCJR² were targeted in consideration of their relative reputation and supposedly reliability.

Second, two experts, Prof. Hilary Nesi and Dr. Benet Vincent, in the field of applied linguistics were consulted. Google engine was also used as another means to search for the most recent international journals with high impact factor. Surprisingly, more than 800 international journals issued in different countries and in different languages were found. As a first step, the procedure consisted in selecting only the international journals issued in Great Britain and recorded among the first fifty journals, as displayed in Table 4.2.

Table 4.2: *Preliminary Selection of International Journals and their SCJR*

Journal	SCJR
Applied Linguistics	3,941
Language Learning	2,882
Language Testing	2,419
Journal of Second Language Writing	2,168
Language Teaching	1,979
Language Teaching Research	1,663
System	1,422
Assessing Writing	1,304
English for Specific Purposes	1,207
Journal of English for Academic Purposes	1,196

SCJR: The SCImago Journal Rank (SCJR)

²The SCImago Journal Rank (SCJR) indicator is a measure of academic journals scientific influence that takes into consideration both the number of citations received and the prominence or prestige of the journals from which the citations are obtained. The SCJR of a journal is a numerical statistic that represents the average number of weighted citations received per document published in that journal over the previous three years within a given year. The greater the SJR, the more respected the journal.

Even though certain journals were chosen, their trustworthiness is still somewhat questionable because there aren't many or any studies that have reported this fact. In addition, most of these journals contain an unsatisfactory number of RAs that are relevant to the aims of our study. On the other hand, two British academics, Hilary Nesi and Benet Vincent, were consulted for their expertise in the disciplines of discourse analysis and genre analysis. Hilary Nesi is an English professor at Coventry University, Department of English and Languages, and a member of the English for Academic Purposes Journal editorial board (JEAP), and Benet Vincent is also a professor at the same university with an academic interest in corpus linguistics, English for Specific Purposes, and vocabulary learning. Both experts have a substantial number of published RAs in genre and corpus analysis.

The two experts mentioned and recommended three journals with a strong reputation in applied linguistics, particularly in language teaching. The suggested journals are Applied Linguistics, System, and Journal of English for Academic Purposes (see Table 4.3). All three journals have a significant impact on the published RAs in applied linguistics, particularly those dealing with issues in language teaching and learning.

Table 4.3: *The Impact factor and SCJR of the International Journals Selected for the Current Study*

Journal	Impact-factor	SCJR
System	3,167	1,422
Journal of English for Academic Purposes	2,171	1,196
Applied Linguistics	5,741	3,941

In collecting the RAs written in the field of applied linguistics by Algerian EFL learners, we followed a number of steps. First, we consulted the list of journals in the ASJP database, looking for which of these journals were more related to the field of applied linguistics. Unexpectedly, I found more than 620 journals in the ASJP database. After that, I looked for the most cited journals. Eventually, 100 journals were found to be the most cited ones in the database. Second, I selected the journals relevant to the applied linguistic field, leaving out those with unrelated titles, such as economics, law, psychology, and journals of Arabic language studies. Of the one hundred journals, only seven were selected (see Table 4.4). It should be noted that even though the selected journals are interdisciplinary and contain RAs in three languages (Arabic, French, and English), they contain RAs linked to applied linguistics and EFL.

Table 4.4: *Titles of the Algerian journals identified as a First Step in Journal Selection*

Journal	University
Revue des Sciences Humaines	Mentouri Univ, Constantine 1
Traduction et Langues	Mohamed Ben Ahmed Univ, Oran 2
Review of Human Sciences	Mohamed Khider Univ, Biskra
Social and Human Sciences Review	El Hadj Lakhdar Univ, Batna 1
The Social and Human Sciences Review	Larbi Tebessi Univ, Tébessa
Revue des Sciences Humaines	Larbi Ben Mhidi Univ, Oum El Bouaghi
Journal El-Bahith in Human and Social Sciences	Kasdi Merbah Univ, Ouargla

With the purpose of restricting the number of journals, it was decided to consider some factors such as the affiliation of the journal, the factor number and the number of articles, in order to proceed to the examination of the articles. In proceeding to the selection of the journals, we decided to work on three reputable journals (Revue des Science Humaines, Social and Human Sciences Review and Social Sciences Journal) publishing RAs in applied linguistics to form the Algerian RA corpus.

4.2.2.2. Selection of the Research Articles

With regard to the RAs authored by NE writers, the study employed 15 RAs obtained from the previously mentioned journals, including Applied Linguistics, System, and Journal of English for Academic Purposes. The 15 RAs in English as an L1 include seven articles from the English for Specific Purposes Journal, seven from System Journal, and one from Applied Linguistic Journal. The selection of these articles was done following certain criteria, including the discipline, topic, and format (IMRD). Since this research aims to investigate and compare the RS and metadiscourse use in RA introductions of Algerian writers and NE authors, RAs authored by NE writers are used as a reference corpus.

To create a corpus of Algerian RAs, 15 RAs written by Algerian learners of English as a foreign language were selected from three Algerian journals (see Table 4.5). Five RAs belong to the Journal of Humanities issued from Mentouri University in Constantine, five RAs from the Human and Social Sciences Journal from Hadj Lakhdar University, Batna2, and five RAs from Social Sciences Journal issued from Ferhat Abbas University, Setif. All these 15 RAs were selected according to the previously mentioned criteria (see section 4.2).

Table 4.5: *Algerian Scientific Journals Selected for the Current Study*

Journal	University	Source
The Journal of Humanities	Mentouri University, Constantine 1	www.asjp.cerist.dz/en/presentationRevue/39
Human and Social Sciences Journal	Hadj Lakhdar University, Batna 2	www.asjp.cerist.dz/en/presentationRevue/97
Social Sciences Journal	Ferhat Abbas University, Setif	www.asjp.cerist.dz/en/presentationRevue/4

4.2.3. The Corpus of PhD Theses and Master's Dissertations

The sub-corpus of PhD theses and MDs include theses and dissertations written by Algerian learners of English as a foreign language. In fact, there are more than 48 universities in Algeria that teach English as a foreign language as a subject. Yet, it was decided to collect the corpus to study from only three universities, namely the University of Mentouri (Constantine 1), the University of Abou Bakr Belkaid (Tlemcen), and the University of KasdiMerbah (Ouargla). The decision was motivated by a number of reasons. Firstly, these universities are ranked at both the national and international levels among the first and most popular universities under the supervision of the non-governmental organization labeled the UniRank Organization and Webometrics. Secondly, it was found relatively hard to collect the required number of theses (PhD and MDs) from the other remaining Algerian universities since the PhD theses, in particular, were found not only insufficient in number but also unfit for the selection criteria of the study, including the topics and the dates of submission. In addition to that, getting access to an online database of Algerian universities was very difficult because the library's online database is poorly organised. To prevent getting an excessive number of theses within a single subject area and to ensure adequate data for corpus creation, the PhD theses and master's dissertations were selected from these subject areas (writing, vocabulary, and reading). The following section discusses the criteria followed in collecting these academic writings.

4.2.4. Criteria for Selecting the Academic Writings

In selecting specialized corpora for genre analysis, Connor, Upton, and Kanoksilapatham (2007) listed a number of parameters that should be taken into consideration. These include the compilation's specific purpose (e.g., to investigate specific lexical, discursive, or rhetorical elements), participants (e.g., the reader or writer role),

communicative purpose (e.g., instruct, advertise), corpus size (entire corpus, sub-corpus, or small-scale corpus), genre (e.g., RAs, textbooks), subject matter/topic (e.g., applied linguistics/elicitation), and English variety (e.g., standard or non-standard) It should be noted that most of these parameters were followed in this study.

The first parameter mentioned in Connor et al. (2007) is the purpose; in our study, the specific purpose of selecting a specialized corpus is to examine and compare the RS (moves and steps) as well as the use of metadiscourse in academic writings written by Algerian learners of EFL and NE writers. The other parameters for corpus selection are to be discussed in the coming sub-sections.

4.2.4.1. Discipline

The academic writing introductions that constitute the corpus belong to the discipline of applied linguistics and more specifically to linguistics and language teaching. The choice to collect the data belonging to one discipline is essentially motivated by a number of reasons. First, analysts and applied linguists unanimously agree that a discipline is an important variable in genre studies (Hyland, 2004, 2005, 2008; Kwan, 2005; Samraj, 2002, 2008); and therefore, working on a single discipline helps the researcher control some variables that may affect the results of the study. Importantly, it should be noted that in genre studies, genre analysts have brought to light a strong relationship between the discipline and genre. Clearly, a discipline affects to some extent not only the way writers organise their arguments in texts but also the way writers use metadiscourse devices. Hyland (2004), for instance, found some variation in the use of metadiscourse between soft and hard disciplines.

The discipline as a variable therefore leads the writer to make discipline-related linguistic choices to make their texts persuasive. In this context, Hyland (2008) argued that “writers must recognize and make choices from the rhetorical options available in their fields to appeal to readers from within the boundaries of their disciplines” (p. 4). In terms of the RS, Samraj (2002) found a generic variation in her study, which examined two related disciplines: wildlife behavior and conservation biology. In the discipline of wildlife behavior, according to Samraj (2002), writers are inclined to employ epistemic statements in all three CARS moves. In contrast, writers in conservation biology tend to justify the research in terms of real-world matters, a rhetorical tendency referred to as promotionalism.

The second reason for choosing the discipline of applied linguistics is associated with the researcher's knowledge and experiences. It is a common practice in genre studies that genre analysts choose an area of study they are much familiar with. Interestingly, the demarcation of moves and steps in texts as well as the identification of metadiscourse devices require the researcher to be familiar with not only the content but also the structure of particular genres.

For instance, it is challenging for an applied linguist to analyze a biology text without the help of a biologist. In light of this, the researcher determines that it would be more beneficial to focus on applied linguistic texts as I am a linguist and an EFL student.

4.2.4.2. Date of Submission

Among the other criteria for selecting the corpus, the date of publication remains an important factor in that it may influence the RS and the use of metadiscourse devices in academic works. Other criteria for selecting the corpus ought to be considered since they also may affect the RS and the metadiscourse. Previous genre studies (Atkinson, 1999; Bawarshi and Reiff, 2010; Bazerman, 1988; Swales, 2004) have shown that, while highly structured and conventionalized, genres are adaptable throughout time. Bazerman (1988), for instance, traced RAs in the field of psychology from the late 1800s to the mid-1960s. He comes to the conclusion that the RA evolved over time from philosophical essays to experimental reports. Based on these facts, only academic writings issued between 2013 and 2020 were selected with the expectation that they would reflect the current practices of the participants in the present study. Table 4.6 exhibits the academic writings with the date of submission.

Table 4.6: *Date of Publication of the Selected Academic Writings*

Year of Publication	APhdTI	AMDI	ARAI	NSRA	Total
2013	0	0	0	4	4
2014	0	0	1	0	1
2015	0	0	1	4	5
2016	4	0	2	0	6
2017	3	0	5	1	9
2018	5	2	5	2	14
2019	2	9	0	2	13
2020	1	4	1	2	8
Total	15	15	15	15	60

4.2.4.3. Format and Type

Considered as additional criteria, the concepts of the overall structure and the type of academic writing are central to the selection of the corpus. With regard to the overall structure, only academic writings that follow the ILrMRD format are selected. The format of the latter stands for introduction, literature review, method, result, and discussion (cf. chapter 3 for more explanation). Many issues arose during the selection of the RAs. One of them was that in some RAs, the introduction and the literature review were written as one inseparable section. This type of RAs were purposefully left out, focusing only on those where the introduction is distinct from the literature review section. The type of academic writing is another criterion set in the study, where only experimental academic writings, particularly RAs, were selected. On the other hand, works such as reviews of the literature and theoretical RAs are simply excluded. The reason behind this is twofold. The first reason lies in the fact that experimental RAs share a predictable organization and follow a common approach (Crookes, 1986; Swales, 2004). The second reason rests on the fact that experimental RAs are more common than other types, which makes the selection process easier. In addition to that, experimental RAs usually have separate sections where clear boundaries may be found, for instance, between the introduction and the literature review sections, a fact that can make collecting the introductions easier.

4.2.4.4. Other Criteria for Corpus Selection

The topic of the academic writing is also another factor that should be taken into consideration. To well match all the academic writings, we selected only the texts that deal with specific topics such as writing, reading, and vocabulary teaching. The criterion of limiting oneself to specific topics has posed a hardship in the selection process, particularly when collecting RAs authored by NE writers. Collecting a corpus of RA authored by British writers in a limited period as set by our study (2013–2020) in only three journals was not an easy task. Most of the articles in these journals were written by two or more authors; one or two of this pair, however, is usually non-native speakers of English. The writer affiliation should also be taken into consideration in order to control the variables of language background and cultural variety, which may affect writing conventions, rhetorical organization, and the use of metadiscourse in NE writers' texts. As far as NE writers are concerned, we decided to work only on RAs written exclusively by British authors; hence, texts written by authors with other varieties of English, such as American, New Zealander,

and Australian authors, were dropped. So far, there has been a deliberate choice to consider the fact that English varieties might influence not only the way writers rhetorically structure their discourses but also when using metadiscourse devices to organise and interact with their potential readers. What is known about such facts comes from Adel (2008), who has attempted to analyze argumentative essays written by British, American, and Swedish learners and found considerable differences not only between British and Swedish learners but also between British and American learners as well. The differences were prevalent in terms of the frequency of occurrence of metadiscourse across the corpus and even the functions of metadiscourse. In the context of move analysis, Jin (2016) explored the move-step structure and metatexts in thesis introductions and literature reviews in applied linguistics written in America, New Zealand, and China.

The study exhibited considerable differences in all moves and metatexts in terms of length and realization of moves at the step level. These studies and others attested to the influence of English varieties on the ways writers organise their academic works and we found it reasonably justified to choose to work only on British writers' RAs. With reference to the Algerian sub-corpus, only the academic writings of the writers that had been educated and graduated from Algerian universities were selected, increasing the likelihood that the Algerian writers are foreign language learners of English. As it was mentioned earlier, Algerian RAs were extracted from the Algerian scientific journal platform (ASJP), while PhD theses and MDs were selected from the Algerian universities' online database.

4.2.5. Corpus Creation

After the compilation of the corpus, the introduction sections of the academic writings were copied and pasted onto a separate file. In extracting the introductions from the academic writings, two reliable criteria were followed. Firstly, the introductions of the RAs (both Algerian and British RAs) were identified as the opening sections that come before the literature review section since the overall structure of the selected RAs corresponds basically to an introduction-literature review -Methodology-Results-Discussion (I-Lr-M-R-D) structure (Swales, 1990). As the 'Introduction' is usually a separate chapter headed as a general introduction in all the examined PhD theses and MDs, I extracted the whole introduction before the literature review chapter (Bunton, 1998; Kawase, 2015; Kwan, 2006). It was then decided to convert the entire corpus into "TXT" format, which contains 58538 words. This procedure helped the researcher analyze the texts in the corpus using the AntConc software.

4.2.6. Corpus Codification

After compiling all the texts of the four sub-corpora, the next step was to document, clean, and format the texts. First, each file has been labeled to reflect its writer's affiliation, its genre, and its sub-genre. Having adopted this procedure, all the academic writings that constitute each sub-corpus were codified in the form of a four- or five-letter acronym. The first letter stands for the author's nationality (A for Algerian writers, NS for native speakers of English). The second and third letters indicate the type (genre) of the academic writing (PhD for doctoral thesis, MD for master's dissertation, and RA for research article). The last letter indicates the sub-genre analyzed in the study (I for introduction). Clearly, English native speakers' RA introductions were referred to as NSRAI1, NSRAI2...NSRAI15 while Algerian RA introductions were coded as ARAI1, ARAI2...ARAI15. Algerian PhD theses and MD introductions have also been codified as APhDTI1, APhDTI2...APDThI15; for doctoral theses introductions, and AMDI1, AMDI2 ... AMDI15 for master's dissertation introductions. The codification of the academic writings is presented in Table 4.7.

Table 4.7: *Codes of the Academic writings*

Code	Academic writing
APhDTI	Algerian PhD thesis introductions
AMDI	Algerian Master's dissertation introductions
ARAI	Algerian research article introductions
NSRAI	Native speaker research article introductions.

4.2.7. Corpus Description

As mentioned in section 4.2.2.2, the corpus of the study consists of 60 introductions of RAs (written by Algerian and NE writers) and PhD theses and MDs (written by Algerian EFL learners). The corpus consists of 58538 words. Table 4.8 demonstrates the size and the number of words in each sub-corpus. The PhD sub-corpus consists of 31142 words, with an average length of 2076 words in each introduction. The MD sub-corpus includes 12890 tokens with an average of 859 words. The sub-corpus of RAs written by Algerian writers consists of 5976 words, while the NE sub-corpus includes 8530 words, with an average of 398 and 569 words in each text, respectively.

Table 4.8:*Number of Texts and Words in the Four Sub-Corpus*

	APhDTI	AMDI	ARAI	NSRAI	Total
Number of texts	15	15	15	15	60
Number of words	31142	12890	5976	8530	58538
Avg.length	2 076	859	398	569	-

Table 4.8 shows that the four sub-corpus are unequal in terms of the number of words in each sub-corpus. The PhD sub-corpus (31142 words) includes nearly twice the size of MD sub-corpus (12890 words). In addition to that, the two sub-corpus appear also too large in comparison with ARAI sub-corpus (5976 words) and NSRAI sub-corpus (8530). This variation might go back to the nature of the genre itself. In PhD theses and MDs, the introduction sections are usually written as separate chapters in these academic works. In the sub-corpus of the PhD theses, the number of pages ranges from three to sixteen pages with the average of 7.4 pages in each introduction while the average number of pages in MDs introductions is 3.23 (two to nine pages). In contrast, however, the introduction in RAs is usually written in one page.

4.3. Analytical Models

In this section, the analytical models that inform the analysis of the RS and the use of metadiscourse devices in academic writing introductions are highlighted. The analytical frameworks include the CARS model introduced by Swales (2004). In describing the CARS model, reference is made to the Swales (1990) model since it is the base from which he developed the revised CARS model in 2004. Since Swales' (2004) model is developed to analyze RA introductions, other models for analyzing PhD theses introductions (Bunton, 2005) and MDs (Samraj, 2008) are highlighted in the study to be used in the interpretation of the results. The second model that has been employed in this thesis to identify and analyze the metadiscourse devices is Hyland's (2005) model, which is to be discussed in the last part of this section.

4.3.1. The Rhetorical Structure Model

The decision to use the CARS model is motivated by many factors. First, it is believed that this model is not just the first to be put to work but also the most powerful framework in genre studies. Considering this aspect, Flowerdew (2005) came to assert that the CARS model is "seminal in shaping genre theory in English for specific purposes" (p. 322), while Anthony

(1999) claimed that the CARS model is "one of the strongest descriptions of text structure to date." (p. 39). Second, the CARS model witnessed a series of modifications and revisions that made the model applicable and straightforward. Indeed, it was introduced by Swales in 1981, revised in 1990, and then reintroduced in 2004 after having undergone a number of criticisms. The third reason for using this model goes back to its prevalence. It has been used in countless influential studies, which in turn, brought forth valuable findings and insights in the study of genre analysis, especially in the area of RA writing (Adnan, 2008; Ahmad, 1997; Al-Qahtani, 2006; Anthony, 1999; Flowerdew, 2005; Kanoksilapatham, 2005; Mirahayuni, 2002; Najar, 1987; Pho, 2008; Rubio, 2011; Samraj, 2005; Shehzad, 2010; Swales and Posteguillo, 1999). In the following section, a description of the CARS model is provided.

4.3.1.1. Swales' (1990) Model

Genre analysis studies began with the seminal research carried out by Swales in 1981. Motivated by the need to help non-native learners to read, write, and publish academic RAs, Swales (1981) analyzed the RS of 48 RA introductions taken from different disciplines, including chemical engineering, neurology, radiology, physics, electronics, educational research, educational psychology, management, and language. After the analysis, Swales concluded that writers of RAs organise their introductions into four main rhetorical actions. Based on these givens, Swales (1981) developed a rhetorical framework claiming to be representative of all RA introductions. The framework is displayed in Table 4.9.

Table 4.9: *Swales' (1981) First Model of Research Articles Introductions*

Moves	Steps
Move 1: Establishing the Field	Showing Centrality of the Topic Stating Current Knowledge of the Topic Ascribing Key Characteristics
Move 2: Summarising Previous Research	Strong Author Orientation Weak Author Orientation Subject Orientation
Move 3: Preparing for Present Research	Indicating a Gap Question Raising Extending a Finding
Move 4: Introducing a Present Research	Giving the Purpose Describing Present Research

Swales' (1981) model for the analysis of RA introductions did not last for a long time. In fact, it received a number of criticisms. One of these criticisms comes from Crookes (1984), who found that the rhetorical moves in this model do not occur in a single progression but occur in cycles, sequenced in different recursive ways. Other researchers (Crookes, 1984; Hopkins, 1985; and Cooper, 1985, as cited in Bunton, 2002) have also criticized Swales' (1981) model. Relying on their studies on RA introductions, the researchers held that RA introductions do not often follow the four-move pattern since some moves, particularly moves 2 and 3, were found absent in the introductions they analyzed (Bunton, 2002). Accordingly, Crookes (1986) declared that certain modifications might be needed to fit different disciplines; he went on to admit that social sciences require longer introductions than hard sciences. Therefore, longer introductions, according to him, require a degree of cycling between Move 2 and Move 3 as a means to provide the reader with sufficient background and more convincing arguments for the significance of the place the study would occupy.

In writing RA introductions, authors, according to Swales (1990), typically begin by offering the readers a rationale for the research, demonstrating its significance, and locating the research as a part of an active, well-established area of study. These rhetorical steps help realize move one (move 1: establishing *a territory*). The second move (move 2: *Establishing a niche*) is realized by establishing a niche for their research by demonstrating that the previous research is relatively incomplete or has many limitations and weaknesses. In the last move (move 3: *occupying a niche*), the writers of the RA introductions assert they will address the problem identified in move 2. Therefore, move 2 is a bridge between move 1 and move 3. In addition to the three obligatory moves, Swales ascribed to each move a number of steps that help writers achieve the rhetorical aims of each move, together; they will help the writer achieve the overall communicative function of the RA introductions (Swales, 1990, p. 80).

In describing the moves' components, Swales (1990) argued that the first move consists of three main steps: *claiming centrality* (step 1); *making topic generalizations* (step 2); and *reviewing items of previous research* (step 3). In the first step, writers assert the importance of their research; the second step shows how appropriate and interesting the research is; and the third step involves the introduction of previous research related to the target research by stating "what has been found" and "who has found it" (Swales, 1990, p. 148). The second move in the CARS model includes only one step, which is divided into four sub-steps. In the first step, *counter-claiming* (step 1a), writers take an opposite stance towards the previous research. The second step, *indicating a gap* (Step 1b), helps writers point out the insufficiency

of the previous research on a particular topic. In the third step, *question-raising* (step-1d), the writers pose a problem in the existing study, while in the last step, *continuing a tradition* (step-1c), the writers expand upon an area of earlier research. The final move (Move 3) in the CARS model consists of three steps. In turn, the first step is divided into two sub-steps in which writers either propose the reason for their research, outlining purposes (step 1a), or present specific features of their research, announcing current research (step 1b). Step 2 (*announcing principal findings*) and Step 3 (*indicating RA structure*), which are both optional, are for explaining major findings and presenting how the research paper will proceed, respectively. The CARS model is well represented in the following Table:

Table 4.10:Swales' (1990) CARS Model for Research Article Introductions

Move 1	Establishing a Territory
Step-1	Claiming centrality and /or
Step-2	Making topic generalization and /or
Step-3	Reviewing items of previous research
Move 2	Establishing a Niche
Step 1A	Counter-claiming or
Step 1B	Indicating a gap or
Step 1C	Question-raising
Step 1D	Continuing a tradition
Move 3	Occupying the Niche
Step 1A	Outlining purposes or
Step 1B	Announcing present research
Step 2	Announcing principal findings
Step 3	Indicating research article structure

The suitability of the CARS model, however, was challenged by other studies, particularly interdisciplinary studies (Anthony, 1997; Holmes, 1997; Samraj, 2002). These studies highlighted that discipline variation is quite common, and thus deviation from the CARS model needs to be accounted for. Anthony (1999), for instance, looked at the discipline of engineering using Swales' (1990) model and claimed that the framework neglects other sections that constantly re-occur in RAs, such as the definition of terms, illustrative examples of difficult concepts, and evaluation of the target research. According to him, writers of engineering RA introductions use an extensive review of background literature, many definitions and examples, and an evaluation of the research in terms of its applications and novelty. Likewise, Samraj (2002) identified additional, regularly occurring sub-moves that require the CARS model to be modified based on her examination of RA introductions from

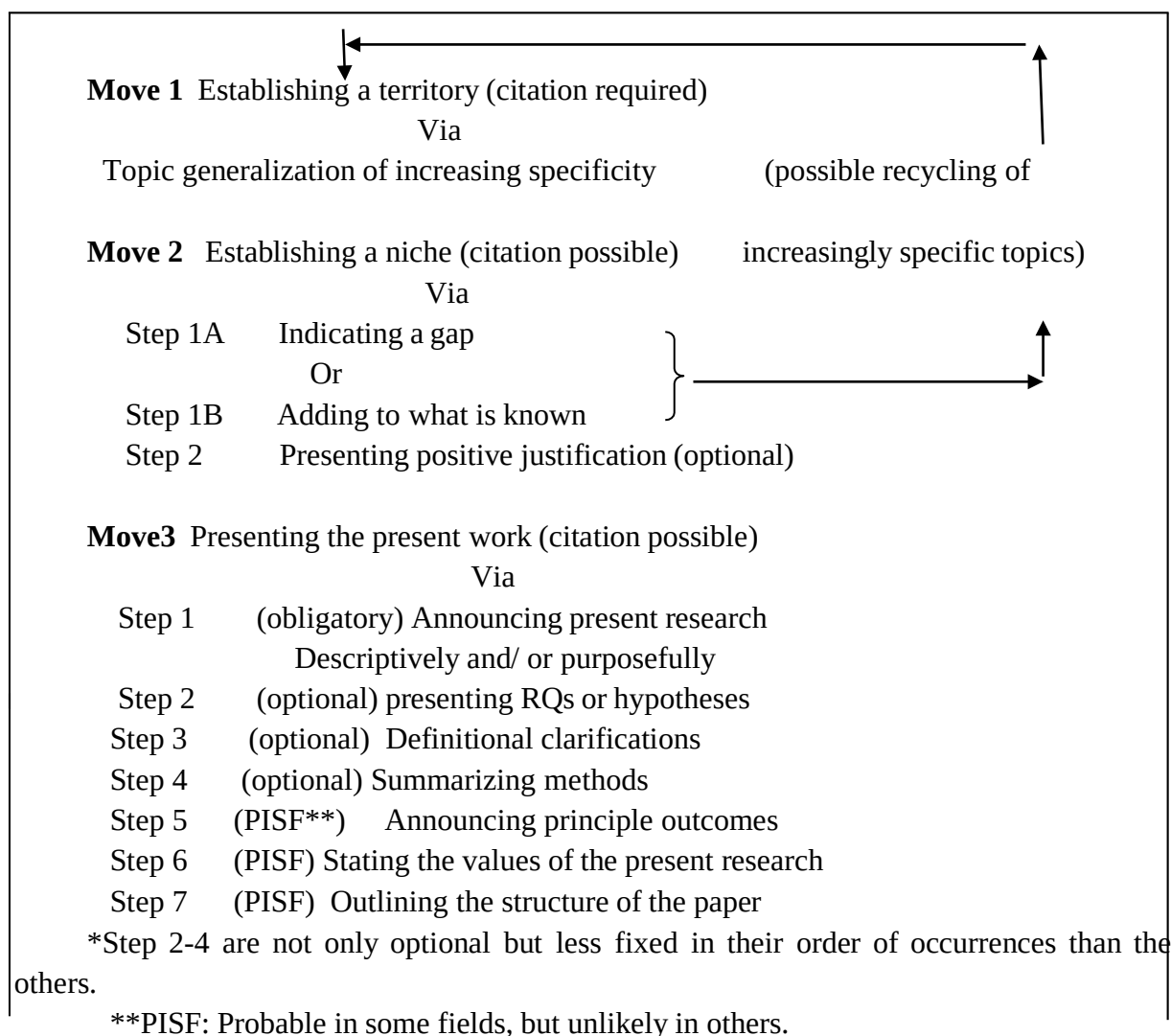
the fields of wildlife behavior and conservation biology. These studies and others evoked new modifications and revisions for the CARS model. Subsequently, Swales reconsidered his CARS introductory framework in terms of the linearity of moves and sub-moves and published a new version in 2004.

4.3.1.2. Swales' (2004) Model

Taking into account the shortcomings and flaws of the CARS (1990) model, Swales (2004) modified his model slightly but did not alter its fundamental structure. The CARS model was modified by removing, adding, and/or reducing a number of rhetorical phases in response to the flaws pointed out by some of the authors above. First, the first step and the second step of move 1 were reduced to a single step. In other words, *claiming centrality* and *making topic generalizations* became one step under the title of *topic generalization of increasing specificity* (Swales, 2004, p. 230). Second, the four steps of move two—*counter-claiming*, *indicating a gap*, *question-raising*, and *continuing a tradition*—were reduced to two steps, namely, step 1a, *indicating a gap*, and step 1b, *adding to what is known*. In addition to that, a new optional step was added to move two, labeled "step 3," *presenting positive justification*. Finally, move three, *occupying the niche* or *The present work* in the 2004 CARS model was strengthened by seven possible steps in contrast to the three originally envisioned in the 1990 model. This move, therefore, includes one obligatory step, namely, *announcing present research descriptively and/or purposefully*, which conceptually agglutinates steps 1a and 1b from the 1990 model (*outlining purposes* and *announcing present research*).

Moreover, three optional steps, which were absent in the 1990 model, were added. Steps 2 and 3 consist of presenting research questions or hypotheses, clarifying definitions, and summarizing methods. Additionally, the second step, *announcing principal findings*, in the 1990 Cars model becomes the fifth step, *announcing principal outcomes*, in the 2004 CARS model, while step 3, *Indicating RA structure*, is substituted by step 7, *Outlining the structure of the paper*, in the 2004 CARS model. Another important modification of the 2004 CARS model is the reconsideration of the third step in Move 1, namely *reviewing the previous research*. According to Swales (2004), this step is no longer limited to a single move but can occur throughout the entire RA. Therefore, the 2004 CARS model (see Table 4.11) attempts to accommodate all the new steps identified and to overcome the problems encountered in the application of some steps within moves 1 and 2 in some disciplinary studies.

Table 4.11: *The CARS Model (Swales, 2004)*



Although Swales' (2004) model appears to be more comprehensible and elaborate, recent studies in genre analysis employ the 1990 model (for example, Hirano, 2009; Ozturk, 2007; Arvey and Tarko, 2004; and Fakhri, 2009). Rubio (2011) provided three main reasons for this tendency to use the 1990 model rather than the 2004 model. He stated that this tendency might be explained by either the strong research tradition developed around the 1990 model, the significant findings resulting from the application of this model, or the fact that the 2004 model yields, to a great extent, the overall underlying structure of the 1990 model and is primarily concerned with outlining possible additional steps within the moves rather than radically modifying them. Therefore, researchers are faced with the dilemma of using either the 1990 version or the 2004 version. In line with Rubio (2011), I believe that the 1990 version is not suitable to analyze the introductions of academic works, particularly in

this study where three genres are investigated. One reason for this is that the 1990 version results from the analysis of RA introductions.

Therefore, some rhetorical steps (like limitations, Storytelling and outlining the structure of the study) in PhD thesis and MD introductions cannot be covered through the use of this model. Another reason might be that the use of the 1990 model will fail to take on board the substantial improvements made to the 2004 model (Rubio, 2011). On the other hand, the 2004 version would also fail, as I believe, in identifying all the rhetorical strategies in the three genres examined. This is because, as we have mentioned earlier, Swales (2004) has reduced the steps of move 1 and move 2, which makes the identification of moves, particularly move 1, too simplistic. However, the 2004 model remains, as I believe, the most suitable model for analyzing academic writing introductions. Based on this, in the current study we rely on the 2004 version with some modifications to Move 1 for the analysis of introductions in RA, MDs, and PhD theses.

Table 4.12:*The Adapted CARS Model (Swales, 2004)*

Move 1 Establishing a territory		
Step 1	Claiming centrality and /or	 (Possible recycling of increasingly specific topics)
Step 2	Making topic generalization and /or	
Step 3	Reviewing items of previous research	
Move 2 Establishing a niche (Citation possible)		
	Via	 (Citation possible)
Step 1A	Indicating a gap	
	Or	
Step 1B	Adding to what is known	
Step 1C	Indicating a gap in the real world	
Step 2	Presenting positive justification (optional)	
Move 3 Presenting the present work (citation possible)		
	Via	
Step 1	(obligatory) Announcing present research descriptively and/ or purposefully	
Step 2	(optional) presenting RQs or hypotheses	
Step 3	(optional) Definitional clarifications	
Step 4	(optional) Summarizing methods	

Step 5	(PISF**) Announcing principle outcomes
Step 6	(PISF) Stating the values of the present research
Step 7	(PISF) Outlining the structure of the paper

*Step 2-4 are not only optional but less fixed in their order of occurrences than the others.

**PISF: Probable in some fields, but unlikely in others

4.3.2. Metadiscourse Model (Hyland, 2005)

In this study, Hyland's (2005) taxonomy is used as an instrument to analyze the metadiscourse devices employed in the corpus of academic writing introductions. This decision is based on a number of reasons. First, this model overcomes the conceptual weaknesses in the understanding of metadiscourse, particularly those of the external and internal boundaries of metadiscourse (Hyland, 2005) (chapter 1, section 1.3.4). Second, this model has not only been characterized as comprehensive in terms of the combination of both interactive and interactional metadiscourse elements but also as a clear and dynamic model (Cao and Hu, 2014; Hyland, 2017). Third, it has been widely adopted in most, if not all, previous studies on metadiscourse (Akoto, 2021; Gong, Liu, and Cao, 2021; Kawase, 2015; Ozdemir and Longo, 2014, to name a few). The wide use of this model led Adel (2018) to characterize it as the 'dominant paradigm' (p. 780). The wide adoption of Hyland's (2005) model by most of the previous metadiscourse studies helps us compare our findings with those studies. Another reason is related to research practices.

In other words, the Hyland's (2005) model is applicable and straightforward, providing sufficient definitions and examples of each category. Interestingly, clear borders between categories are highlighted, and more than five hundred examples are provided in Hyland's (2005) taxonomy, which helps genre analysts and researchers easily apply the model in analyzing metadiscourse devices. Bringing these together, the Hyland's (2005) model is not only a modern version of the metadiscourse classifications compared to other models presented by other researchers (see chapter three), but it also offers greater clarification and separation of the metadiscourse form variations. For these reasons, this study draws on Hyland's (2005) taxonomy for the identification and analysis of metadiscourse devices.

Although Hyland's (2005) model is characterized as being comprehensible and making clear boundaries between metadiscourse items, we added some real examples and clarifications, drawing on some previous studies on metadiscourse devices. Therefore, other

specific studies of metadiscourse emphasizing both types of metadiscourse or each major category of Hyland's (2005) model are additionally included to form a functional extension of his framework for this analysis. These studies include those by Fu and Hyland (2014), Hu and Cao (2014), Hyland (2005), Hyland and Zou (2000), and Vold (2006).

4.3.2.1. Interactive Metadiscourse

This set of metadiscourse features manages information flow primarily through creating cohesion and logical coherence in the discourse, thus directing and guiding readers through texts. Therefore, interactive metadiscourse markers are like explicit connectives containing objective references to any related elements of the discourse. This type of metadiscourse is used with the aim of constructing and organizing a text. The interactive category, according to Hyland (2005), consists of five sub-categories: transitions, frame markers, endophoric markers, evidentials, and code glosses.

–**Transition markers:** This sub-category includes mainly conjunctions (subordinating and coordinating conjunctions) and adverbial phrases that help the writer organise his ideas in the discourse and the reader interpret pragmatically the relationships between the arguments presented by the writer. The linguistic elements in this subcategory are used to indicate additive, contrastive, and consequential steps in the discourse, as opposed to the external world. This category is divided into three sub-categories, namely *addition markers*, *comparison and contrast markers*, and *consequence (inference) markers* (Hyland, 2005; Hu and Cao, 2014).

- **Additive markers:** such as *and*, *furthermore*, *moreover*, *by the way*, add elements to an argument.

Example: Their writers, **moreover**, are normally studying part time and are looking forward to returning to their professional workplaces ... (Cao & Hu, 2014, p. 19).

- **Comparison and contrast markers:** such as *similarly*, *equally*, *in the same way*, *in contrast*, *however*, *but*, *on the contrary*, *on the other hand...etc.* These lexical items mark argument either as similar or different.

Example: Some of the remaining variance in the assessment of oral performance might indeed be explained by accented realization of phonemes. **However**, systematic individual

differences among raters ... contribute significant explanatory power (Cao & Hu, 2014, p. 22).

- **Consequence (inference) markers:** express relations of cause and effect between sentences or paragraphs.

*Example: **Consequently**, it is not possible to determine if...the findings can be attributed to the effect of one or more of the feedback variables (Hu &Cao, 2014, p. 23).*

–**Frame markers:** are the linguistic features that may be used to sequence parts of the text or to order an argument internally, frequently acting as more explicit additive relationships (*first, then, at the same time, next*). They can mark text stages specifically (*to summarize, in short, by way of introduction*). They state the objectives of the discourse (*in this case, my intention is, as the paper indicates, to convince, and there are many reasons for this*). Therefore, elements in this group include framing details about discourse elements. According to Hu and Cao (2014), Hyland (2005), and Hyland and Zou (2020), this metadiscourse category can be classified into four subcategories as demonstrated below:

- **Sequencers:** such as *first, second, third...etc.* These linguistic features are employed to organise a text into sequences.

*Example: Several interesting results are illustrated in this knowledge decomposition analysis. **First**, it is clear that some learning takes place at the knowledge component level (Cao& Hu,2014, p. 23).*

- **Topicalisers:** such as *in regard to, concerning...etc.* These items are used to signal a shift from one topic to another.

*Example: **With regard to** relational factors that can contribute to conflict, supervisors mentioned the evaluative nature of supervision and concomitant power differential as critical factors (Hu & Cao, 2014, p. 23).*

- **Discourse labels:** are used to mark the stages of textual development. This category includes items such as *in summary, thus far...etc*

Example: In summary, anhedonic depressive tendencies negatively predicted other-directed violence and positively predicted self-directed violence both in men and in women (Hu & Cao, 2014, p. 23).

• **Announcers:** such as *aim to, seek to ...etc.* These items are used by writers to indicate their discursive aims.

Example: I will now refer to microgenesis instances where participants co-create learning affordances which are not based on corrective feedback (Hu & Cao, 2014, p. 23).

–**Endophoric Markers:** these linguistic elements are used mainly to refer to other parts of the text. Writers use these elements to help the readers to recover the writes’ meaning and help them understand the discourse. *See Figure 2, refer to the next section, as noted above* are examples of Endophoric markers.

• **Linear references:** such as *in the following paragraphs, as presented in the previous section.* These linguistic elements help to set a relationship between different sections of the text.

Example: In the following subsection, we consider a variety of possibilities and whether they might be beneficial as well ... (Hu and Cao, 2014, p. 24).

• **Non-linear references:** refer to additional textual materials such as tables, figures, stand-alone examples or extracts. These items link what the writer is talking about with extra textual material located somewhere in the text in order to make the intended meaning clear for the reader. This type of metadiscourse includes items such as *summarized in Table 1, see Excerpt 1, for an example*

Example: The last column of Table 2 shows the test for the differences among ... (Hu and Cao, 2014, p. 24).

–**Evidentials:** refer to the source of information from other texts written in the same field by other scholars. According to Hyland (2005), evidentials guide the reader’s interpretation and establish an authorial command on the subject. Evidentials are on two types, the integral and non-integral citation (Swales, 1990).

- **Integral citations:** This type of citation incorporates a cited source as part of the reporting sentence. In other words, the name of the cited author appears at the beginning of the sentence, so the writer can give more prominence to the cited author (Hyland, 2002).

Example: Hyland (2005) classified metadiscourse items into two categories

- **Non-integral citations:** the name of the cited author appears within parentheses or elsewhere demonstrated via a superscript number leading to a footnote, endnote or bibliography, so the writer can put more emphasis on the message (Hyland, 2002).

Example: metadiscourse can be classified into two broad categories (Hyland, 2005).

–**Code glosses:** The primary goal of these markers is to clarify the meaning of a sentence in a conversation. This can be achieved either by adding extra examples to the main sentence or by restating the sentence to make it clearer. Code glosses include items such as "for example," "such as," or "that is." This set of markers, according to Hyland (2007), supplies additional information by rephrasing, explaining, or elaborating what has been said to ensure the reader is able to recover the writer's intended meaning (p. 35). They are of two types: exemplifiers and reformulators.

- **Exemplifiers:** exemplification is a process of adding extra examples to the main argument to make it clear. Therefore, lexical items such as *for example*, *like*, *such as* are used to join examples to the main sentence.

*Example 1: Male students had various outbursts throughout the 2 weeks regarding the topic. Hieu, **for example**, could not believe that he had to learn these "embarrassing things" (Hu & Cao, 2014, p. 22).*

Example 2: ... students find reading in English to be difficult and that self-selected reading did not seem as valuable as other activities (e.g., required school work, TOEFL study) (Hyland, 2007, p. 17).

- **Reformulators:** reformulation is a process whereby the main sentence is restated to make the meaning clear for the reader. This process can be achieved through the use of lexical items such as *that is*, *or*, *in other words*, *to put it in another way*...etc.

*Example: Furthermore, as these researchers pointed out, the tasks used for examining the formula effect, **that is**, measuring the fluency and accuracy ...*(Hu & Cao, 2014, p. 22).

4.3.2.2. Interactional Category:

This category includes the linguistic elements that used by writers to establish relationships with potential readers and help writers to get readers involved in the text. The interactional category, according to Hyland (2005), consists of five sub-categories namely hedges, boosters, attitude markers, engagement markers and self-mentions.

–**Hedges:** They are the linguistic features that withhold the full commitment to a proposition, indicating that an argument is based on the researcher’s knowledge rather than certain facts. They play a remarkable role in helping writers avoid conveying direct or definite certainty about presented information. The manner in which they indicate that writers are not completely committed to the referential knowledge allows writers to modestly downplay their argument, allowing beliefs to be negotiated and promoting further analysis and discussion with readers for clearer answers to the topic (Hyland, 2005).Hu and Cao (2015) classify hedges into five categories, including epistemic modal verbs, lexical verbs, adjectives and adverbs, nouns, and expressions for marking qualification.Each sub-category is clarified by an example bellow:

- **Epistemic modal verbs:** such as **could** and **may** are used as helping verbs to indicate modality

*Example: Future investigations **could** also pursue more in-depth analysis of the performance among members of Group 3. (APL/QUAL4) (Hu & Cao, 2015).*

*Example: However, the study also **may** have practical implications, which we make cautiously because of the size of the sample. (EDU/QUAN20) (Hu & Cao, 2015).*

- **Lexical verbs:** such as *appear, claim* and *suggest*. These verbs are considered as hedges since they soften or decrease the force of the messages conveyed.

Example: The results suggest that the degree of vocabulary coverage required depends on the degree of comprehension required (Hu & Cao, 2015).

- **Adjectives and adverbs:** such as *likely, possible* and *always*.

Example 1: Though under certain conditions it's self-beneficial for the less-developed region to behave strategically, it's socially inefficient because of loss in total production and allocative efficiency (Liu and Huang, 2017).

Example 2: The giant NCLDV viruses probably have an ancient evolutionary history, but they are among the newest things on the scene for virologists (Fu and Hyland, 2014).

• **Nouns:** this type of metadiscourse includes nouns such as *likelihood*, *possibility*...etc.

*Example: Quality-of-life data were missing at 1 or more time points in 19% of participants, and we cannot entirely exclude the **possibility** that differential loss of participants may have affected our results (Vold, 2006, p. 81).*

• **Expression for marking qualification:** Such as *to some extent*, *in general*

*Example: (1) This explains, **to some extent**, why young women would be less likely to study STEM subjects, but not why more advantaged young women seem to be more resilient to these effects. (Zou and Hyland, 2019, p. 12).*

–**Boosters:** According to Hyland (2005), boosters are the linguistic features which reflect the writers' certainty about the presented arguments, closing other opportunities for alternative interpretations.

• **Epistemic model verbs:** such as *must*, *will*.... These verbs are used to strengthen or amplify the force of utterances as boosters

*Example: Along this road, trainees **will** find that they are by turns excited, afraid, motivated, confused, inspired, and angry – and they will catalyze many of those same feelings in their family and friends (Hu & Cao, 2015).*

• **Lexical verbs:** such as *demonstrate*, *prove*, *show*...

*Example 1: The Chi-square analysis **showed** that there was no statistical effect of the prior belief on the selection of experiments (Hu & Cao, 2015, p. 18).*

*Example 2: This analysis **demonstrates** the importance of using age-appropriate norms lists in the study of WA stereotypy (Hyland and Jiang, 2018, p. 23).*

• **Adjectives and adverbs:** can usually be found among the expressive words which normally emphasize the scale of writers' commitment and thus intensify the propositional information.

Example: This brings us into conflict with Currie's account, for static images **surely** cannot trigger our capacity to recognize movement. If that were so, we would see the image as itself moving. With a few interesting exceptions we **obviously** do not see a static image as moving. Suppose, then, that we say that static images only depict instants. This too creates problems...and this seems **highly** dubious (Hyland, 2008, p. 18).

– **Attitude Markers:** These linguistic features reflect the writers' attitudes towards both the text and the reader. They uncover the writers' judgments and opinions based on their own affective perspectives or attitudes, which add to propositional information in a variety of ways, such as by conveying agreement, inquisitiveness, surprise, significance, frustration, and so forth. Hyland (2005) classified this type of metadiscourse into three sub-types. This includes attitude verbs (such as *agree, prefer, etc.*), adjectives (such as *preferred, shocked, essential, etc.*), and adverbs (such as *fortunately, hopefully, etc.*). Hu and Cao (2015) provide a more elaborate categorization of attitude markers; therefore, their categorization is adopted in the current study. Their categorization is presented below with extra examples taken from their study and other studies.

• **Deontic models:** such as *have to, should, must...*

Example 1: Furthermore, not only **should** instructors learn about their students, but they **must** also be cognizant of the meta- narratives circulating within their own professional groups and communities (Hu & Cao, 2015).

Example 2: Future research needs to explore these additional factors (Hu & Cao, 2015, p. 18).

• **Attitudinal adjectives:** such as *desirable, unfortunate, unexpected ...etc.*

Example: This was an **unexpected** result and provides **compelling** evidence for the importance of deltas based on their size alone (Hyland and Jiang, 2018, p. 22).

• **Affective adverbs:** such as *interestingly, surprisingly...etc.*

Example: Unfortunately, we did not hit on any winners (Zou and Hyland ,2019, p. 11).

• **Expressions conveying stance and evaluation:** such as *what is important, it is necessary...etc.*

Example 1: It is somewhat surprising that there was no significant relationship between total scores on career-sustaining behaviors and emotional exhaustion (Hu & Cao, 2015, p. 18).

Example 2: As expected, when reading in Spanish, the high-exposure group's kernel recall is significantly better than the low exposure group's recall (Hu & Cao, 2015, p. 18).

–**Self-mention markers:** This type of markers reflects the presence of the writer in the text, showing that the presented arguments belong to the writer himself rather than to other sources. According to Hyland (2008), the presence or absence of explicit author reference is a conscious choice by writers to adopt a particular stance and disciplinary-situated authorial identity. Based on Hu and Cao (2015), the self-mention marker includes *first person pronouns, possessive determiners, and third person pronouns*, as demonstrated below:

• **First person pronouns:** such as *I* and *we*

Example 1: In this subsection, I discuss two very subtle cases of ... (Hu & Cao, 2015, p. 18).

Example 2: We next examined whether there would be the expected sex differences in marital power (Hu & Cao, 2015, p. 18).

• **Possessive determiners:** Such as *our, my...etc*

Example: Drawing on our experiences and perceptions, we hope to articulate the value and importance of mainstreaming boundary-spanners to cultivate a more dynamic relationship between science and policy (Zou and Hyland, 2019, p. 18).

–**Engagement markers:** These devices are used explicitly to bring the reader into the text. Therefore, they are oriented towards the reader asking him to take part into the discourse. Engagement markers, according to Fu and Hyland (2014) and Hu and Cao (2015), include markers such as *directives, reader references, questions, appeals and references to shared knowledge and personal asides*.

• **Directives:** using imperatives such as *see, consider, note*, these items ask readers to behave or see events in a specific way.

Example 1: *Although a detailed exploration of these constraints is beyond the scope of this article, I do wish to offer a few considerations (also see Ashcraft, 2002, 2006) (Hu & Cao, 2015, p. 19).*

Example 2: *Pre-microgenesis activity normally entails organisational talk and an awareness... stage, leading to microgenesis affordance (see below) (Hu & Cao, 2015, p. 19).*

• **Reader references:** help the writer to construct a relationship with the reader. These markers also ask readers to be involved in the textual interaction. According to Fu and Hyland, this type of markers includes items such as *the inclusive we, you, your and our*

Example: *Living organisms were distinguished by the fact that they were spontaneous and unpredictable. If you saw something move without being obviously pushed or pulled, **you** could be pretty sure it was alive*(Fu and Hyland, 2014, p. 129).

• **Questions:** this type of metadiscourse includes both rhetorical and real questions asked to engage readers overtly (Hu and Cao, 2014). They usually occur at the very beginning of a text to both orient readers to the topic and to elicit their interest. Questions include items such as *is it necessary to distinguish?*

Example: *What do recently retired scientists do for six weeks on ...* (Fu and Hyland, 2014, p. 130).

• **Appeals or references to shared knowledge:** These are phrases and expressions used to place readers within a specific disciplinary understanding and to bring them into agreement with the claims of the writers. Writers use, for instance, this expression, *it is all too obvious that*, to state that a particular knowledge is shared between writers and readers.

• **Personal asides:** are usually the linguistic element used to interrupt the argument to provide a comment to what has been mentioned.

Example And - as I believe many TESOL professionals will readily acknowledge - *critical thinking has now begun to make its mark, particularly in the area of L2 composition* (Hyland, 2005, P. 152)

Table 4.13: *Model for Analysing the Use of Metadiscourse Devices in the Academic Writing Introductions (adapted from Hyland, 2005 and Hu and Cao, 2015)*

Type	Function and examples
Interactive	Help to guide readers through the text
Transitions	Express relations between main ideas or clauses
Additive	Such as : moreover, in addition, furthermore, also)
Comparison and contrast	Such as : similarly, in comparison, by contrast)
Inferential	Such as : therefore, consequently
Frame markers	Refer to discourse acts, sequences, or stages.
Sequencers	Such as: first, second
Topicalisers	Such as : in regard to , concerning
Discourse labels	Such as: in summary, thus far
Announcers	Such as : aim to , seek to
code glosses	Used to explain, add examples or restate the argument.
Exemplifiers	Such as : for example , such as
Reformulators	Such as : that is , in other words
Endophoric markers	Refer to other parts of texts.
Linear reference	Such as : in the following paragraphs, as presented the previous section
Non-linear reference	Such as :as summarized in Table 1, see excerpt 1
Evidentials	Present information from other texts.
Integral	Such as: Hyland(2005) states that..., according to x
Non – integral	Such as: (Hyland, 2005),(A and B,2019),(X,2020,p. 15)
Interactional	Involve readers in the texts and arguments
Hedges	Withhold full commitment to proposition
Epistemic Modal verbs	Such as: could, may
Lexical verbs	Such as: appear, claim
Adjectives and adverbs	Such as: plausible, probably
Nouns	Such as: likelihood, possibility
Linguistic expression for marking qualification	Such as: in general, to some extent
Boosters	Increase writer's degree of certainty regarding propositional content
Epistemic modal verbs	Such as: must
Lexical verbs	Such as: demonstrate, prove
Adjectives and adverbs	Such as: undisputed, undoubtedly
Nouns	Such as: fact, certainty
Emphatic expressions	Such as: without a doubt
Attitude markers	Used to convey writers' evaluative and affective stance toward propositions
Deontic modals	Such as: have to, should

Attitudinal adjectives	Such as: desirable, unfortunate
Affective adverbs	Such as : interestingly, surprisingly
Expressions conveying stance or evaluation	Such as: without a doubt
Self mentions	Explicitly indicate the write presence.
First person pronouns	Such as: we, I
Possessive determiners	Such as: our ,my
Third person nominal phrases	Such as: the present author, the researcher
Engagement markers	Help to bring readers to the discourse
Directives	Such as: recall ,suppose, should, ought to, it is important to remember
Reader reference	Such as: you, your
Questions	Such as: it is necessary to distinguish?
Appeals or references to shared knowledge	Such as: it is all obvious that
Personal asides	Such as: in my opinion, gave rise to...

4.4. The validation of Data Analysis Findings

4.4.1. Reliability of Move Identification

The analysis of the RS of texts according to genre analysis theory starts with the identification of moves. In theory, Swales (CARS models, 1999, 2004) established the boundaries for RA introductions. In practice; however, there are two problems arising while identifying the move and steps in texts. First, the identification of moves and steps in a given genre is a difficult task (Hyland, 2009). The reason behind this is that genre analysts do not make an explicit reference to the criteria they use in deciding where boundaries of moves and steps are to be drawn. Second, it has been characterized as being subjective since it relies on the researchers' intuition (Crookes, 1986, Paltridge, 1994).

To overcome the difficulty of defining moves and steps, genre analysts draw on the top-down approach, the bottom-up approach, or both of them. While in the bottom-up approach, the identification of moves and steps relies solely on the linguistic features (lexico-grammatical features), in the top-down approach researchers rely on the content and function in identifying moves and steps (Pho, 2008). Some researchers (for example, Nwogu, 1997) used linguistic resources to define the boundaries of "move" and "step." Nwogu (1997) stated that 'moves and their sub-element [steps] are partly determined by inferencing them from the context' (p. 113). This process, according to him, relies on linguistic features such as 'explicit prefacing expressions, explicit lexemes, and various grammatical specifiers of content, discourse conjunct and different kinds of semantic markers' (p. 114).

In contrast, other researchers relied mainly on the top-down approach. Pho (2008) advocated the use of the top-down approach to avoid move circularity which may result from the bottom-up approach. In congruent with Pho (2008), Paltridge (1994), for instance, advocated the use of the top-down approach, claiming that identifying moves and steps on the basis of linguistic features is not an easy task. He asserted that ‘there are non-linguistic, rather than linguistic, reasons for generic staging in texts’ (p. 288). He said that the search for structural division in texts should be seen as a search for cognitive boundaries in terms of conventions appropriacy and content rather than a search for linguistically defined boundaries.

While there is a controversy about the use of either top-down or bottom-up approaches in setting the boundaries of moves and steps, Swales (1990) suggested using both of these approaches. In other words, both the content, rhetorical or functional attributes, and linguistic features are necessary for demarcating the moves and steps. Although Swales relied on both approaches, he paid more attention to the researcher's intention. For Swales, though lexicogrammatical means and content are helpful in staging texts, they do not constitute uniform and unambiguous signals. The moves and steps, therefore, are demarcated according to their function.

With the intention to overcome this issue and try to achieve high accuracy in analyzing the data in the current study, we follow Swales's (1990) approach to data analysis. In other words, a combination of a top-down and a bottom-up approach was opted for in the analysis of academic writing introductions. In analyzing the corpus, the researcher starts identifying the RS by drawing on the linguistic features exploited by authors in their texts such as the use of certain verbs, nouns, and signal phrases. The identification of moves and steps relies also on the researcher's interpretation of the content reported by the author of the text. This strategy helps us considerably in recognizing the rhetorical moves/steps employed, readily in all texts.

The second issue in the analysis of genre in terms of moves and steps (as mentioned earlier, p. 184) lies in the fact that this kind of analysis is subjective (Bahtia, 2003; Crookes 1986; Kanoksilapatham, 2005, 2007, 2015; Swales, 2004). Indeed, the identification of moves and steps in texts is based on the researchers' intuition and knowledge. Therefore, there might be a bias in assigning moves and steps to their real functions. To overcome this problem, researchers in the field of genre studies (Kanoksilapatham, 2005, 2007; Spooren and

Degand, 2010) suggested involving coders to lessen the subjectivity that may hinder the analysis and the result of research. This issue is discussed thoroughly in section 4.5.2.

In categorizing the moves in terms of their frequency of occurrence, there have been a variety of classifications of moves. Although most genre analysis researchers agree that moves can be categorized into three categories, namely obligatory, conventional, and optional, there has been no consensus on the frequency of occurrence of particular moves that indicate their categories. As the leading figure in genre analysis, Swales (2004) categorized the moves and steps into optional and obligatory (CARS model in chapter three); however, no specific criterion to categorize moves and steps was provided. Other researchers categorized the moves and steps based on certain criteria. Kanoksilapatham (2005, 2015), for instance, considers that the rhetorical move would be obligatory only if it appeared in all the texts (i.e., 100%) of the corpus while a move is considered conventional if its frequency of appearance ranges from 60 to 99%. The move is considered optional if it occurs less than 60%. In another study, Connor, Upton, and Kanoksilapatham (2007) lowered the percentage of obligatory moves to 97-100%. However, the frequency of occurrence of the conventional and optional moves remained at more than 60% and less than 60%, respectively. In some studies (Nwogu, 1997; Skelton, 1994), the conventional move was not mentioned; they set the cut-off point of 60% to differentiate between obligatory and optional moves. According to these studies, the move is obligatory if it appeared in more than 60% and it is an optional move if it occurred in less than 60% of the corpus. Other studies (Dusjik 2013; Li and Ge 2005, Tessuto 2015; Thumvichi, Gampper, and van de Weijer, 2019) followed different categorizations of moves which resulted in a lack of common consensus about move categorization. Table 4.13 demonstrates other categorizations of moves by other researchers in the field of genre analysis.

Table 4.14. *Move Categorization in the Literature*

	Obligatory	Conventional	Optional
Skelton (1994)	more than 65%	-	less than 65%
Nwogu (1997)	more than 65%	-	less than 65%
Li and Ge (2005)	more than 50%	-	more than 50%
Dusjik (2013)	100%	more than 60%	less than 60%
Davis (2015)	more than 60%	-	less than 60%
Tessuto (2015)	90%	83-88	-
Kanoksilapatham (2015)	100%	more than 60%	less than 60%
Thumvichi and Gampper (2019)	more than 90%	more than 70%	less than 70%

In this study, the following criteria are used to categorize moves as obligatory, conventional, or optional. A move must occur more than 90% of the whole corpus to be considered as obligatory, while it can be described as conventional if its frequency of occurrences ranges between 60 and 90 %. If a move occurs less than 60% in the corpus, it can be characterized as an optional move. Our decision is motivated by two reasons. First, it is based on the common consensus among genre analysts that it is uncommon for a move to appear 100% in a particular genre or sub-genre (Kanoksilapatham, 2003; Nwogu, 1997; Thumvichi and Gampper, 2019; Swales, 1990). Second, this study examines introductions in academic writings written by Algerian learners of English as a foreign language. Some of them might not be familiar with the conventional ways of writing an academic writing introduction. Therefore, to consider the obligatory move as the one which occurs 100% will lead to failure in categorizing the moves in the corpus.

4.4.2. Identification and Analysis of Metadiscourse: Issues and our Justification

With regard to metadiscourse analysis, there are some problems that might be encountered while identifying the metadiscourse devices. Hyland (2005) mentioned the weaknesses of the quantitative analysis of metadiscourse devices. In analyzing metadiscourse, according to him, there is a possibility of omitting and overlapping some metadiscourse elements because of multifunctionality. The latter means that some linguistic elements may have more than one function in a particular text. Hence, two or more researchers may identify the function of a given linguistic element in the corpus in different ways. What follows is a brief presentation of some issues in identifying metadiscourse devices and our suggestions to overcome these issues.

— **‘And’ is not a transition marker:** In a study carried out by the researcher himself and his supervisor (Mezrag and Merrouche, 2020), we found some ambiguities related to the first category of metadiscourse introduced by Hyland (2005). As explained before (chapter 1, section 1.3.4.4), Hyland (2005) classified metadiscourse into two main categories namely the interactive and the interactional metadiscourse. Within the interactive category, there are five sub-categories: transitions, frame markers, endophoric markers, evidential markers, and code glosses. In the first sub-category, Transitions express relations between the main clauses and arguments in the text. These include the additive set such as ‘and’, ‘moreover’, and ‘furthermore’. Although Hyland classified ‘and’ as a metadiscourse device, the distinction

between “and” that performs a metadiscourse function and “and” that performs a propositional function is a very difficult task (Mezrag & Merrouche, 2020). This is because a transition marker is used widely in academic writing. In his study, Biber (1999) argued that one of the most characteristics of academic works is the extensive use of the transition marker ‘and’ (p. 71). The same idea was achieved by Mezrag and Merrouche (2018) who found that the transition ‘and’ was used widely by Algerian and NE writers in their academic writing. The wide use of ‘and’ in academic works makes the decision of whether ‘and’ is a metadiscourse or not a very difficult task. According to Hyland, the transition marker ‘and’ represents the default options for making conjunctive relations of addition and alteration rather than conscious rhetorical strategies for signaling a particular writer's intention (K, Hyland, personal communication, February 2, 2020). In other words, the transition marker ‘and’ does not play a pragmatic function in academic writing, it is just a marker used to group words, sentences, and ideas together. Although recent studies continue to consider ‘and’ as a metadiscourse device, in the current study, we decided to omit ‘and’ from the category of transition markers that function as metadiscourse devices.

A cluster of hedges: most of the previous studies on metadiscourse devices relied heavily on the list of hedges supplied by Hyland's (2005) model in identifying these items in texts. Hyland's (2005) list of hedges includes approximately 101 hedges, including single to three-word hedges. Examples of these list items include quite, to my knowledge, and from my perspective. This list helps researchers to easily identify hedges in texts; however, some instances of hedges may create problems for genre analysts, particularly when two or three hedges are combined together to create hedges. An Example of this combination is provided below:

Ex: **I would like to suggest** that counterfactual thinking is an essential necessity of human existence (Gillearts & Van de Velde, 2010).

It is obvious in this Example that **would like** and **suggest** are two independent hedges, but they are combined together by the writer to inform the reader that his claim (counterfactual thinking is an essential necessity of human existence) is based on his knowledge rather than a particular fact. The problem arises here is that whether the researcher counts them as one hedge or two hedges? In this case and following Gillearts and Van de Velde, (2010), instances like these are counted as one hedge in the present study.

Data normalization: The unequal size of data is another issue in corpus analysis as this factor may affect the frequency of occurrence of the examined linguistic elements. According to Gries (2010) a higher frequency occurrence of particular element (for instance, a particular metadiscourse) in corpus does not mean that this element is more frequent since the frequencies rely on the sizes of the corpora being compared as well. One way to overcome this issue is to normalize the frequencies of words in each sub-corpus. Using normalized frequencies instead of raw data enables the researcher to overcome the issue of inequality of the data in the four sub-corpus.

As the number of words varies in the four sub-corpus (see section 4.2.6); the density calculation through frequency count will lead to misleading information. In order to make the corpus comparable, we need to normalize the number of words in all sub-corpus. In doing so, we need to establish the relative frequency of the words and multiply this by a common factor/ denominator (such as 500/1000/10000/1000000) (Weisser, 2016). The choice of the factor in data normalization depends, according to Biber et al (1998), on the typical length of the corpus. However, most of the previous studies on metadiscourse use in academic writing used the per 1000 factor in the normalization of data. In this study, we use the per “1000” factor in the normalization of the frequency counts of metadiscourse devices. This allows us to compare our findings with those of the previous studies. Another reason for choosing to use the “1000” factor is that the size of each of our sub-corpus exceeds 500 words; therefore the “500” factor cannot be used in this study. Besides, the size of our corpus is not large enough to use the factors of 10000 or 1000000. Therefore, we believe that the factor of 1000 is suitable and fits the normalization of data in the current study. Based on this, the following formula is used to normalize the data in this study.

$$\text{Normalized Frequencies} = \frac{\text{raw frequencies} \times \text{basis of normalization (per 1000)}}{\text{number of tokens in corpus}}$$

The raw frequencies refer to the number of observed phenomena in a particular corpus (in this study: the number of metadiscourse devices) while the *number of tokens* refers to the whole number of words in a particular corpus. For instance, if we have a corpus of 3500 words and the number of the observed metadiscourse devices in this corpus is 250, then the normalization would be as the following: *Normalized Frequency*=250*1000/3500= 71.43

The calculation above indicates that there are more than seventy-one (71.43) linguistic choices in every 1000 words. This can be expressed as $Nf=71.43$ per 1000 words. Nf stands for frequency number.

– **Statistical significance test:** In addition to the normalization of data, Rayson's log-likelihood test was employed in this study to ensure that there is a substantial difference between the compared results. A null-hypothesis significance statistic test called log-likelihood (LL) has a corresponding probability value (p-value). The p-value is used in corpus linguistic studies to assess whether a difference in relative frequencies of a word between two corpora is the result of chance or not. In other words, the P-values demonstrate the degree to which we may be certain that the frequency difference we have discovered is reliable and statistically significant (Gries, 2010; Pojanapunya and Todd, 2016).

Although many statistical tests were used in the previous metadiscourse studies (for instance, Kawase (2018) used normalization and percentages; Abdollahzadeh (2011) used the non-parametric test; Adel (2022) used the Chi-square test, Wu and Paltridge (2021) used the Paired sample t-test, to mention a few), the Log-Likelihood is the most reliable test that can detect whether there is a significant difference between the compared variables (Ädel &Ermann, 2012; Pojanapunya &Watson-Todd, 2018). In addition to that, the Log- Likelihood test has been used by most prominent and recent metadiscourse studies (Chan, 2015; Jiang &Hyland, 2015; Wang &Zeng, 2021). For these reasons, we chose to use the Log-Likelihood in this study. Because of the difficult statistical calculation and arithmetic operation involved, using the Log-Likelihood test is not a simple process. Rayson (2016) made the test easier by developing a log-likelihood calculator that is accessible online (<http://ucrel.lancs.ac.uk/llwizard.html>) (Figure 4.2). The calculator is a useful and user-friendly web tool. The online calculator returns the statistical scores that we may use to identify significant differences once you enter the statistical numbers. For the discussion of the result provided by the Log-Likelihood test, Rayson provided four levels of significance as shown in Table 4.14.

Table 4.15: *The Levels of Significance in Relation to Log-Likelihood and p Values*

Log-Likelihood (LL)	P values	Level of significance
LL=3.84	$p \leq 0.05$	significant
LL=6.63+	$p \leq 0.01$	Very significant
LL=10.83+	$p \leq 0.001$	Very significant
LL=15.13+	$p \leq 0.0001$	Very significant

Figure 4.3. *The Online Simplified Calculator (Rayson, 2016)*

Log-likelihood and effect size calculator

To use this wizard, type in frequencies for one word and the corpus sizes and press the calculate button.

	Corpus 1	Corpus 2
Frequency of word		
Corpus size		

Notes:

1. Please enter plain numbers without commas (or other non-numeric characters) as they will confuse the calculator!
2. The LL wizard shows a plus or minus symbol before the log-likelihood value to indicate overuse or underuse respectively in corpus 1 relative to corpus 2.
3. The log-likelihood value itself is always a positive number. However, my script compares relative frequencies between the two corpora in order to insert an indicator for '+' overuse and '-' underuse of corpus 1 relative to corpus 2.

Figure 4.3 displays an example of the results produced by the online calculator when comparing the overall use of transitions employed in MD and PhD thesis introductions. If we assume that PhD authors employed 380 transition markers in a corpus of 31142 tokens, compared to the writers of MD (120 transition markers in a corpus of 12890), the log-Likelihood calculation would be LL=6.98 and the $p \leq 0.01$. So, this indicates that the difference between PhD thesis and MD writers in terms of the use of transition markers is very significant. This finding also indicates that, when compared to MD introductions, the frequency of occurrence of transition markers is higher in PhD thesis introductions. The frequency of occurrences of the item normalized per 1000 words is represented by 1% (1.22) and 2 % (0.93).

Figure 4.1: *Example of Log-Likelihood Results*

Log-likelihood calculator results

Key:
O1 is observed frequency in Corpus 1
O2 is observed frequency in Corpus 2
%1 and %2 values show relative frequencies in the texts.
+ indicates overuse in O1 relative to O2,
- indicates underuse in O1 relative to O2

Item	O1	%1	O2	%2	LL	%DIFF	Bayes	ELL	RRisk	LogRatio	OddsRatio
Word	380	1.22	120	0.93 +	6.98	31.07	-3.71	0.00003	1.31	0.39	1.31

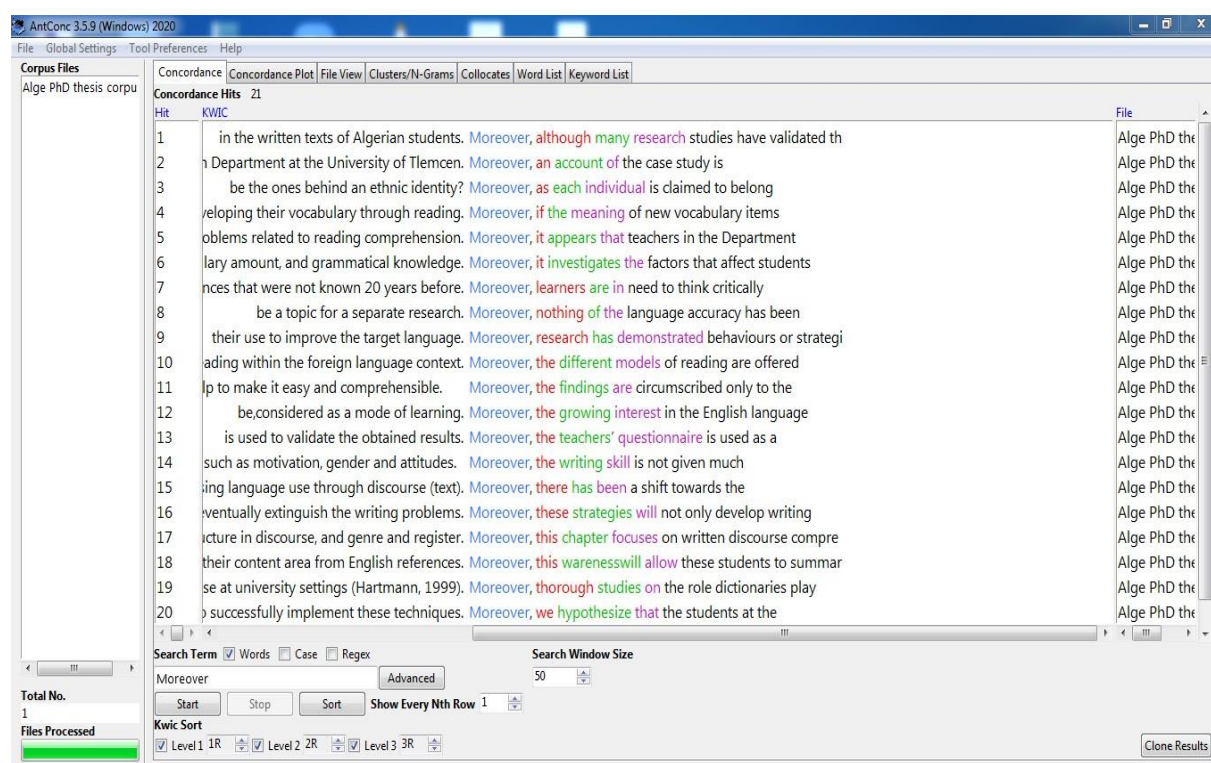
4.4.3. Application of Corpus Software

In order to identify the metadiscourse devices employed in the corpus, a semi-automatic coding procedure was used for the frequency retrieval step. We employed AntConc 3.5.9 software to conduct an automated search for pre-identified metadiscourse markers in the corpus. We chose the AntConc software because it is not only the most reliable, but also the most widely used in recent metadiscourse studies (Birhan, 2021; Deng, Fatemeh, & Gao, 2021; Qiu& Ma, 2019; Zou & Hyland, 2020). The AntConc 3.5.9 software is a collection of applications for observing the behavior of words in texts (Figure 4.4). It comes with six analytic tools, two of which were utilized for metadiscourse analysis in this study. These include a Wordlist tool that creates word lists for lexical comparison of texts, either in alphabetical or frequency order. The second is the Concord, which generates concordances, locates collocates of the term, recognizes common phrases, and presents a graphical map of where the word appears in the corpus. These tools were used to identify instances and generate a concordance for metadiscourse devices in the corpus. This procedure was followed by manual coding to exclude those that were irrelevant. All the academic writings in the corpus were in PDF format. These PDF files were converted to TXT files since this program only works with plain text files.

The identification process started with identifying the metadiscourse devices included in the first subcategory (transition markers), then we continued until we reached the last subcategory (self-mention markers). Once the automatic identification was finished, we used the "tool file view" for manual coding. Since metadiscourse devices can perform different functions depending on the context in which they are used, the analysis of metadiscourse would be better performed manually. Manual coding is usually the most precise way to define roles and assign markers to relevant subcategories (Hyland,2005).

In terms of coding accuracy and reliability, the best method to follow is to use an inter-coding process, which entails having at least two coders working independently and comparing results for consistency. However, for the second part of the study (metadiscourse analysis), the feasibility of doing so is reduced due to the following reasons. To begin with, none of the possible second coders who involved in the analysis of move-step structure of the academic writing introductions are familiar with metadiscourse concepts. Second, coding a large number of different types of markers might be an impossible task for them to complete. Third, the identification of metadiscourse devices in a large corpus entails good knowledge of metadiscourse. It is also a time-consuming process, so no coder would accept the task of coding and classifying metadiscourse devices. For these reasons and others, the identification and classification of metadiscourse devices are done by the researcher himself.

Figure 4.2: *The print-screen showing the concordance lines on AntConc*



4.5. Pilot Study

Since one of the aims of this study is to explore and compare the RS of introductions in RAs, MDs, and PhD theses using the CARS model, a pilot study was carried out for many reasons. First, by conducting a pilot study, we need to ensure the applicability of the CARS

model in the demarcation of the moves and steps in the introductions of different genres. Second, several academics (Biber, Connor, and Upton, 2007; Hyland, 2009; Kanoksilapatham, 2005, 2007, 2012, 2015; Paltridge, 1994; Spooren and Degand, 2010) in the field of genre analysis have recommended conducting a pilot study and including coders in the examination of texts in genre analysis to get reliable results. By involving coders in this study, we aim to demonstrate that a text unit may be defined in such a way that various individuals can identify the boundary of text units with a high percentage of agreement. Kanoksilapatham (2007), for instance, suggested involving two coders to reach inter-rater reliability, while Biber et al. (2007) presented a list of steps that might be followed in analyzing a given genre (as demonstrated in chapter 1, section 1.2.2).

Among these steps, step four entails conducting a pilot coding to test and fine-tune definitions of move purposes, and step six entails coding a full set of texts, with an inter-rater reliability check to confirm that there is a clear understanding of move definitions and how moves and steps are realized in texts. Conducting a pilot study and involving coders in the analysis process helps the researcher minimize the possibility of subjective judgments that might hinder the reliability, applicability, and transparency of the research. However, it should be noted here that the pilot study is concerned only with the first part of this study. i.e., the RS of academic writing introductions. The second part, which deals with the identification and comparison of metadiscourse devices in academic writing introductions, is not included in the pilot study. This is because metadiscourse is a very complicated subject; hence, finding specialized coders to participate in the pilot study and the main study is not an easy task. The identification of metadiscourse is also a time-consuming activity since it entails a careful reading of the texts in order to identify the linguistic elements that play a pragmatic function. Therefore, it would be impossible to find a coder who is able to identify the metadiscourse devices in the texts and who is available for the length of time required to do so. These reasons and others led the researcher to analyze metadiscourse devices using AntConc software (see Section 4.5.1). After that, the results were checked again manually by the researcher to make sure that all the identified elements are metadiscourse devices.

4.5.1. Size of the Corpus

In conducting a pilot study, a number of considerations should be made. The first issue has to do with the size of the corpus, which is still a subject of controversy among corpus analysts. While some researchers (Sheldon, 2013) used the entire corpus of the main study to

conduct a pilot study, others (Burgess, 2002; Crooks, 1986; Kanoksilapatham, 2005) believe that only a small percentage of the data is sufficient for conducting a pilot study. For instance, only 25% of the main corpus was used as the corpus for Kanoksilapatham's (2005) pilot study. In the same vein, O'Connor and Joffe (2021) proposed that a corpus for intercoder reliability should consist of 10 to 25% of the data. Based on this, we selected 12 introductions of academic writings, which equals 20 % of the main corpus. Three RAs authored by NE writers, three RAs authored by Algerian writers, three PhD theses, and three MDs written by Algerian learners constitute the corpus of the pilot study. The selection of these academic writings is based on the selection criteria (such as the discipline, the topic and the format of the research article) outlined in Section 4.2.4. The CARS model (Swales, 2004) was used to analyze the selected texts.

4.5.2. Selection of Coders

Another issue that should be taken into consideration has to do with the number of coders required in the pilot study. Like the size of the pilot study corpus, the number of coders is also controversial among corpus analysts. In this matter, O'Connor and Joffe (2021) stated that a minimum of two independent coders is necessary to establish intercoder reliability. Only one coder was involved in Kanoksilapatham's (2005) study, while in his subsequent studies (Kanoksilapatham 2012, 2015), six coders were involved in his pilot studies. In the current study, three coders and the researcher were involved in the analysis of the introductions of academic writings. One of them is an assistant teacher at the University of El ArbiBenM'hidi, Oum El Bouaghi, Algeria. He holds a PhD in applied linguistics and has an experience in discourse studies and genre analysis studies. Over the course of several years, he supervised master's students and published more than three articles in applied linguistics in national and international journals. The other coders are two top master's students at the same university; one of them has already gained some knowledge about genre analysis as his master's dissertation was about it. Each coder received a copy of the Swales CARS model and another copy of the data to be analysed. For the first coder, we had only one session together. We discussed the Swalesian CARS model and the data to be analysed.

For the other coders, we have had several sessions. In the first two sessions, we discussed the Swalesian model, providing some examples to illustrate how the model can be implemented to analyse the data. During these sessions, the coders were allowed and encouraged to ask questions in case they faced any ambiguity in terms of the explanation of

the model or its implementation. Before beginning to analyze the introduction sections, the coders were also instructed to carefully review the CARS model. The two student coders were also asked to send emails for more clarification if they faced coding issues.

After multiple meetings, we set the date for the last session where the findings would be presented. During the last session, we went through the texts to discuss the results and identify any coding issues. By the end of the session, a number of discrepancies were identified and discussed. The majority of these inconsistencies have nothing to do with the presence or absence of a specific move, but rather with the beginning and end of the moves. The inconsistencies also concerned several moves in PhD thesis introductions, where a section is titled "Statement of the Problem," which normally deals with the problem that the study intends to solve, but the content of that section has nothing to do with establishing the niche in move 2. These and other points of disagreement were discussed and clarified until the session ended with a sense of agreement.

The results of move identification in the pilot study were examined and measured in terms of their agreement in order to compare the coding performed independently by the coders. In doing so, this study employed an agreement rate (also known as a percentage agreement) to measure the inter-rater reliability. Our choice of using this test to examine the inter-rater reliability is based on the fact that it is the most straightforward and frequently used test in move analysis studies (Kanoksilapatham, 2005). In calculating the percentage of agreement, the total number of coded items that the researcher and the coder agreed upon is multiplied by 100 and then divided by the total number of units coded, as demonstrated by the following formula:

$$\text{Percentage of agreement} = N^{\circ} \text{ of coded units} * 100 / N^{\circ} \text{ of all coded units}$$

There was typically good inter-coder agreement between the researcher and the three coders in recognizing rhetorical moves, notwithstanding slight variations in move identification. Despite minor discrepancies in move coding, the researcher and the three coders were able to identify move boundaries, as evidenced by the overall percentage of agreement of 94.78%. In fact, the coders were able to agree on all of the boundaries of some moves, especially those that were realized by distinct linguistic items and lexical choices (for instance, the phrase this study aims at indicates the beginning of announcing the present research step in move 3). Based on this, we reached the conclusion that the procedure of

identifying the moves was trustworthy and reliable enough to be followed because of the comparatively high degree of agreement.

4.5.3. Findings of the Pilot Study

The discussion between the researcher and the three coders and the findings gained from the pilot study provided us with a number of useful observations and direct guidelines. First, the communicative purpose of a particular move could be realized by either a short sentence or by a whole paragraph. For instance, in MD and PhD thesis introductions, a whole section headed "statement of the problem" was used to realize the establishing a niche move without giving a clear picture of the problem that the study intends to solve, while this move can be realized clearly in a few words in RA introductions. Another observation was made regarding the CARS model, and in particular, the first move in introduction writing. According to Swales (1990), move 1 can be realized through one or more of the following steps: claiming centrality, making a topic generalization, and reviewing items from the previous research. These rhetorical steps, however, were reduced to only one step, topic generalization of increasing specificity in the CARS model (Swales, 2004) (see section 4.3.1.1 in this chapter for more elaboration).

In the pilot study, however, the findings revealed that the reduction of the three steps of move 1 into one step was not workable, as the three steps were easily identified in all examined academic writing introductions. Based on this, we decided to maintain Swales' (1990) three steps in Move 1 in order to fully understand the different rhetorical strategies employed for its realization and to find out how this move was realized by writers in different academic writing introductions. It was also observed that RA introductions differ slightly from introductions in PhD theses and MDs. Some moves and steps were found in PhD thesis and MD introductions, but they were totally absent in the RA introductions. This finding prompted us to rely on Bunton's (2002) and Samraj's (2008) models (see chapter 3 for more explanation), which were created to examine PhD thesis and MD introductions respectively, as guiding schemes in the analysis of moves, and steps in academic writing introductions

Conclusion

In this chapter, we attempted to clarify the key analytical and methodological procedures we followed in the selection and analysis of academic writing introductions. In the first section, the size of the corpus, selection criteria, and creation and codification of the corpus were explained. In the second part, the analytical models employed in this study are presented and discussed. These include the CARS model (Swales, 2004) for examining the RS of the introductory sections of academic writings and Hyland's (2005) taxonomy for metadiscourse analysis. Issues related to the validation of data analysis, including the identification of moves and metadiscourse and the use of the corpus software, were also discussed in the third part. This chapter closes with a brief description of the main findings of the pilot study.



Chapter Five:

Move-Step Analysis of the Introduction Sections

Introduction

5.1. Rhetorical Moves and Steps in Research Articles

5.1.1. Move-Step Structure of the NE Writers' Research Article

Introductions

5.1.2. Move-Step Structure of the Algerian Research Article

Introductions

5.1.3. Differences and Similarities between English native speakers and Algerian Research Article Introductions

5.2. Rhetorical Structure of Algerian PhD Thesis and Master's Dissertation Introductions

5.2.1. Move Step-Structure of the Algerian PhD Thesis

Introductions

5.2.2. Move-Step Structure of the Algerian Master's Dissertation

5.2.3. Differences and Similarities between PhD Thesis and Master's dissertation Introductions

5.2.4. Differences and Similarities between academic writing introductions authored by Algerian and NE writers



Introduction

This study is carried out to analyze introductions in academic writings at two levels, the RS level and the metadiscoursal level (for metadiscourse analysis, see chapter six). Introductions of RAs, MDs and PhD theses written by Algerian post-graduates and introductions of RAs written by NE writers are analysed and compared. The aim of this study is to compare the RS of introductions in academic writings authored by NE and Algerian writers in order to highlight the similarities and differences between both sets of writers. A modified version of the CARS model (Swales, 1990, 2004) was used to analyse the RS while an enhanced framework (Hyland, 2005) for metadiscourse analysis was used to identify the metadiscourse devices employed in the corpus. The examination of the RS of academic writing introductions authored by writers from different linguistic backgrounds and academic levels provides us with a clear picture of how these writers use language to organise their academic writing introductions.

This chapter reports the study results and discussion of the main findings in relation to the previous theories and genre analysis studies. The first section starts with presenting the distribution of moves and steps, their linguistic realization, their status, and the rhetorical patterns of RA introductions written by Algerian and NE writers. The section closes with a detailed comparison between both sets of writers' sub-corpus and the findings are compared to previous genre analysis studies. The second section deals with the RS of the PhD thesis and MD introductions written by Algerian EFL learners. In categorizing the moves, the frequency of occurrence of moves is also recorded and presented in order to determine the status of each individual move in the PhD thesis and MD introductions. Like the first section, the second section closes with a comparison between both sets of writers.

5.1. Rhetorical Moves and Steps in Research Articles

The first section of this chapter aims to answer the first set of research questions (research questions 1, 1.1., and 1.2.) mentioned in the general introduction of this study. The research questions are the following:

1. What are the move-step structures of research article introductions written by native English and Algerian EFL writers?

1.1. To what extent do the move-step structures in the research article introductions written by Algerian EFL writers differ from those written by native English writers?

1.2. Do the move-step structures of research article introductions written by native English and Algerian EFL writers conform to Swales' (2004) model?

In response to these questions, this section starts by presenting the distribution of moves and steps, i.e., the frequency and percentage of the application of each move and its steps along with their categories (obligatory, optional, and conventional). The rhetorical patterns of the RA introductions of each group are also highlighted. The findings are compared to find out how each group of writers rhetorically structure their RA introductions. In doing so, the similarities and differences in terms of move-step structure and move patterns are highlighted.

5.1.1. Move-Step Structure of the NE Writers' Research Article Introductions

This section provides a detailed description of the move-step structure of RA introductions authored by NE writers. The sub-corpus representing the population of the NE writers consists of 15 RA introductions in applied linguistics, published in well-cited and reputable international journals. In analyzing the data, Swales' (2004) CARS model is used as the main generic framework for the data analysis in order to pinpoint the rhetorical moves and steps these authors used to accomplish their communication goals. This part begins with a presentation of the findings (see Appendix 1), which is followed by an explanation of the moves and steps in this sub-corpus. To provide further elaboration, actual examples drawn from the data are also included.

5.1.1.1. Overview of the Findings

Based on the findings presented in Appendix 1, it was revealed that all the moves introduced by Swales' (2004) model were present in the corpus of the NE writers. Move 1, *establishing a territory*, was always the opening move in all RA introductions written by NE writers, followed by move 2 (*establishing a niche*) as the second move. The only exception was in two RA introductions (NSRA3, NSRA6) where move 2 was substituted by move 3. The closing move in all the introductions was move 3 (presenting *the present work*), with the exception of one introduction (NSRI5), in which the writer closed his introduction with move 2. To put these into numbers, the frequency of occurrence of M1, M2 and M3 was 100%, 93% and 100%, respectively, in the RA introductions authored by NE writers. M1 and M3 were always present as they occurred in 15 out of 15 introductions, while M2 was the relatively less

frequently employed move as it appeared in 14 out of 15 introductions. Based on the categorization criteria mentioned earlier, the wide use of the three moves was reason enough to consider them as obligatory moves in the RA introductions authored by NE writers.

In reference to the rhetorical steps that realize each move, some steps were found to receive great attention as they were widely used, while other steps were rarely used. For instance, the step *topic generalization of increasing specificity* in move 1 (M1S1), the step *indicating a gap* (M2S1a) in move 2, and the step announcing present research descriptively and/or purposefully (M3S1) were used 100%, 93%, and 100%, respectively. On the other hand, the steps *adding to what is known* (M2S1b), *indicating a problem in the real world* (M2S1D), in move 2, the steps *presenting RQ or hypothesis* (M3S2), *definitional clarification* (M3S3), *announcing principal outcomes* (M3S5), and *stating the value of the present research* (M3S6) in move 3 were partially used. The remaining steps, such as *presenting positive justification* (M2S2) in move 2, *summarising methods* (M3S4), and *outlining the structure of the paper* (M3S7), appeared in a few introductions. In the following section, more elaboration on how these moves and steps were realized with real examples taken from the NE writers' sub-corpus is provided.

5.1.1.2. Analysis of the Move-Step Structure

Having identified the frequency of occurrence and the status of the moves and steps used in the RA introductions written by NE writers, this section gives the detailed findings of the genre analysis of 15 RA introductions written by the same writers. Then, using text examples from the sub-corpus, their communicative or functional goals as well as the typical linguistic characteristics realized in each move and step are explained. The rhetorical patterns used by NE writers are then noted in order to highlight the most prevalent and effective rhetorical patterns in this sub-corpus.

– Move 1: Establishing a territory via topic generalization of increasing specificity.

According to Swales (2004), writers in this move introduce the topic under investigation in general through the use of the *topic generalization of increasing specificity* step. In this rhetorical step, writers of RA introductions make rhetorical 'appeals' to persuade the discourse community members and their potential readers that their research is new, significant, and worth investigating. This is usually done through employing one or more strategies such as showing that the research is important, interesting, relevant, popular, or

problematic. The findings revealed that move 1 was present in all RA introductions, and most importantly, this move was realized by several rhetorical strategies. It is important to mention here that *claiming centrality*, *summarising items of the previous research* and *making topic generalization steps* were introduced in the 1990 CARS model but condensed into one step, which is the *topic generalization of increasing specificity* step in the 2004 model. However, the three steps were found to appear in the NE writers' sub-corpus as demonstrated below.

Focusing on the step level, the findings revealed that the *claiming centrality* step was the prominent step in the NE sub-corpus as it was found in 93% of their RA introductions. *Summarising items of the previous research* step was also a preferred step as it appeared in 14 out of 15 introductions (93%). The least frequently employed step was the *topic generalisation* step, as it was found only in 7 out of 15 introductions (46.66%). The linguistic realization of move 1 and its rhetorical steps are illustrated by the following Examples:

Example 1: *Incidental learning **occurs** when learners acquire new aspects of their L2 without being focused on doing so. **Researchers have since long been interested in** the uptake of new vocabulary knowledge through incidental learning. This **is an important question**, for it gives an indication of how much input is required to reach certain degrees of vocabulary uptake.* (NSRAI2)

Example2: ***Over the last few decades**, writing pedagogy **has seen a paradigm shift** from the traditional product approach to a centered, process-oriented approach (Ref; Ref). In process writing, learners “discover and reformulate their ideas as they attempt to approximate meaning” in various interconnected production and regulatory activities... (Ref; Ref; Ref). Peer feedback, **one of the central components** at the reviewing and revising stages, **has captured the interests** of second language (L2) writing researchers. **A substantial number of studies** have examined learners' perceptions and the psychological or motivational impact of peer feedback ... (Ref). (NSRAI9)*

Example 3: ***The past two decades** have seen regular contributions to the **debate** over the relevance of research from areas of applied linguistics to language teaching practice (Ref; Ref; Ref; Ref; Ref; Ref; Ref; Ref; Ref; Ref). (NSRA10)*

Example 4 :*Learning to write effectively in an academic context is **very important**, not only because it is often the only means by which students' content knowledge is assessed in a large number of disciplines, but also because producing academic texts helps students to*

become members of a discourse community ...(**Ref; Ref**). *The development of L2 learners' academic writing ability **has mostly been investigated** in terms of improvements in various assessment criteria... (see, for example, Ref). It is only recently that writing research and studies in the field of English for Academic Purposes (EAP) **have started to focus on** the linguistic features of students' writing... The development of the syntactic **complexity** of students' writing has been **at the centre of a number of studies** in recent years (e.g., **Ref; Ref; Ref; Ref; Ref; Ref; Ref; Ref**). (NSRAI12)*

Move 1, in most RA introductions authored by NE writers, was mostly realized by two or three rhetorical strategies. In the first Example (ex.1), for instance, the writer employed two rhetorical strategies, topic generalisation (*Incidental learning **occurs** when learners acquire*) and claiming centrality (***Researchers have since long been interested in, this is an important question***). In order to realize move 1, the writer first introduced his RA introductions by briefly stating the topic in question on the assumption that it is common knowledge in the discourse community. The writer then attempted to persuade the members of the discourse community that his research issue is worth investigating by not only demonstrating that his research attracts the researchers' interest but also by highlighting the significance of conducting such research. The importance of the research is justified by stating the reason for its importance (*for it gives an indication of how...*). The same rhetorical strategies were mostly employed in the remaining examples. However, in Examples 2, 3, and 4, the writers employed references to relevant literature as another rhetorical strategy.

Summarising items of the previous research step was found to be prevalent in most RA introductions authored by NE writers. This result supports Samraj's (2002) claim that this strategy is an obligatory step in RA introduction writing. In this strategy, writers summarise either the findings or the methods used by previous studies, preparing to establish *a niche* by indicating limitations in either the findings or the methods followed. The use of this strategy might be explained by the fact that NE writers want to present strong arguments, particularly when the references are presented as a cluster of citations strewn across the text (Ex 2, 3, and 4). This step was found to appear extensively across the RA introductions written by NE writers.

Linguistically speaking, move 1 was realized through a number of linguistic choices. First, adjectives (such as " central", " important" as in Ex 1, 2 and 4) intensified by amplifiers (such as " very" as in Ex 4) are used to point to the importance of the research topic being

studied. The current state of the research topic is signaled by the use of time-indicating phrases (such as " over the last few decades", " the past two decades", " it is only recently") and verbs in the present tense (simple and perfect, passive or active) such as " is", "occurs", "has seen", "have since long been interested", "has mostly been investigated" to show that the research topic in question is lively, new , and still has the ability to hold readers' interest. Parenthetical citations (substituted by Ref) are also the linguistic choices employed by the NE writer to realize move 1.

–Move 2: Establishing a niche

Establishing a niche is also an obligatory move in this sub-corpus, as it appears in more than 90% of the corpus. This move indicates that there are areas of the research field that need to be investigated. According to Swales (2004), this move can be realized by either obligatory steps such as *indicating a gap* and *adding to what is known*, or an optional step such as *presenting positive justification*. Therefore, the communicative purpose of move 2 is achieved through the use of one or all of these three steps.

However, in this sub-corpus, only the first step was prominent as it was employed in 93% of the sub-corpus. The other steps, S1b and S2, occurred mainly in 13% and 46% of the whole sub-corpus, respectively. It should be noted here that an instance of one step which is not included in the CARS model was found in this sub-corpus. In the introduction 1 (NSRAI1), the writer did not indicate a gap by stating the weaknesses and shortcomings of the previous research; instead, he mentioned a problem in real life. Bunton (2005) and Samraj (2008) have earlier noted that in academic writings, particularly the PhD thesis and MD introductions, writers may indicate a gap by presenting a local problem that needs to be solved. However, this rhetorical step was rarely identified in RA introduction writing. What follows is how move 2 was realized in the RA introductions authored by NE writers.

• Step1a: Indicating a gap

Indicating a gap was found to be the prominent step of move 2 as it was employed in 93% of the sub corpus. The wide-spread use of this step is a good reason to characterize it as an obligatory step. With regard to move-step realization, different discursive strategies were employed by this group of writers to realize *Step1a*. What follows is a brief discussion of how different discursive strategies and linguistic elements were used to signal the realization of this step. The linguistic elements used to realize *indicating a gap* step are marked in bold.

As demonstrated in the Examples below (ex 5a, 5b, and 5c), one of the discursive strategies used by NE writers to indicate the gap is the use of negation. Negative words such as "no", "not" were used to express a total denial of the existence of research on a particular subject matter (ex 5a: **no studies**, ex 5b: **no previous studies**). This discursive strategy helps writers express that a particular subject matter was totally ignored. Hence, paying more attention to that subject is highly necessary. However, this strategy was not prevalent in the RA introductions authored by NE writers as it was found only in a few introductions. NE writers were found to rely more on down-scale linguistic items, as demonstrated in Ex. 5d and 6.

Example 5a: *Overall, in terms of the logogenesis of written text (studying meaning as it unfolds during the writing process), there are just a few studies that examine this in first language writing (see Bowen, 2019; O'Donnell, 2013 for studies on English texts) and **no studies**—as far as we know—on logogenesis in second language writing.*(NSRAI7)

Example 5b: ***No previous studies** were conducted in the contexts of the short and highly intensive pre-sessional EAP courses, which are frequently offered to students in the UK who fall short of the language requirements for university by a small margin.* (NSRAI8)

Example 5c: comparisons on their unfolding choices there is **no existing** data that we know of on...(NSRAI9)

Instead of total denial of the existence of previous studies on a particular subject, another discursive strategy used by NE writers is the use of down-scale linguistic items (negative words) such as "little", "fewer", "few", "smaller", "under". These linguistic choices denote that there are/were only a small number of studies regarding a particular area of study; hence, sufficient knowledge about that area is not provided to fully understand it. As demonstrated in Examples 5d and 6, the writers overused these kinds of linguistic items in order to emphasize that though a particular area of study received some attention, it still requires more attention.

Example 5d: *L2 listening **has received relatively little research attention** (Ref), and this is also the case in the area of incidental vocabulary acquisition: **considerably fewer studies were carried out** in the context of listening than reading... Some early vocabulary studies **have included listening, but they explored how auditory** stimuli can reinforce acquisition from reading (e.g. Ref), **rather than** acquisition from listening only. More recently, **a few***

vocabulary studies have measured learning from listening directly. Their findings suggest that listening **leads to even smaller gains than reading** does (Ref;Ref). **Yet**, similar to traditional reading research, **these studies have used meaning-based tests only**. This suggests that more learning may have occurred than has been revealed. (NSRAI2)

Example 6: *While the findings of TBLT research were central to our understanding of SLA processes ...TBLT has been critiqued* for predominantly focusing on task performance **without adequately investing in research** in L2 development (Ref;Ref). TBLT research has **so far shed little light** on L2 development as it has largely drawn on cross-sectional studies with data often collected **under less** ecologically valid conditions (Ref). **Few systematic efforts were made to examine the ...Notwithstanding** the significant contribution of TBLT to SLA, **little attention has been paid** to investigating... Similarly, examining ...**has remained a relatively under-researched area** in TBLT studies. (NSRAI5)

Another discursive strategy employed by NE writers is the use of the negative polarity through the use of the negative composition device "unclear" to claim that the knowledge about a particular subject (for instance, "learning transfer" in ex 7) is still vague. In Example 7, the writer indicated that the reason that leads to learning transfer is not yet limited. In addition to that, the writer seemed to be dissatisfied with using negative polarity to indicate a gap; therefore, he reinforced his argument by using negative words (only small) to express that learning transfer was ignored by previous research. Using this strategy indicates that the writer wants to convince the discourse community that the gap does exist.

Example 7: **yet**, it is still **unclear** how and why learning transfer occurs or not (e.g., see Ref; Ref). **Importantly**, there **are only a small number of studies on learning transfer** in discipline-based academic literacy (AL) courses (Ref). (NSRAI4)

As the Example 8 shows, NE writers may also start with a positive evaluation regarding the focus of the previous studies, indicating that a number of previous studies devoted a lot of attention to a particular broad area of study. However, the writer identifies a specific subject which was totally ignored by previous studies. Then, indicating a gap augmented by negative words such as "lack" and "few."

Example 8: However, **despite the potential for focusing on the development of language** (logogenesis) in text (see Ref), **to date**, the majority of SFL-inspired research in this timeframe **has concentrated almost exclusively on speech** (Ref; Ref). And **while some studies**

have looked at logogenesis in written text (e.g., Ref), they have done so in relation to writing being a finished, instantial product rather than a series of unfolding choices (many of which are absent in the final product)...there are justa few studies that examine this in first language writing (see Ref; Ref for studies on English texts) and no studies—as far as we know—on logogenesis in second language writing. Therefore, there is a lack of information on how writers...(NSRAI7).

In indicating a gap, NE writers employed several linguistic elements and lexical items in order to realize this rhetorical step. As it is demonstrated in the above Examples, the writers signaled the role of step 1a in move 2 through using concessive conjuncts in the form of contrastive adverbs (such as "yet", "however"), concessive conjuncts in the form of prepositional phrases (such as "despite the potential," "notwithstanding the significant"). Negative quantitative noun phrases (such as "no studies"), and nouns pre-modified by adjectives and adverbs (such as "relatively little research attention," "considerably fewer studies," "few vocabulary studies") are also used to highlight the scarcity of research in a specific area. Verbs in the present tense (simple or perfect) (such as "is", "are", "shed", "were made", "has been paid", "has remained", "has concentrated") and backward-span adjuncts (such as "to date") are used in this rhetorical step.

This is because NE writers want to demonstrate that previous research has been carefully reviewed until the present moment and that the gap in these studies did exist at the time of conducting their research. In addition, the use of the present tense (simple or perfect) indicates that NE writers tend to give the impression that their studies are lively and new. The extensive use of these linguistic resources implies not only that the writers need to direct the reader's attention to the scarcity of research in a particular area, which entails more investigation, but they also strive hard to promote their research as if they want 'to sell' it (Paltridge and Starfield, 2020).

- **Step1b: Adding to what is known**

Adding to what is known is another way to establish a niche. In contrast to the relatively large number of instances of *indicating a gap* step in move 2, there were fewer instances of *adding to what is known* step. This implies that step 1b was not preferred by NE writers as it appeared only in 13% of their sub-corpus (2 out of 15). Although it was marked as an obligatory step in the CARS model, in this sub-corpus it can be considered optional. In the

following Example (ex. 9), the writer mentioned what has been done in a particular subject, but he felt that there should be more studies to cover other areas of that subject. The writer employed this step as a rhetorical strategy to support the findings of the well-known studies, and to establish a relationship between these studies and the research in question.

Example 9: *Ref (2015), focusing on PE in the primary school curriculum, **identify the relationship between physical performance in PE and the role of language accompanying action**. They also distinguish between ‘action discourse’ which relates to the action in PE and ‘reflection discourse’ as talk about social practice. **In this paper, we focus on the latter, reflective discourse**, which becomes increasingly important when the assessment of PE involves writing or speaking components (NSRI1).*

- **Step 2: Presenting positive justification**

With regard to the step of *presenting positive justification*, the findings revealed few instances of it in the NE sub-corpus. Only 7 (46%) of the 15 introductions include the S2 of move 2 which was not preferred by the authors and can be characterized as an optional step. This finding backs up Swales' (2004) assessment of it as an optional step in move 2. In making justification, NE authors of RA introductions emphasized the relevance of their findings to real-world issues. In the following Example (ex. 10), the writer highlights the importance of his research findings (sustaining skills and knowledge) to real world problems (learning a language and disciplinary writing development) through the use of positive evaluative phrases "is central to" to support the need to conduct his research.

Example 10: *Business graduates are assumed to transfer the skills and knowledge including cognitive, social and communication skills from their studies to their workplace as well (Ref). **Therefore, sustaining these skills and knowledge is central to learning and disciplinary writing development**. (NSRAI4).*

–**Move 3: Presenting the present work**

Presenting the present work is the last move in the CARS model. This move can be realized by either the combination of the seven steps outlined in the CARS model or by an individual step. It is an obligatory move as it appeared in 100% of the whole sub-corpus. After establishing a niche, NE authors presented their research using a number of rhetorical

strategies. However, the use of these strategies was characterized by variation in terms of frequency and the number of steps used.

In terms of the quantity of steps, in five introductions, this move was realized by two steps. In four introductions, it was realized by three steps, while in the other four introductions, it was realized by only one step. In the remaining introductions, it was realized by four steps. With regard to the frequency of occurrence, some steps were rarely used while others were used in all introductions. Some steps occurred less frequently in this sub-corpus. These include *presenting research questions and hypotheses* (M3S2), *definitional clarifications* (M3S3), *announcing principal outcomes* (M3S5), *stating the value of the present study* (M3S6), and *outlining the structure of the paper* (M3S7) which occurred 20%, 13%, 6%, 13%, and 26%, respectively in the sub-corpus. The absence of these steps can be attributed to the nature of the RA, where little space is allowed to realize move 3 with different rhetorical strategies. Examples of the less frequent steps are presented below. More examples of the use of this move and its linguistic realization, with a focus mainly on the most frequently used steps (S1 and S4), are discussed below.

- **Step 1: Announcing present research descriptively and /or purposefully**

One step used by NE authors to realize move 3 was *announcing present research descriptively and /or purposefully*. It appeared in 100% of the sub-corpus; hence, it can be characterized as an obligatory step in move 3 in introduction writing. This finding is in line with the CARS model in which this step was also described as an obligatory step in move 3.

The Examples below (ex 11, 12, and 13) demonstrate how the research goal is announced by NE writers. In most of the introductions in this sub-corpus, writers employed the personal pronouns (*I* or *we*) followed by verbs indicating the purpose of the study (such as *aim*, *address*) to present their research aims. In other introductions, the writers used impersonal structures in order to announce their research aims. These structures include determiners (such as *this*, *the*), followed by nouns (such as *study*, *research*) and an infinitive (*to improve*, *to match*) (Ex 11). In this step, the use of the present tense may suggest that the research is new and lively.

Example 11: ***This study aims to improve*** our understanding of the demands that learning disciplinary, technical words places on non-native speakers of ... (NSRAI6)

Example 12: *In this study, which involved closely examining the experiences of sixteen EFL students in learning English composition in their X university over a period of one year, I aimed to match up... practice by connecting two different conceptual level frameworks...*(NSRAI3)

Example 13: *In this study, we address these issues by drawing upon keystroke logging (KSL) and SFL to examine the revisions of three master's students with English as a first language (L1) and three with English as a second language (L2). We included L1 and L2 groups that were similar in age, education level...*(NSRAI7)

• Step 4: Summarizing methods

Summarizing methods is another step used to realize move 3. In this sub-corpus, this step was not preferred by NE writers, as it occurred in only 46% of their RA introductions. This small frequency of occurrence is reason enough to describe it as an optional step in move 3.

In the Examples below (ex. 14 and 15), the writers presented the aspects of research methodology and procedures followed in their studies. Linguistically, this step was characterized mainly by the presentation of the research instruments for data collection (such as "questionnaires", "interviews"... etc.), teaching activities (such as "implicit feedback", "individual corrective feedback"... etc.), and statistical tools (such as "MANOVA"). Action verbs describing research activities (such as "collect", "receive", "apply") in the simple past were also used in order to clarify how their research was conducted and to indicate that their research was completed. NE writers introduced this step by the use of prepositions (such as "in") and possessive adjectives (such as "our") preceding nouns (such as "study," "research") to indicate that the presented research instruments and statistical tools are specific to their studies.

Example 14: *In our research we collected questionnaire data.... We applied multiple analyses of variance (MANOVA) to explore how language learning motivation, self-regulation and learner autonomy is[sic] related to socio-economic factors.* (NSRAI14)

Example 15: *In our study, students received implicit feedback in the form of repetitions and recasts (they were able to listen to their own recorded pronunciation and to model speech). One group of students also received individual corrective feedback (ICF) which*

included explicit metalinguistic information and a 'push' for output in addition to the listening activities. (NSRAI15)

• Step2: presenting research questions or hypotheses

The step of *Presenting research questions or hypotheses* was not preferred by NE writers as it was found only in 3 out of 15 introductions (20%). This finding confirms Swales (2004) characterization of this step as an optional step of move 3 in academic writing introductions. Example 16 shows how this step was realised.

Example 16: The **research questions** for this study are:

How can a simplified version of the Appraisal framework be mapped onto a simplified version of the selves 'framework' to analyze EFL student writing?

How can this process reveal metalanguage that university EFL writing teachers can use to understand writer identity in appropriate and effective written arguments? (NSRAI3)

• Step 3: Definitional clarifications

The *Definitional clarifications* step was also found to be optional as it appeared only in two RA introductions. In example 17, the writer tried to inform readers of how a specific concept (dynamic assessment) is understood in his study, with the aim of situating the study in a specific area that needs attention.

Example 17: DA **is defined as** an "approach to understanding individual differences and their implications for instruction [that] embeds intervention within the assessment procedure" (Ref). (NARAI4)

• Step 5: Announcing principal outcomes

As it was mentioned before (p. 214), the step of announcing principal outcomes tends to be absent in this sub-corpus. It was found only in one introduction (ex. 18), a finding that was predicted by Swales (2004). In his 2004 CARS model, Swales (2004) stated that the step of announcing *principal outcomes* might be found in some disciplines, but it may not be reported in others. Linguistically, this step was signaled by lexical items such as "findings" and assertive verbs in the present simple, such as "demonstrate" as shown in Example 18.

Example 18: *Although it is beyond the scope of the present study, **our findings in the larger project... demonstrate** that the explicit teaching of language for curriculum learning is also **valuable** for PE and other subjects.* (NSRAI1)

• Step 6: Stating the value of the present study

In this sub-corpus, the step of *stating the value of the present study* was only mentioned twice, hence it is an optional step. In this step, writers build a connection between the results of their research and the outside world. In Example 19, the author made an effort to highlight the importance of his discoveries for the vocabulary researcher and subject experts.

Example 19: *Since **technical words combine language and subject knowledge (Ref), findings from this study will be of interest not only to vocabulary** researchers, but also to subject specialists involved in teaching content through students' second language.* (NSRAI6)

• Step 7: Outlining the structure of the paper

The step of Outlining the structure of the paper is also another optional step in RA introductions authored by NE writers. This is because it appeared less frequently in the sub-corpus, with the percentage of only 26 %. Example 20 shows how this step was realised.

Example 20: In this paper **we will first review** ... and discuss the potential role of.... **This will be followed** by a description of our research procedures ... **Next, we will provide** a detailed discussion of our findings in the light of **The paper will be concluded** by ... (NSRAI14)

5.1.1.3. Rhetorical Move Patterns

In terms of move sequence, Table 5.1 demonstrates that the majority of NE writers start their RA introductions with M1 (*establishing a territory*) and close their RA introductions with M3 (*presenting the present work*). Only one introduction (NSRA5), as an exception, starts with M1 and closes with M2. Table 5.1 also reveals that there are diverse patterns of moves in RA introductions authored by NE writers. The most common pattern is the linear pattern (i.e., M1-M2-M3). This pattern was found in 60% (9 out of 15) of this corpus. The remaining patterns are cyclical in which either M2 or M3 (or both) are repeated in the introductions. The M1-M2-M3-M2-M3 pattern is followed by 20% of the corpus, 13% of the introductions follow the M1-M3-M2-M3 pattern, and only 7% follow the M1-M2-M3-M2 pattern. On the

whole, NE writers of RA introductions in applied linguistic discipline showed a strong inclination to follow the move pattern proposed by Swales (2004).

Table 5.1: *Move Sequence in RA Introductions Authored by NE Writers*

Move sequence	No	%
RA introductions following Swales CARS model		
M1-M2-M3	9	60
M1-M2-M3-M2-M3	3	20
M1-M2-M3-M2	1	13
RA introductions deviating from the strict Swales CARS model		
M1-M3-M2-M3	2	7
Total number of RA introductions	15	100

M: Establishing a territory; M2: Establishing a niche; M3: Occupying a niche

5.1.2. Move-Step Structure of the Algerian Research Article Introductions

This section, like the first, examines the move-step structure of RA introductions authored by Algerian writers using the Swalesian framework (the CARS model). By doing this, we aim to pinpoint the rhetorical preferences of the Algerian RA authors. With regard to the data, 15 represent the number of RA introductions in applied linguistics that make up the sub-corpus of Algerian writers. This section begins by outlining a broad conclusion about the presence of the moves and steps in this sub-corpus. This is followed by an in-depth description of the moves and steps, along with how they are realized linguistically. This section comes to a close with a discussion of the rhetorical patterns found in the Algerian RA introductions.

5.1.2.1. Overview of the Findings

The second investigated sub-corpus consists of 15 RA introductions written by Algerian writers. These writers graduated from Algerian universities and published their articles in Algerian journals. The analysis of the Algerian RA introductions revealed that the moves covered by Swales (2004) occurred in the Algerian RA introductions. With regard to move 1, all the writers of RA introductions employed this move except for two (ARAI6 and ARAI12), where this move was neglected (see Appendix 2). Move 2 took different positions in the sub-corpus. In some introductions (ARAI1, ARAI2, ARAI5, ARAI11, ARAI14, ARAI15), it appeared in its normal position, i.e., after the first move (M1). In others (ARAI3, ARAI8,

ARAI9, ARAI13), it was totally neglected where the introduction is composed only of two moves (M1, M3). In the remaining introductions (ARAI6, ARAI7, and ARAI12), move 2 was the opening move. The last move (M3) appeared in all of the RA introductions except in ARAI6 and ARAI12. To put these into numbers, the frequency of occurrence of M1, M2, and M3 was 86%, 66%, and 100%, respectively, in the Algerian sub-corpus. M1 occurred relatively often or always, while M3 was always present, as it appeared in 15 out of 15 introductions. M2 was rarely present in the Algerian sub-corpus. These percentages allow us to classify the status of the moves in accordance with the criteria mentioned earlier as follows: Move 1 and Move 2 are conventional; Move 3 is considered obligatory in the Algerian RA introductions.

With regard to the rhetorical steps, the findings revealed that some steps occur often while others are rarely used. The step topic generalizations of increasing specificity in move 1, the step M2S1D indicating a real-life problem (not included in the CARS model), and the step M3S1 announcing present research descriptively and/or purposefully occurred frequently, with 86%, 66%, and 86%, respectively, being used in the Algerian RA sub-corpus. However, the steps M2S1b, which add to what is known in move 2, M3S5 announcing principal outcomes, M3S6 stating the value of the current study, and M3S7 outlining the structure of the study in move 3, were rarely used, appearing in only 6% of the sub-corpus. The remaining steps occurred in a few introductions. These include M2S1a *indicating a gap* and M2S2 presenting positive justification in move 2, M3S3 *definitional clarification*, and M3S4 summarizing *methods* in move 3. These steps occurred only in 26% of the Algerian sub-corpus. The realization of moves and steps in the Algerian RA introductions is thoroughly discussed in the following section, which provides some real examples from the sub-corpus.

5.1.2.2. Analysis of Move-Step Structure

Having recognized the frequency of occurrence and the position of the moves and steps utilized in the RA introductions written by Algerian writers, this section gives the detailed findings of the genre analysis of 15 RA introductions written by the same writers. Then, using text examples from the sub-corpus, their communicative or functional goals as well as typical linguistic characteristics realized in each move and step are explained. The most prevalent and favored rhetorical patterns in this sub-corpus are then noted.

–Move 1: Establishing a territory via topic generalization of increasing specificity.

As it was mentioned earlier, *establishing a territory* is the first move in the CARS model. In writing RA introductions, this move ensures readers that the subject under investigation is intriguing or essential; it also serves to alert readers to the issue or stimulate their curiosity, especially when it appears at the beginning of the introduction. In the Algerian RA introductions, *establishing a territory* was found only in 13 out of 15 RA introductions (86%) authored by Algerian writers. In the remaining two introductions, writers start their introductions by moving to move 2 (establishing a niche).

In realizing the first move (M1), Algerian writers of RA introductions employed a number of rhetorical strategies but with different frequencies of occurrence. This includes *claiming centrality of the topic*, *making topic generalization*, and *reviewing previous research*. The *making topic generalisation* step was found to be the most prominent strategy in the Algerian RA sub-corpus as it appeared in 60% (9 out of 15) of the sub-corpus. This is followed by claiming centrality which appeared in 5 introductions (33%). *Reviewing the previous research* step was not preferred by Algerian writers as it was found only in one introduction. Examples of move 1 are demonstrated below

Example 21: ***The effective use of language involves in the first place the learners' ability to use the linguistic knowledge in order to interpret different language functions*** (ARAI10)

Example 22: ***Writing is one of the four language skills students should develop when attempting to learn a foreign language. Given its complexity, both EFL teachers and specialists make considerable efforts to find out easier ways of teaching and making students learn this skill*** (ARAI3)

Example 23: ***Developing appropriate composition skills is one of the hardest challenges for English as Foreign Language university students. The challenge lies in coping with the complexity of the writing skill that encompasses various sub-skills that are necessary for university learners...***(ARAI5)

Example 24: ***The increasing interest in publishing research articles (RAs) has heightened the need for creating an international framework that guides scientific writing the***

worldwide. RAs introductions are still **a source of wide controversy** among researchers. (ARAI1)

Example 25: *Feedback is the **most important aspect** in teaching writing skill because it helps learners to improve, refine and shape their writing ability.* (ARAI8)

The Examples presented above are instances of move 1 taken from the Algerian RA introductions. As it is demonstrated in these Examples (Ex. 21, 22, 23, 24, and 25), most Algerian writers began their RA introductions by presenting a statement about a shared knowledge. That is the *making topic generalization* step. This step is always present and usually begins the introduction section. However, it can have different positions within the introduction section. Swales (2004) argued that although this step might have different forms, it often belongs to one of two groups: statements about phenomena and statements about knowledge that is known in the field or practice.

In other words, authors use this step to define the key idea and provide a clear summary of the issue that needs to be investigated. Examples 21, 22, and 23 are the best ones that illustrate how this step is realized. In addition to that, Algerian writers showed the tendency to start their introductions by indicating the centrality of the topic in question. This was done by showing either that there was an interest in a given topic or demonstrating the significance of the subject matter (ex. 24 and 25). In these cases, the linguistic realization of move 1 was done through implementing the lexemes "important," "challenging," "complex," etc. Verbs in the present tense (such as "involves"), "is" , "lies" , "make") are also used in order to convince potential readers that their research is new and worth investigating. One noticeable thing in the introductions of RA authored by Algerian writers is the absence of *references to previous studies* step in move 1. As it was mentioned earlier, this rhetorical strategy was rarely used, with the exception of one introduction. The absence of this step in the Algerian writers' sub-corpus rendered their research topics decontextualized in the literature. Moreover, the lack of this step made the Algerian writers' arguments appear weak and not strong enough to convince their potential readers.

–Move 2: Establishing a niche

The second move in RA introductions is the *establishing a niche* move. This move validates a study by highlighting perceived gaps in the existing literature. In other words, writers want to demonstrate that although the topic in question has been the subject of several

studies, there is still a gap that needs to be filled. According to Swales (2004), this move can be realized through *indicating a gap, adding what is known or presenting positive justifications*. However, in the Algerian RA introductions, move 2 was found only in 66.6% of the sub-corpus. It is worth noting that this move was mostly realized by *indicating a problem in real life* (which is not included in the CARS model) rather than *indicating a gap in previous research*. Based on the categorization criteria mentioned previously, this move is optional in the Algerian RA introductions. Within the step level, the steps introduced by the CARS model were rarely used. The steps S1a, S1b, and S2 accounted for 26%, 6%, and 13% of the sub-corpus, respectively. The findings also revealed that the Algerian writers of RA introductions have an inclination to realize move 2 by indicating a problem in the real world rather than in the research world. More elaboration on how this move was realized is presented below.

• Step1a: Indicating a gap

Example 26: *Previous research had looked at RAs introductions as problem-solution texts and it focused on the surface study of texts basing on their goals, current capacity, problem, solution and criteria of evaluation (Ref, 1983). **However**, this method had been considered **to be flawed** because researchers are required to state the significance of incomplete research and its contribution in the discipline. **The purpose of this** research is to investigate the applicability of genre analysis of the introductions of applied linguistics research articles published in Algerian and International Journals of scientific research.* (ARAI1)

Example 27: ***Although** the efficiency of incorporating FSs in second/foreign language writing classrooms was proved by many studies (e.g. Ref; Ref; Ref), teachers' attitudes towards the inclusion of these sequences **remained uncharted territory**. **The focus has mostly been on** the use of FSs from the perspective of learners.* (ARAI15)

Example 28: *In the Algerian settings, **a limited repertoire** of vocabulary is assumed to be a **major problem** that affects EFL learners.... Consequently, the paucity of lexical knowledge **remains to be a hindrance** to achieve both linguistic and communicative competences.* (ARAI2)

Example 29: ***However**, many EFL **students encounter problems** in the use of cohesive devices... these **students fail in** using them appropriately at many levels because they do not*

possess an awareness of the stylistic, semantic and syntactic variations of such connectors.
(ARAI11)

As demonstrated in the above Examples, this step is signaled through the use of contrastive conjunctions (such as *although* and *however*) and negative qualifier words (such as *limited*). Phrases indicating the limitations of the previous studies, such as "*to be flawed*," *remained uncharted*," *remains to be a hindrance*" are also used by Algerian writers of RA introductions to highlight that there is a gap to be filled.

Although the Algerian writers succeeded to some extent in realizing the *indicating a gap* step at least at the surface level, a careful analysis revealed that their arguments appeared to be weak and less convincing. In the Example (26), the writer employed two linguistic choices ("however" and "to be flawed") with the intention of highlighting the research gap; however, no gap could be identified in his text. Moreover, the first argument (Previous research... of evaluation (Ref)) in the text was supported by evidence (reference). The second part (**However**, this method... contribution in the discipline) appeared as an opinion as it was not supported by evidence. The striking problem with this text is that the purpose of the study (the purpose of this research is to investigate the applicability of genre analysis...) does not match the research gap, if there is a gap.

• Step1b: Adding to what is known

Adding to what is known was the least common step employed by Algerian writers of RA introductions when it comes to *establishing a territory* move. Although this step was introduced as an obligatory step in the CARS model, Algerian writers of RA preferred not to include it in their introductions. The sub-corpus as a whole contained only 6% of this rhetorical step. Example 30 shows an instance of this step with linguistic realization

Example 30: **Inadequate** research has been carried out in the area of collocation. **Although** some researchers have shown interest in collocations, extensive research **still needsto** be undertaken to highlight its practical importance in improving EFL learners' overall linguistic competence. (ARAI12)

In this Example (ex. 30), the writer mentioned that the topic under investigation (collocations) has been the subject of a number of researchers, but more studies in the same

topic are still required. This is because, according to the writer, there are some areas that need to be highlighted.

• Step 2: Presenting Positive Justification

To establish the need for conducting the research, the *Presenting positive justification* step is used (Samraj, 2008). Typically, this is accomplished by outlining the predicted outcomes of the study. In other words, this rhetorical step is used to argue why a gap in knowledge must be filled or why earlier research must be improved. Similar to *indicating a gap* step, this step was only found in 13% of the Algerian RA sub-corpus. The Example below illustrates how this rhetorical step is signaled.

Example 31: We think that **exploring the theoretical aspect of the repertoire of the writing strategies would be of great benefit** for our work since these strategies **help learners to improve** their writing. (ARAI4)

Example 32: Knowing **students learning styles** can help in many ways enhance learning and teaching. First, teachers **can benefit** by getting information about how their students can learn better... Second, making students aware of their learning styles **can help** them understand their strengths, weaknesses... Furthermore, providing students with learning content and activities that fit their preferred way of learning **can make learning easier** for them (ARAI6)

In the Examples above (ex. 31 and 32), the writers tried to convince their readers that the topic being investigated in their research papers is quite beneficial by pointing out how the problems encountered by students can be solved. Linguistically speaking, positive words (such as "benefit", "advantages", "help", "improve", "easier" and modal verbs (such as "can", "would" and "may")) were used to realize the *presenting positive justification* step.

–Move 3: Presenting the Present Work

Move 3 (M3) serves as a way to present the work that would fill the gap mentioned in Move 2 (M2). As a result, M3 and M2 are closely related. According to Swales (2004), *Presenting the Present Work* move can be realized by either the combination of the seven steps outlined in the CARS model or by an individual step. In this sub-corpus, M3 was found to be present in every RA introduction, making it an obligatory move in RA introductions. In this move and after establishing a niche, Algerian writers presented their research using a number of rhetorical strategies. Nonetheless, there was variance in the frequency and quantity of steps taken when these strategies were applied. In terms of the quantity of steps, in seven

introductions this move was realized by only two steps, while in the other four introductions it was realized by only one step. In the other two introductions, this move was realized by three steps. In the remaining introductions, it was realized by four steps. With regard to the frequency of occurrence, some steps were rarely used while others were used in all introductions. More illustrations on the use of this move and its linguistic realization with a focus mainly on the most frequent steps (S1 and S4) are presented below.

• Step 1: Announcing Present Research Descriptively and /or Purposefully

Announcing present research descriptively and/or purposefully is the second most widely employed step across the RA instructions authored by Algerian writers as it appears in most of the introductions. The only exception was the introductions 9 and 10 (ARAI9 and ARAI10), where the aim of the study was not mentioned. The Examples below illustrate how this step was realized by the Algerian writers.

Example 33: ***This paper aims at exploring the students' levels of vocabulary comprehension and use by means of the administration of two well-known diagnostic and proficiency vocabulary tests.*** (ARAI2)

Example 34: ***The aim behind this study is to choose a positive kind of feedback to improve the learners' writing proficiency.*** (ARAI4)

Example 35: ***The present study attempts to shed some light on Algerian learners' knowledge of collocation in academic writing. It investigates the correlation between success in writing and the acquisition of collocations.*** (ARAI12)

The Examples above (Ex. 33, 34, and 35) clarify how the research goal is announced by Algerian RA writers. This step was frequently indicated by deictic terms (like "the present study," "this paper," etc.) followed by a present tense verb (like "attempts," "aims," etc.), leading to a thorough explanation of the writer's research goal. Most of the introductions in this sub-corpus opted to announce the research aims in an impersonal manner. As shown in Ex 33 and 35, these structures include determiners (such as "this," "the") followed by nouns (such as "study," "research") and infinitives ("to improve," "to match"). In announcing the aims, the writer's identity was totally absent in the whole sub-corpus of the Algerian RA introduction.

• Step2: Presenting Research Questions or Hypotheses

Presenting research questions or hypotheses step was not favored by Algerian RA writers, as only 6 out of 15 RA introductions included it. This finding confirms with Swales (2004), who stated that the *presenting research questions or hypotheses* step is an optional step in RA writing. In most cases, the Algerian writers relied on impersonal structure in realizing this step. The research questions were always preceded by an introductory statement. In this statement, the deictic "study" or "paper" is the subject of the statement instead of the researcher. Verbs in the present tense (such as "aims", "attempts") followed by an infinitive (such as "to answer") and the reference "questions" were usually the constituents of the introductory statement structure. The impersonal structure was also used in presenting the hypothesis(s). The most introductory statement structure that preceded the hypothesis(s) was "it + to be+ verb + that."

Example 36: *This study attempts to answer **the following questions**:*

1. *Are EFL teachers aware of the phenomenon of formulaicity?*
2. *What are the teachers' attitudes and related practices regarding the inclusion of FSs in their writing classrooms? (ARAI15)*

Example 37: *To answer these questions, **it is hypothesised that** if students are provided with un-coded written feedback, coded written feedback, and peer feedback this would result in effective results on the writing performances of... (ARAI3)*

• Step 3: Definitional Clarifications

Due to the fact that it was only included in 4 out of 15 introductions, this step is likewise optional in RA introductions written by Algerian authors. In order to clarify the key ideas in their research, Algerian writers of RA frequently employ the words "definition," "define," "refer to," and "is" in this step. The step of *definition clarification* was not only used to define significant terms in the relevant literature but also to introduce the specific terminology utilized in the study (see the 2nd sentence of Ex. 38).

Example 38: *Actually, the concept of learning styles **has been differently defined**. In this study, learning styles **refers to** an individual's characteristics and preferred ways of gathering, interpreting, organizing and thinking about the information. (ARAI7)*

• Step 4: Summarizing Methods

Similar to the RA introductions authored by NE in the first sub-corpus, the *summarizing methods* step was an optional step in RA introductions authored by Algerian writers, as it appeared in only 3 out of 15 introductions. Although this step was mentioned in three introductions, it was embedded with other steps. It was found in two introductions to be embedded with other steps. In Example 39, the writer of the introductions combined the steps of summarizing methods and announcing present research descriptively and/or purposefully, whereas in Example 41, the writer combined the steps of announcing principle outcomes and summarizing methods. In these two introductions, the presentation of research instruments and statistical tools was lacking, indicating how the research was done was also not stated clearly. Only in one introduction (ARAI2) (ex. 40), the writer stated clearly how the research was carried out. In describing methodological procedures, different linguistic elements and lexical items were employed to signal this step. These include the use of past simple activity verbs (such as "administer," "give") and infinitive measurement verbs (such as "to assess," "to measure,"... and so on). Subordinate conjunctions (such as "first," "second") were also used to illustrate the time frame for the study's research procedures. The use of these linguistic and lexical items helped the writer present the relationship between variables in his research in a clear way.

Example 39: **Using Swales CARS schema**, the study **attempts to recognize** rhetorical differences among applied linguistics RAs introductions and their specific linguistic conventions (ARAI1)

Example 40: **Firstly, the Vocabulary Size Test (VST)** was administered to **measure** the participants' vocabulary receptive knowledge; particularly, their abilities to recognize and comprehend words within a limited context. **Secondly, the Productive Vocabulary Levels Test (PVLТ)** was **given to assess** the participants' productive vocabulary knowledge, notably their levels of proficiency in word use within various contexts.(ARAI2)

Example 41: The researcher used the **focus group discussion** to explore this issue, it was found that...(ARAI7)

• Step 5: Announcing Principal Outcomes

The *announcing principal outcomes* step was rarely used in the introductions of Algerian RAs, as it appeared in only two introductions. Although this step was realized by lexical items (such as "results" and "findings") and assertive verbs (such as "reveal"), the

communicative purpose of step 5 (in move 3) in the Algerian RA introductions does not function as announcing principal outcomes. In Example 43, for instance, the writer did not present the findings of the research that went in line with the aim of his research (Ex. 44). Instead, he restated the indicating a real-life problem.

Example 42: *The **results** of the study **reveal** important differences between x and International RAs introductions.* (ARAI5)

Example 43: *The researcher used the focus group discussion to explore this issue (M3S4), it was **found** that students really experience many difficulties in writing; they are not accustomed to write, they cannot express their ideas on paper, and one major factor is that most teachers use the same writing instructions and activities with the whole class depreciating their students' different learning styles.*(ARAI7)

Example 44: *The major **aim** of this study is to investigate the effectiveness of teaching activities based on the students' learning styles in developing their writing skills.* (ARAI9)

• Step 6: Stating the Value of the Present Study

Stating the value of the present study step tend to be totally absent in the Algerian RA introductions. As it appeared only in 2 out of 15 RA introductions; this step is considered as an optional step in RA introductions. The Example 45 illustrates how this step was realized.

Example 45: ***The results** of an innovative assessment practice at the department of English at x University **will be used to illustrate** first year students of English attitudes towards self-assessment.*

As the Example (45) shows, this step is expressed in no more than one sentence. The key word "the results" and model verb "will," expressing the future tense, are among the linguistic choices that help the writer signal "*stating the value of the present study*" step.

• Step 7: Outlining the Structure of the Paper

Like the other mentioned steps, *outlining the structure of the paper* step was also not favored by the Algerian writers of RAs as it was found only in 2 out of 15 RA introductions. This step is illustrated by Example 46

Example 46: *So, **the first part of this paper** will be devoted to LLS. Research has shown that there are two kinds of language learners: successful language learners and unsuccessful*

language learners... **The second part of this paper** will deal with the writing skill. Indeed, writing is a difficult skill to master since it involves the mastery of a variety of other sub-skills. (ARAI4)

5.1.2.3. Rhetorical Move Patterns

With regard to move cycle, the research space was established in different ways in the Algerian RA introductions. Various rhetorical patterns preferred by Algerian writers are shown in the Table below (Table 5.2). The M1-M2-M3 pattern is the most common move pattern in their sub-corpus, as shown in Table 5.2; however, it was used in only 33% of their RA introductions. This shows that the majority of Algerian RA introduction writers preferred cyclical patterns to linear ones, as 67% of these writers used diverse combinations of moves to structure their introductions, some of which were repeated or inverted. In the Algerian RA sub-corpus, there was another preferred common pattern (M1-M3) in which move 2 was totally neglected. In this pattern, which appeared 33% in the Algerian RA, writers started their introductions with move 1 (*establishing the territory*), moving directly to close with move 3 (*presenting the present work*) without identifying a gap in earlier research or highlighting a problem to be solved. The remaining identified patterns, including M1-M3-M2-M3, M2-M3-M2-M3, M2-M1-M2-M3-M2-M3, M2-M3 appeared in 13%, 7%, 7%, and 7% of the whole sub-corpus, respectively.

Table 5.2: Move Sequence in RA Introductions Written by Algerian Writers

Move sequence	No	%
RA introductions following Swales' CARS model		
M1-M2-M3	5	33
RA introductions deviating from the strict Swales' CARS mod		
M1-M3	5	33
M1-M3-M2-M3	2	13
M2-M3-M2-M3	1	7
M2-M1-M2-M3-M2-M3	1	7
M2-M3	1	7
Total number of RA introductions	15	100

M: Establishing a territory; M2: Establishing a niche; M3: Occupying a niche

Table 5.2 indicates that only 33% of the RA introductions followed the strict pattern proposed by the CARS model. The remaining RA introductions (63%) authored by the

Algerian writers were found to deviate from the strict pattern of the CARS model. Besides, M2 was found to be absent in most of the Algerian RA introductions, although *establishing a niche* move is considered an obligatory move in RA introductions (Swales, 2004; Swales and Feak, 1994). These findings are sufficient to conclude that Algerian writers of RA introductions deviate from Swales' (2004) move pattern to some extent.

5.1.3. Differences and Similarities between English Native Speakers and Algerian Research Article Introductions

'To what extent do the move-step structures in the RA introductions written by Algerian EFL writers differ from those written by NE writers?' and 'do the move-step structures of RA introductions written by Algerian EFL writers and NE writers conform to Swales' (2004) model?' are the first and second research questions of the first part of this study. In response to these research questions, this section focuses on the similarities and differences between Algerian and NE writers regarding the move-step structure of their RA introductions. This section also discusses how well these groups of writers conform to Swales' (2004) model regarding the move frequency, realization, and status. Moreover, the findings of this study are compared to other previous genre analysis studies.

To start with, the RA introductory sections written by the Algerian and NE writers varied in terms of length and the space allocated to each introductory section. The NE writers' introductions had 8530 characters with an average length of 569 words in each introduction whereas RA introductions authored by Algerian writers contained 5976 words with an average of 398 words. In terms of the space allocated to each introduction in these academic writings, it was found that the number of pages ranges from one to two pages in both sub-corpus.

With regard to move-step structure, our study showed that all three moves included in the CARS model (Swales, 2004) appeared in both sub-corpus. However, there were some differences in the frequency of move occurrences. Based on the frequency of occurrence of each move identified, we were able to determine the status of individual moves, be they obligatory, conventional, or optional. In the Algerian sub-corpus, *establishing a territory* was the conventional move, while the optional move was *establishing a niche*. *Presenting the present work* was the only obligatory move in their RA introductions. In contrast, all the moves introduced in Swales (2004) were found to be obligatory moves in RA introductions authored by NE writers as they appeared more than 90% of the time in the whole sub-corpus.

The presence of all three moves in all RA introductions authored by NE writers implies that this group of writers succeeded to a large extent in establishing their research in the eyes of the discourse community. In writing their RA introductions, NE writers started showing the centrality of their research topics as an appeal to the discourse community to accept their research. This rhetorical move was often followed by indicating a gap in the previous research, the step which is highly valued ‘in a tightly contested territory’ (Swales, 2004, p. 226), which led them to occupy a niche as the last rhetorical move in their RA introductions. As a result, the authors developed an RA introduction that progresses from a broad to a more specific research field that requires more attention. In contrast, the Algerian writers created hybrid and non-predictable texts as some moves did not occur in their predictable position and *establishing the niche* move was not only absent but unconventionally realized in most of their RA introductions.

The Algerian and NE writers followed different rhetorical ways in realizing the first move (establishing a territory) in their RA introductions. Cross-cultural differences were prevalent in the choice of different rhetorical steps in this move. While some steps were prominent in one sub-corpus, they were partially neglected in the other. *Claiming centrality* was regarded as an obligatory step in the RA introductions of NE writers, while it was rarely used in the Algerian sub-corpus. In the NE sub-corpus, the *claiming centrality* step was found to appear in 100% of the whole sub-corpus, a finding that is in line with most of the previous genre analysis studies (Dudley-Evans, 1986; Lindeberg, 2004; Loi, 2010; Samraj, 2008; Swales, 1990; Wang and Yang, 2015). These studies indicated that *claiming centrality* is the common opening strategy in RA introduction writing. Due to the overt promotional nature of this strategy (Swales, 1990) and the fact that the research topic is usually promoted by strengthening its centrality, the step of claiming centrality is a crucial strategy for promoting research in applied linguistic RAs (Lindeberg, 2004; Wang and Yang, 2015).

While being a crucial rhetorical strategy, it was only occasionally used in the Algerian RA introductions (7% of the entire sub-corpus). The absence of this step in the RA introductions authored by the Algerian writers led them to miss an important rhetorical strategy. *Reviewing previous research* is another step that makes a difference between both groups of writers. This step was found in 93% of the NE sub-corpus. However, no traces of this step were identified in the Algerian sub-corpus (0%). The last step, *topic generalization*, was employed in most of the RA introductions of Algerian writers (60%)

while it was rarely used in the NE writers' sub-corpus (7%). Based on this, it can be argued that while *claiming centrality* and *reviewing previous research* are obligatory steps, *topic generalization* is an optional step in RA introductions authored by NE writers. On the other hand, while reviewing *previous research* and *claiming centrality* are optional steps, *topic generalization* is a conventional step in the Algerian RA introductions.

Based on the textual analysis, this study also found that the Algerian and NE writers varied in their ways of constructing move 2. The NE writings are presented utilizing nearly all of the rhetorical steps introduced in Swales' (2004) model. These include *indicating a gap* (93%), *adding to what is known* (13%), and *presenting positive justification* (46%) steps. More than that, they employed different rhetorical strategies to realize the *indicating a gap* step. In fact, the latter is considered by many previous studies as not only the most important but the obligatory step in RA introduction writing (Samraj, 2008; Swales, 2004). In contrast, move 2 was not only partially neglected by Algerian writers but also realized by a few rhetorical steps and a limited number of necessary linguistic choices.

Despite the fact that move 2 appeared in 66 % of the Algerian writers' sub-corpus, the realization of this move was different from what was indicated in Swales' (2004) model. The Algerian writers showed an inclination to avoid criticizing or evaluating previous research, which was reflected in the absence of *indicating a gap* step. Instead, they preferred to deal with issues in the real-world as seen by the frequent use of *indicating a gap in the real world*. These differences revealed cross-cultural variations between Algerian and NE writers in both the frequency and construction of move 2. The scarcity of move 2 in RA introductions written by Algerian writers appears to be consistent with previous contrastive genre studies (Aggoun, 2018, 2020; Ahmad, 1997; Al Quahtani, 2006; Frederickson and Swales, 1994; Hirano, 2009; Jalilifar, 2010; Jogthong, 2001; Kashiha and Marandi, 2019; Ozturk, 2007; Samraj, Sheldon, 2013; Swales, 2004) in which non-natives were found to give less attention to this move.

For instance, Swales (2004) stated that in a corpus of non-English texts that can be considered to be equivalent to English ones, claiming knowledge and good performance in a specific field seems to have a higher priority than establishing that there exists a gap in previous research that needs filling. In justifying the scarcity of use of move 2 in non-native writing, most of the previously mentioned studies attributed the absence of move 2 to the influence of a number of factors, including the cultural and linguistic backgrounds (Al Quahtani, 2006), the influence of the local discourse community (Ahmed, 1997; Frederickson

and Swales, 1994), and the social environment (Kashiha and Marandi, 2019). These factors could explain the lack of move 2 in FL writing. Nonetheless, the Algerian writers of RA introductions appeared to be more influenced by the Algerian educational environment. The latter is characterized by a lack of competitiveness in terms of research dissemination. In addition, the status of English as the second foreign language in the Algerian setting might be the reason for the scarcity of English language researchers, which might again be the reason for the lack of competitiveness.

The use of move 3 in the Algerian and NE sub-corpus did not make a difference between both groups of writers. First of all, this move was found to be an obligatory move in both sets of data as it was widely used in by Algerian and NE writers. Besides, the findings showed that, generally, the occurrence of steps used to realize Move 3 in both corpora tended to be similar. The realization of move 3 was made mainly by only one prominent step, *announcing present research descriptively and/or purposefully*. This step occurred 93% and 100% of the time in the Algerian and NE sub-corpus, respectively, and is thus obligatory in move 3 realization. Similarities between both groups of writers were also highlighted regarding the use of the remaining steps. In both sets of data, the remaining steps were entirely optional in move 3.

The only difference was marked by the appearance of two rhetorical steps. *Presenting RQ or hypothesis* step was prevalent in the Algerian sub-corpus (40%), when compared to the NE sub-corpus (13%). On the other hand, the *summarizing methods* step was prominent in the NE sub-corpus (46%), while it was almost totally absent in the Algerian sub-corpus (13%). The realization of move in both sets of data is consistent with the CARS model since, in the latter, only the *announcing present research descriptively and/or purposefully* step is obligatory, whereas the other steps are designated as optional in RA introductory writing.

With regard to the move patterns, Table 5.3 demonstrates that there is a significant difference in the move patterns of the two groups of writers. While the NE writers preferred the linear pattern (M1-M2-M3), the RA introductions of Algerian writers appeared to be structured according to certain regularities (such as M1-M3, M2-M3-M2-M3, M2-M1-M2-M3-M2-M3, M2-M3). The move sequence of NE writers' introductions often starts with M1, with repeating moves appearing in only a small number of introductions. Nevertheless, the move sequence in the Algerian RA introductions starts with M1, M2, or M3, and practically all moves recur in their move sequences. This finding is in line with previous genre analysis

studies (Loi, 2010, Samraj, 2008, Sheldon, 2013). These studies found that whereas non-native writers deviate from the conventional pattern and use different patterns in their RA introductions, NE writers tend to follow the conventional move pattern. Loi (2010) found that only 40% of Chinese writers followed the linear structure, compared to 55% of NE writers, while Sheldon (2013) revealed that Spanish writers preferred not to include move 2 in their RA introductions when compared to NE writers. Table 5.3 reveals that the M2-M3 pattern is the preferred move cycle in NE writers' RA introductions. This finding contradicts Swales (1990), who claimed that the M1-M2 pattern recurs in RA introduction writing. This, however, might be attributed to the influence of the disciplines from which the RAs were extracted, as the corpus in Swales (1990) included RAs from different disciplines. In applied linguistics academic texts (the focus of this study), it can be argued that the recurrence of M2 and M3 might be a good strategy for writers to indicate the worth of their research by reminding the reader about the existence of the gap (M2) in the previous research and the necessity to fill this gap (M3).

Table 5.3: *Rhetorical Patterns in RA Introductions Authored by NE and Algerian Writers*

Rhetorical Patterns	NSRAIs	ARAIs
	%	
M1-M2-M3	60	33
M1-M2-M3-M2-M3	20	
M1-M2-M3-M2	13	
M1-M3-M2-M3	7	13
M1-M3		33
M2-M3-M2-M3		7
M2-M1-M2-M3-M2-M3		7
M2-M3		7
	100	100

Summary

This section presented a linguistic examination of the RS, moves and steps, of RA introductions authored by Algerian and NE writers. The differences and similarities between these two groups of writers in terms of how moves and steps are realized linguistically and rhetorically were underlined. In light of this, it may be claimed that the findings of this study provide support for the theory that the social-cultural context influences writing (Mur-Dueas,

2011, Hyland, 2005). The social-cultural context had an impact on both sets of writers in this study, which was reflected in the ways they structured their RA introductions. Although there were some similarities, there were also a number of differences between the two sets of writers in a number of areas, such as the number of words, the length of the introductions, the frequency of moves and steps, and the preferred rhetorical patterns.

Having examined the RS of RA introductions authored by NE and Algerian writers, the second section of this chapter presents the findings regarding the RS of PhD thesis and MD introductions authored by Algerian learners of EFL. It should be noted here that an adapted model (see p. 200) is used to investigate the moves and steps in these academic genres, aiming to highlight the differences and similarities between the PhD thesis and MD writers.

5.2. Rhetorical Structure of Algerian PhD Thesis and Master's Dissertation Introductions

The second section of this chapter deals with the second set of research questions of the first part of this study (research questions 2, 2.1, 2.2 and 2.3). These research questions are the following:

2. What are the move-step structures of PhD thesis and MA dissertations introductions written by Algerian writers?

2.1. To what extent do the move-step structures in PhD thesis introductions differ from those in MD introductions?

2.2. Do the move -step structures of PhD thesis introductions written by Algerian writers conform to Swales (2004) model?

2.3. Do the move -step structures of MD introductions written by Algerian writers conform to Swales (2004) model?

In response to these questions, this section starts first by presenting the distribution of moves. i.e., the frequency and percentage of the application of each move along with their categories (obligatory, optional, and conventional). The rhetorical patterns of the academic writing introductions of each group are also highlighted. The findings are compared to find out how each group of writers rhetorically organises the academic writing introduction. In

doing so, the similarities and differences in terms of move structure and move patterns are highlighted.

5.2.1. Move Step-Structure of the Algerian PhD Thesis Introductions

I previously used the adapted CARS model to examine the move-step structure of RA introductions written by Algerian authors (Swales, 2004). This section examines PhD thesis introductions written by Algerian authors using the same move-step model, i.e., the adapted CARS model. This sub-corpus includes 15 introductions that were taken from PhD theses, submitted in partial fulfillment of the requirements of a PhD thesis in applied linguistics. This section begins with the overall findings, and then goes into a great detailed description of the moves and steps and their linguistic realization. This section ends with a description of the rhetorical patterns found in the sub-corpus.

5.2.1.1. Overview of the Findings

The analysis of moves and steps of the Algerian PhD thesis revealed that all the moves (M1: Establishing a territory, M2: Establishing a niche, M3: Presenting the present work) captured by the CARS model (Swales, 2004) were present in their PhD thesis introductions. The only exception was one introduction (APhdTI15), in which move 1 was not included. In this introduction, the writer preferred to start by indicating a gap in the real world instead of introducing or showing the importance of his research to the discourse community. Move 2 took different positions in the PhD introductions. It appeared in its normal position, i.e., after M1, in some introductions (APhdTI1, APhdTI2, APhdTI3, APhdTI4, APhdTI7, APhdTI11, APhdTI12, APhdTI13, APhdTI14). It appeared after M3 in other introductions (APhdTI5, APhdTI6, APhdTI8, APhdTI9). In most of the introductions, this move was recycled more than twice. For instance, this move (M2) was employed four times (M1-M2-M3-M2-M3-M2-M3-M2-M3) in the PhD introduction number 12 (APhdTI12). Lastly, move 3 was always the closing move in all the PhD introductions.

With regard to move realization, the rhetorical steps used by Algerian PhD thesis authors are quite similar to those proposed by Swales (2004). Some steps were highly favored while others were largely ignored. Other steps which were not mentioned in the CARS model but were included in the Algerian PhD thesis introductions. Steps like M1S1B, M3S3, and M3S5 were almost non-existent; whereas M3S1, M3S2, M3S4, and M3S4 were frequently used in the introductions. The newly identified step M2S1C (indicating a gap in the real

world) was widely used in the Algerian PhD thesis introductions, though it is not described in the CARS model.

5.2.1.2. Analysis of Move-Step Structure

The research authors of the PhD thesis introductions have taken advantage of a number of linguistic and rhetorical signals that are representative of the moves and steps shown in constructing a research space. By providing some examples drawn from the PhD thesis introductions, the next section investigates various manifestations of moves and steps.

–Move 1: Establishing a Territory via Topic Generalization of Increasing Specificity.

Move 1 was found in 93% of the sub-corpus. Hence, it can be considered as an obligatory move in the Algerian PhD thesis introductions. It was principally in the initial position in all introductions. However, it was recycled in some introductions. In the APhDT1 and APhDTI2, move 1 was found in the initial position and it appeared again in the third position(**M1**,**M2**,**M1**,**M2**,**M3**/**M1**,**M2**,**M1**,**M3**) after the move, while in the APhDTI14, this move recurred after the move 3(**M1**,**M2**,**M3**,**M1**,**M2**,**M3**). In realizing move 1, writers usually exploit three main rhetorical steps, namely *claiming centrality*, *topic generalization*, and *reviewing items of previous research* (Swales, 1990, 2004). However, in this study, move 1 was made possible by mainly two rhetorical strategies: claiming centrality of the topic being investigated (Ex 47a, 47b, and 48) and reviewing the items of previous research. PhD thesis writers rarely used topic generalization to realize move1.

Example 47a: *For literate communities, reading is considered as **an essential** part to life. It is **central to** learning in school, work, and in everyday life. It is **an important** tool in education and individual development as it plays **central roles** in individuals" careers. It is seen by some scholars as a **life-long** activity that is conducted for specific purposes. Indeed, reading is **central to learning** as it sets the foundations for learners" future success.* (APhDTI2)

Example 47b: *Writing occupies the **central** position among the literature subjects and plays a **vital** role in social, cultural and academic setting ... In fact, the teaching of writing as a skill **attracts** papers, articles, journals, and dissertations; however, writing is still an area of **lively** debate and research. In addition, students in different academic settings are still finding it the most intellectually **demanding and cognitively complex** of the four modes of communicating through language.* (APhDTI14)

Example 48: *Forgetting or losing language or language skills **has recently been recognized** as a dilemma threatening language retention. This could be noticed on immigrants returning to their mother lands after having stayed longer periods in the host country, and in students learning a foreign language.* (APhDTI3)

As it is demonstrated in the Examples above, the PhD thesis writers introduced the topics of their studies by claiming that they were important areas of research. This was usually done by implementing predicative and attributive adjectives (such as "an **essential** part," "the **central** position," "reading is **central** to learning," etc.). To indicate that the topic is new and lively, verbs in the present tense (simple and perfect, passive and active) (such as "is," "has recently been," "occupies," and "attracts") were used. These linguistic choices and lexical items support highlighting the significance of the subject and ongoing interest in a specific idea or study area.

The *topic generalization* step was another rhetorical strategy employed to realize move 1 in the PhD thesis introductions. However, it was not preferred by Algerian PhD thesis writers as it appeared only in a few introductions. This step was always described with a statement about what is currently understood in the field and a statement regarding a particular phenomenon. The PhD thesis writer used this step to offer a clear definition of the issue or subject under investigation. The following Example (Ex. 49) illustrates the use of step 2, *topic generalisation*, in the PhD Introductions.

Example 49: *Assessment **is a part and parcel of** the teaching-learning process; it is responsible for checking students' progress and determining whether the stated objectives are met. Assessment **can have different manifestations including: summative and formative...** this assessment is used to verify students' outcomes, grade them and make decisions accordingly, such type of assessment **is known as summative**assessment.* (APhDTI1)

Reviewing previous research items was the second most commonly used rhetorical step of move 1 in PhD thesis introductions. This rhetorical step was found to be prevalent in most PhD theses as it appeared in more than 90% of the sub-corpus. Linguistically speaking, this step was realized by a statement starting with a reference to previous studies (such as "research studies", "formal language studies") followed by a cluster of references that functioned as a rhetorical support for the presented arguments. The PhD thesis authors attempted to establish a link between their research and earlier research by citing pertinent

literature. However, they did not appear to be successful in doing so. This is due to the fact that PhD thesis writers limited this step to just reviewing a number of prior studies, with little analysis, commentary, or reflection on those findings. Additionally, the majority of the verbs used in this step were in the past tense, which could suggest that the prior research was completed in the past and has no relevance to the current investigation. The Examples (Ex. 50a and 50b) below show how this step was accomplished.

Example 50a :**Research studies** were carried out on the belief that a learner's individual characteristics had an impact on language learning either directly or indirectly, such as gender (**Ref; Ref; Ref**), motivation (**Ref; Ref; Ref**), learning styles (**Ref**) and language proficiency (**Ref; Ref; Ref**) which is the main concern of this dissertation.(APhDTI5)

Example 50b: Formal **language studies** offered a lot to language learning and teaching (**Ref**). They treated sentences at the formal level and succeeded to provide many answers to questions asked by linguists such as sentence structure, rules of accuracy and so on. (APhDTI7)

–Move 2: Establishing a Niche

Establishing a niche in PhD introductions includes a number of rhetorical steps. Some of these steps are introduced in the CARS model (Swales, 2004), while others are not captured by the model. According to Swales (2004), establishing a niche can be realized by either *indicating a gap* in the previous research, *adding to what is known*, or *presenting positive justification* (optional). In this sub-corpus, the most frequently used step to realize move 2 was *indicating a problem in real life*, as it appeared in more than 80% of the sub-corpus, followed by *presenting positive justification*, *indicating a gap*, and *adding to what is known* which appeared in 60%, 33%, and 6%, respectively. For a comprehensible view of how this move is realized, Examples extracted from the Algerian PhD sub-corpus of each step are presented below.

• Step1a: Indicating a Gap

Indicating a gap step occurred only in 5 out of 15 introductions. As it was mentioned earlier, indicating a gap in previous research is a rhetorical strategy where writers tend to show that the previous studies have shortcomings that should be solved. The following

Examples (Ex. 51a and 51b) were taken from PhD thesis introductions written by Algerian writers, clarifying how these writers realize the *establishing a niche* move.

Example 51a :***Despite an extensive body of research in the field of writing skill and LLSs in relation to ... (Ref, 1980); and in the ESL context (Ref, 1987, Ref, 1983, Ref, 1993) and the EFL context (Ref, 2007 ; Ref, 2011; Ref, 2011, Ref, 2013; Ref, 2011; Ref, 2013), scant attention has been given to EFL Arab and Algerian learners in that field of research. Up to now, far too little attention has been paid to the usefulness of learning strategies in improving... They rather investigated the process of writing in terms of...*** (APhDTI 2)

Example 51b: ***Previous research on the effects of ... on vocabulary knowledge has failed to produce a clear image that describes it. Until now, most studies have generally targeted paper ... and have looked at the size of vocabulary (breadth) ignoring the other aspects of word knowledge (depth).*** (APhDTI13)

As indicated in the above Examples, Algerian PhD thesis writers justified their need to carry out their research by indicating a problem in the previous research. The use of contradiction connectors (such as "despite") and phrases (such as "scant attention has been given", "far too little attention", "rather investigated", "has failed", "ignoring") is a strategy to highlight the limitations and weaknesses of the previous studies. In presenting the limitations of the previous studies, the Algerian writers are preparing to present the issue under investigation. However, *indicating a gap* step was not preferred by Algerian PhD writers. As the result shows, the most favored step to realize move 2 was the M2S1c step, as it occurred in 11 out of 15 introductions. Instead of criticizing the previous research, the Algerian PhD thesis writers preferred to indicate a gap by mentioning problems or obstacles in the real world, avoiding mentioning the limitations or shortcomings of the previous studies. This rhetorical strategy, which is not included in the CARS model, was used in the majority of PhD thesis introductions, including those with the *indicating a gap* step. Instances of presenting a problem in real life are demonstrated below.

Example 52: ***However, different raising problems encountered by students nowadays impede the progress of this language skill especially in the context of ESP. In other words, students usually face problems in understanding English texts in any field of ESP. These problems might be related to the general and/or specific English language ... technical texts.*** (APhDTI4)

Example 53: *EOP students **encounter** difficulties to comprehend texts related to their English specialties. As it was observed, most of students **depend** mainly on translation to understand the meaning of key words rather than trying to contextualize them. In addition, EOP learners **are** in need to read manual instructions to operate machines effectively if they are willing to work in foreign or national companies. They also **need** to write ... in English.* (APhDTI10)

In the Examples above, the Algerian PhD thesis writers attempted to persuade their potential readers that the issue being mentioned previously is quite serious by describing how the circumstance or problem occurs. This is reflected in the implementation of verbs in the present tense ("encounter," "are," "need," "impede") and contrast discourse markers (such as "however") to emphasize the existence of the current problems that need to be investigated. Together, these linguistic and lexical items help to link the ideal situation previously mentioned to the current situation, implying that the problem does exist, which entails being solved. One noticeable thing in this rhetorical step is that no references to previous studies, to support their statement of the problem and arguments, are included. The lack of this strategy made their arguments very weak since they were based solely on their intuition and observation. Instead of reviewing, criticizing the previous studies, Algerian PhD writers preferred to criticize the social context and institutions where the problem occurs, as demonstrated in the following Examples:

- *****Criticizing the Context**

Example 54: *Moreover, the writing skill is **not given much importance** in most educational systems in terms of the time allotted and the methods used. That is why, many Algerian learners produce weak pieces of texts...In **most Arab EFL contexts**, learners use English only in classrooms and write mainly for academic success i.e., to get good grades and pass the examination. They neglect the pivotal role to write for other purposes and audience i.e., to endure a long life societal goals.* (APhDTI5)

Example 55: ***X University is one of the Algerian universities** which implemented ESP courses in the university curriculum. It has set the ESP course as an obligatory one, mainly in scientific and technical institutes. At the department of Y at X University, English is taught for one semester per one academic year during the three years of Licence (Bachelor). However, **there are no speacialised teachers** for the ESP courses. Those who teach in that*

department are either teachers holding a Magister degree in English language and literature or teachers with a BA in English language and literature, too, often with **no training in English for Specific Purposes**. Besides, **there exist no official syllabi** for these courses, nor are needs analyses from students held. (APhDTI8)

- **Step1b: Adding to what is Known**

Among the three steps of move 2 in the CARS model, *adding to what is known* is the step least favored by Algerian PhD thesis writers. Only one instance was found in the whole sub-corpus. The Example below, extracted from APhDTI1, shows how this step was presented.

Example 56: *Many researchers explored formative assessment in different contexts and with various aspects including language skills. **For the present study, formative assessment is explored** in relation to text comprehension.* (APhDTI1)

- **Step 2: Presenting Positive Justification**

Presenting positive justification was the second most used step in this sub-corpus as it appeared in more than 60% of the sub-corpus. This step, which generally appears after the two remaining steps of move 2 in the CARS model, was found to follow directly, *indicating a gap* step (step 1a). It was used to report the positive aspects of the research in question. Instances of this step are presented below.

Example 57: *Many studies in pragmatics agree that formal **instruction is likely to raise learners'** pragmatic awareness (Ref). The teaching of pragmatic aspects in the classroom **has proved to be of great benefits** in promoting learners' pragmatic competence such as producing appropriate deictic expressions.* (APhDTI7)

Example 58: ***Many reasons lie behind the choice** of this topic. Among these is the fact that reading skill occupies **an important position in ESP**. It is used by students to acquire knowledge of target community discourse (Ref, 2013). Another reason is that **many applied linguists have currently suggested** a discourse-based approach to teach EFL as a reaction to formal approaches to language (Ref; Ref; Ref).*(APhDTI10)

As demonstrated above, verbs in the present tense (is, occupies, have suggested) and phrases indicating that research should be carried out ("is likely to," "has proved to be," "have

currently suggested") are commonly employed by the writers of PhD introductions. In addition to that, PhD writers utilized positive evaluative adjectives in reporting the study ("**important**", "**great** benefits"), to help them reinforce the arguments for the study that they wanted to conduct.

–Move 3: Presenting the Present Work

As it was mentioned earlier (p. 215), the *presenting the present work* move can be realized by either the combination of the seven steps outlined in the CARS model or by an individual step. In this sub-corpus, M3 was found to be present in every PhD thesis introduction, making it an obligatory move in RA introductions. Though it was the obligatory move, its realization was totally different from move 1 in RA introductions. In presenting the present work, PhD thesis writers showed different preferences in terms of the rhetorical strategies employed in their PhD thesis introductions. For instance, steps 1, 2, 4 and 7 were the most prevalent steps in move 3 as they appeared 93%, 100%, 86% and 100%, respectively. The remaining steps 3, 5 and 6 were rarely employed. The analysis also revealed that PhD thesis writers employed other steps that were not introduced in the CARS model. These include *the limitations of the study* step, *storytelling* step. More illustrations of how these rhetorical steps were realized are provided below.

- **Step 1: Announcing Present Research Descriptively and /or Purposefully**

One of the rhetorical steps that realize move 3 is announcing current research descriptively and/or purposefully. By employing this step, writers explicitly indicate the purpose of the research being reported. In this sub-corpus, it was the most frequently used rhetorical step by Algerian PhD thesis writers. As indicated in the CARS model, this step is obligatory as it was found in 100% of the sub-corpus. The following Examples represent excerpts that demonstrate how the Algerian PhD thesis writers announce the purposes of their studies in their PhD introductions:

Example 59: *More importantly, **this research tries to show** how reading can contribute... It **explores** the language learning benefits of... Moreover, it **investigates** the factors that affect ... It **tries to illustrate** the issues that help...* (APhDT12)

Example 60: ***The current research tends to explore** the various reading problems... Therefore, the present research **aims**, first, **to identify** the source/s of reading difficulties ...*

and second, to propose a course which addresses ... and third, **to illustrate** the effect of the course design on students' reading proficiency. (APhDTI4)

Example 61: **The present study intends to identify and analyze** the most recurring errors in the writings of EFL students at the University of x and the causes behind them ... **The second purpose of this work is to explore** how to ... various stages of the writing process. (APhDTI12)

As demonstrated in the Examples above, the Algerian writers of PhD introductions presented the purpose of their studies. This step appeared to be long in PhD introductions, contrary to what was found in RA introductions. Its length ranged from one sentence to a whole paragraph in all PhD introductions. The linguistic realization of this step was done through the use of the deictic references to the present research/study; these include demonstrative adjectives (such as "this") and specific determiners (such as "the"), which come before common nouns referring to the text (research, study). In most of the introductions, the linguistic realization of this step was done through the use of 'this' or 'the' +noun+verb+ to infinitive structure. Examples of this structure are the following: "this research tries to show," "the present study aims at detecting," "the current study aims at investigating," and "this study attempts to reconsider."

It is worth mentioning that the writer's identity was not expressed in all the Algerian PhD introductions. This is apparent in the use of impersonal stereotypical phrases such as "this research tries to show" and "the current research tends to explore". The only exception is the eighth introduction (APhDTI8), where the writer's identity was explicitly expressed. In the Example below, the writer expressed himself through the use of the inclusive 'we'. This rhetorical strategy is very important in academic writing. For more clarification on this subject, see the next chapter (chapter 6) on metadiscourse, where this strategy is thoroughly discussed.

Example 62: **In this research, we have investigated the impact** of ... on ESP learners' reading comprehension **by adopting an approach that relies** heavily on this framework, DPF; in that, purpose for reading, discourse knowledge, pragmatics, background knowledge, context, metacognition and reading strategies are the building along with the combination of both top-down and bottom-up processing.

In the Example (62), the writer also used a good rhetorical strategy where he combined the aim of the study with the method or approach. According to Hyland (2000), merging the aims and methods is a useful rhetorical strategy which helps writers to insinuate the appropriacy of the technique by strategically linking approach in an unproblematic way to accomplish the research objective. The simple present tense spreads across all the PhD introductions when it comes to presenting the purpose of the study. This might imply that Algerian writers want to show that their studies are new, hence they are worth investigating.

• Step2: Presenting Research Questions or Hypotheses

Although *presenting research questions or hypotheses* step (M3S2) occurs in the CARS model as an optional step in academic writing introductions, all the introductions in PhD theses authored by Algerian writers in the current study have the explicit section headings of research questions and hypotheses. The only exception was the third introduction ((APhDTI3) where this step was absent. In another introduction (APhDTI7), the writer mentioned only the hypothesis without stating the research questions. This step appeared in more than 90% of the corpus; the reason that allows us to characterize it as an obligatory step in PhD thesis introductions. Examples and the linguistic realization of this step are presented below.

Example 63: **This study tries to investigate reading** and its effects on the development of language proficiency. In this respect, it tries to provide answers to **the following research questions:**

1. **What are** the obstacles and the difficulties that cause students' poor reading?
2. **What are** the language learning benefits of reading?
3. **How can** reading be exploited to develop the English language skills?
4. **How can** effective reading instruction be provided to EFL students?

These research questions are explored on the basis of the following **hypotheses:**

1. Lack of motivation, ..., and language knowledge **could be** the main reasons of students' reading difficulties.
2. Reading has ample learning benefits which **lead** to the development of language proficiency.
3. Reading **can be** used to develop the language skills through the use of multiple activities.
4. A successful reading instruction combines ... intensive reading and extensive reading programmes. (APhDTI)

As it is shown in the above Example, research questions and hypotheses were clearly enumerated in most of the PhD thesis introductions. The only exception was one introduction (APhDTI12), where the writer expressed the research questions and hypotheses within a paragraph. Linguistically, the research questions in the PhD thesis introductions were signaled by the use of both polar questions (yes/no questions) and WH questions. The first category involves the use of the operators "do", "will", or "would" in auxiliary verb-subject-main verb structures (such as "do inferencing and interpreting strategies enhance...") and the primary copular verb in the present simple in an existential interrogative structure (such as "is there any significant difference...") appeared (43%) 18 times in the corpus. The second category appeared (57%) more than 24 times in the corpus. These include factual questions (such as "what is the impact of..."), evaluative questions (such as "to what extent does a model text... help..."), and circumstantial questions (such as "how do learners..."). After the research questions, the PhD thesis writers presented their hypothesis (s), which were introduced mainly by the noun *hypothesis(s)* or the verb *hypothesize*. Verbs in the present tense (such as "is", "are") and modals (such as "can", "will" and "would") were also used to signal the hypothesis in move 3.

- **Step 3: Definitional Clarifications**

The step of *definitional clarifications* was not preferred by Algerian writers of PhD thesis introductions as it appeared only in 4 out of 15 introductions. The absence of this step is reason enough to consider it an optional step. This finding supports Swales' (2004) description of this step as an optional step in move 3. However, this step was found to be embedded with other steps in move 1. This is in contrast to the CARS model, which places this step after the second step in move 3. An Example of this step is presented below.

Example 64: *Discourse has become the basic unit of analysis since the advent of the communicative approach... Discourse **has been defined** by a number of researchers. According to X (1989), **the term discourse refers to** meaningful, unified, and purposive stretches of language. Y (1994) claims that there are two lines **for the definition of 'discourse'**. **Formal definitions view** discourse as ...* (APhDTI8)

In the Example above, the PhD writer of the introduction tended to clarify the key word (discourse) in his research by presenting different views about the concept of "discourse." Most of the definitions in the corpus were presented in move 1. The only exception was the

one introduction (APHDTI9), where a separate section headed "key terms" was presented in move 3.

- **Step 4: Summarizing Methods**

Summarizing methods step elucidates the procedure followed by writers in order to provide readers with a clear image of what the writers were attempting to establish. Although there is a whole separate chapter entitled 'Methodology' in all PhD theses analysed in this study, this step was prevalent and found to be used widely in PhD thesis introductions written by Algerian EFL learners. There was a greater concentration on this step in most of the introductions in the sub-corpus than the swales model (CARS model) allows. As it was found in 13 out of 15 introductions, it can be considered as a conventional step in PhD thesis introductions. To put this in numbers, this step was absent only in two introductions, while it took a whole paragraph without a heading in six introductions. In four introductions, it was realized in a separate section with the headings "methodology," "means of research' or "tools of research". In the remaining introductions, it was presented in different sub-sections (such as "population", "instruments", "population and sampling", "tools of research", "procedures") holding general headings such as "research design" or "research methodology". Examples of this step are presented below.

Example 65:

Population and Sampling

*To achieve the objectives of the study and to check the hypothesis, the researcher carries out an experiment. **The sample of the study** consists of two groups of second-year students out of four, majoring in English at the University of x , Algeria, during the academic year 2014-2015. **The sample consists**, then, of 46 students. The sample **has been divided** into an Experimental Group (N=23) to whom coherence is taught following the modeling strategy, and a Control Group (N=23) who are taught ...*

Tools of Research

*The researcher relies on **three research instruments** to maximize the accuracy of the data and the transferability of the results. These include: **A pre-test, a post-test and a pre-experiment questionnaire** devoted to the participants in both groups, **in addition** to a post-experiment questionnaire to measure the students' appreciation of the strategy used. With*

such a form, the study is a **mixed-method research** that crosses the quantitative-qualitative technique... **Before** the experiment, a pilot study **has been carried out** in which the researcher **has used** the same...

For the main experiment, it is chunked into **three phases** corresponding to the ultimate aims of the study. **In the first stage**, the students in... The pre-test **is carried out** to check... **In the second stage** (intervention), the experiment **is conducted** through presenting two categories of courses about characteristics ... **The first series** was in the conventional way for the Control Group; while for the Experimental Group, it was through a model-based instruction. **The third stage** is the post-test ..., the researcher relies on the **descriptive analysis techniques** to interpret the frequencies of the tests scores. Statistically, the **paired t-test sample procedures** are used to compare the scores of both groups in pre-test and post-test. The scores are compared in terms of **mean, p-value and t-value**. (APhDT11)

Example 66:

Methodology

Instruments

We used a number of **tools** for collecting data. **First, we conducted** a pilot study. **Second, we held classroom discussions**. We **succeeded** in identifying the difficulties encountered by Accounting and Finance students. **Third, we distributed a questionnaire** of 36 questions to... **Fourth, we tested** the students... Fourth, we trained them for five sessions, one hour and a half each. **Finally, we conducted** a post-test that ...

Participants

Participants in the present study **were enrolled** at Accounting and Finance department at x University. **The sample is 53** from a **population of 82**. They are all Algerians and received the same instruction from primary school to secondary school...

Procedures

This study **took place** in the first semester of the academic **year of 2014-2015** from the middle of October to the middle of December. It is quasi-experimental. The pilot study was conducted at the beginning of October 2014. **Questionnaire** data were collected at **the**

beginning of the semester, the second session. The pre-test lasted one hour and a half. (APhDT8)

Linguistically speaking, this step was signaled by expressions relevant to research procedures and research instruments (such as "think-aloud procedure," "questionnaire," "tests," etc.). These expressions are generally followed by activity verbs (such as "distribute", "collect", "formulate") in the simple past tense and the present perfect in order to indicate that the research activities were completed and the research procedures were successfully followed. More information on the population, including age, background, and gender, of the study was also highlighted in this step. Time and location Expressions (such as "the academic year of 2014-2015", "the beginning of the semester", "at Accounting and Finance department at x University") were also included in order to give sufficient information about the study. In most of the examined introductions, the research procedure was carefully explained. This was reflected in the use of sequence discourse markers (such as "first," "second," "finally," "the first stage"... etc.). In addition to this, expressions related to statistics (such as "mean", "p-value", and "t-value") were also included in order to clarify how the findings were analysed and calculated.

- ***** Justification for the Adopted Method**

This rhetorical step appeared in 33 % of the whole sub-corpus of the PhD thesis introductions. After presenting the tools, instruments, procedures and the population of the study, the PhD thesis writers feel the need to justify why they used a particular tool or instrument or followed a particular procedure. In most cases, this rhetorical step was embedded within the *summarizing methods* step. The communicative function of this step is to provide a reason for selecting or following a particular method. In doing so, the writers need to enhance the reliability and validity of their studies, which might help them persuade the discourse community members to accept the way the study is done. As the Example (67) shows, the PhD thesis writer justified the use of the instruments of investigation by presenting the aims behind the use of these instruments. The writer's use of this rhetorical strategy demonstrates both his need to clarify his ideas and his awareness of the reader's need to comprehend how his research was conducted.

Example 67: *An experimental design is opted for and two instruments of investigation are used for data collection. The first tool is a questionnaire addressed to 17 teachers of*

Written Expression at the University of Constantine 01. **The aim of the questionnaire is to provide insights into the teachers' experiences, attitudes, and opinions about the use of cohesive devices.** Another questionnaire was given to 50 second year students at the University of Constantine 01. **The questionnaire is meant to test their knowledge of cohesion and the way it is achieved. Besides, it is to check whether they know different cohesive ties, and to specify their needs.**

- **Step 5: Announcing Principal Outcomes**

Announcing principal outcomes step was totally absent in the PhD thesis introductions authored by Algerian writers. It was found in only one introduction (1 out of 15). This finding allows us to characterize this step as an optional step in PhD thesis introductions. The absence of this step in the introduction section might be attributed to the nature of the genre itself. That is the PhD thesis introduction itself. As this type of genre usually includes a long section headed "*results and discussion*" where writers thoroughly present, interpret, and discuss their study findings; PhD thesis writers might not feel the need to include this rhetorical step in the introduction section. The only example of this step identified in this sub-corpus is presented below:

Example 68: *The findings showed that SBI was successful on the whole. It helped learners change their... It also enhanced students' writing performance... The programme was **workable**, desirable and **practical** to **intensify** the writing abilities and **confidence**. In addition, **the study provides insights** to English teachers and curriculum planners... It also **identifies** how LLSs are affected by learners' English proficiency.* (APhDT5)

- **Step 6: Stating the Value of the Present Study**

The sixth step in move 3 was received little attention. It was not preferred by Algerian PhD thesis writers as it appeared only in 6 out of 15 introductions. This finding is in line with Swales (2004), who classified step 6 as an optional step. In this step, PhD thesis writers established a relationship between the findings of their studies and the real world.

Example 69: *The present inquiry is **significant** in different respects. **First**, it attempts to provide teachers with ...The study also brings the macro-level of discourse ...and micro-level into a symbiotic relation. , rather than teaching parts of the whole in isolation from each other.*(APhDTI9)

- *****Limitations**

This step is employed when authors intend to offer a negative evaluation of their research. In writing the *limitations* step, writers present the weaknesses and shortcomings of their research in terms of the findings, methods followed or instruments used in the study. Although this step was not mentioned in the CARS model, it was present in this sub-corpus. The limitations step was found only in 7 out of 15 PhD thesis introductions (46%). Therefore, it can be considered as an optional step in move 3 in PhD thesis introductions. Examples and linguistic realizations are presented below.

Example 70: *As with any research, there were some **limitations and obstacles**. First, the use of SILL questionnaire posed some **constraints** as ... **Moreover**; the findings are circumscribed **only** to the **small** population used in this study... **another limitation** was that **difficulty** of getting students present all along the experiment which led the researcher to gather **fewer** written samples... Besides, students' engagements with work and their studies **hindered**, in some ways, the experimental study to be successfully done in the right time.* (APhDTI5)

In the Example above, the writer presented a number of obstacles encountered in his study. These include problems related to the questionnaire, the size of the population, and the absence of the participants. Most of the linguistic elements used to signal this step were negative expressions such as ("limitations", "obstacles", "constraints", "small", "difficulty", "fewer", "hinder"). Discourse markers (such as "first," "moreover," "besides," etc.) were also used to signal the *limitations* step.

- **Step 7: Outlining the Structure of the Paper**

Outlining the structure of the study step was always present in the sub-corpus. It appeared in 100% (15 out of 15) of the PhD thesis introductions authored by Algerian writers. This step is frequently used, which provides sufficient justification for considering it an obligatory step in move 3 of a PhD thesis introduction.

Example 71a: *The thesis **is structured in five chapters** divided into two parts. **The first three chapters** are devoted to ... The first chapter **examines** the ... It also provides a comprehensible review of the main teaching trends wereadopted, in Algeria trying to deduce*

how FL writing has been dealt with under each framework. The second chapter **is devoted to...**(APhDTI9)

Example 71b: **This thesis is organized into eight chapters.** It starts by a general introduction giving some background information about... **The first chapter gives** different conceptualizations of the term *writing*...**Chapter two sets** the ground to have an overall view of the different ...**Chapter three** presents different perceptions of ... how the combination of ...*can boost students' writing*...**Chapter four is** a description and a discussion of the qualitative and quantitative methodology ...**Chapter five presents** and discusses ...**Chapter six casts** the light on the errors made in the corpus.(APHDTI12)

Linguistically speaking, this step was always introduced by a proposition such as "this/the thesis is organised into x chapters." The indefinite article "the" or the demonstrative adjective "this" proceeding the noun "thesis," followed by a verb in the present tense (usually passive) such as ("is organised", "is structured") is the most structure used in the opening sentence in this step. Since writers need to present how their papers are structured in this step, Expressions indicating chronological order, such as ("first", "second", "the third", "next", etc., were extensively used in this step. Verbs in the present tense (passive or active) (such as "is", "gives", "casts", "sets", "examines", etc) were also used to signal the *outlining structure of the paper* step.

- *****Telling a Story**

The *storytelling* step was another novel step that was identified in the PhD thesis introduction. This step was located in the second move in the majority of PhD thesis introductions. In fact, Amara (2006) had already introduced this step, so this finding was not new. The *story-telling* step identified in this study and those identified by Amara, however, differ from one another. According to Amara's study, this step was primarily found in move 1 and was utilized as an attention-getter by writers of magister theses. In other words, in order to attract the readers' attention, the authors of magister theses began their introductions by relating a personal experience to the subject under investigation. However, it was revealed in this study that, depending on its textual position, the *story-telling* step had two distinct purposes. If this step is employed after the one that involves identifying a gap, it serves as a justification for selecting a specific project to work on as well as the necessity to fill the gap (see Ex 72b). When the indicating a gap step is absent, the story-telling step takes its place

(Ex 72a). In *telling a story* step, PhD thesis writers introduce themselves as observers, usually as teachers or students, of a problem in real life, usually in their educational institutions, trying to indicate a problem in real life. Examples of telling-story step are presented below:

Example 72a: *As a secondary school teacher of English language in Algeria, I have noticed such conflict between ethnic self and ethnic other in EFL learners' discourse. FL learners are exposed to a foreign discourse, a part of which reflects an ethnic identity that is different from their own. Of course, a foreign discourse can as well trigger other identities which are based on different ideologies that a FL learner might or might not share with the target group* (APhDTI6)

Example 72b: *To the best of my knowledge, no significant research has been found in the correlation ... Investigating this research emanates from my experience as a teacher of written expression at the department of English for four years. It was an opportunity for me to observe how foreign language learners dealt ...*

5.2.1.3. Rhetorical Move Patterns

The analysis revealed unexpected findings in reference to move patterns in the Algerian PhD thesis introductions. Table 5.4 shows that although all the three moves introduced in the CARS model were employed, each writer used a different sequence of moves to create a research space in his PhD thesis introductions. This variety in terms of the sequence of moves made it hard to identify a common pattern in the Algerian PhD thesis introductions. The linear sequence (i.e., M1-M2-M3) was mostly absent; it appeared only 20% of the time in the whole corpus. In other words, most of the Algerian PhD thesis introductions were not organised linearly but based on certain regularities. In so doing, most of the Algerian PhD thesis writers started their introductions with move 1, with the exception of one introduction where move 2 was the opening move. The remaining introductions had a recycled structure, mostly with one (ex. M1-M2-M3; APhDTI6, APhDTI9), two (Ex. M1-M2-M2-M3 (APhDTI1); M1-M2-M3-M1-M3 (APhDTI10)), or three moves (M1-M3-M1-M2-M3-M2-M3 (APhDTI5) move repetition. Although the alteration between M2 and M3 was the prominent feature in this category of introductions, with significant differences frequently occurring in the middle parts, all of these introductions started with Move 1 and ended with Move 3. The alternation of M2 (*indicating a niche*) and M3 (*presenting the present work*) and the repetition of the two moves in the Algerian PhD corpus may indicate that PhD thesis writers were trying hard to

convince the discourse community that their research was worthwhile and that the research problem should be solved.

Table 5.4: *Move Sequence in PhD Thesis Introductions Authored by Algerian Writers*

Move sequence	No	%
PhD thesis introductions following Swales CARS model		
M1-M2-M3	3	20
M1-M2-M1-M2-M3	1	6.67
M1-M2-M1-M3	1	6.67
M1-M2-M3-M2-M3-M2-M3	1	6.67
M1-M2-M3-M1-M3	1	6.67
M1-M2-M3-M2-M3	1	6.67
M1-M2-M3-M2-M3-M2-M3-M2-M3	1	6.67
PhD thesis introductions deviating from the strict Swales CARS model		
M1-M3-M1-M2-M3-M2-M3-M2-M3	2	13.33
M1-M3-M2-M3	2	13.33
M1-M3-M2-M3-M2-M3-M2-M3	1	6.67
M2-M3	1	6.67
Total number of RA introductions	15	100

M: Establishing a territory; M2: Establishing a niche; M3: Occupying a niche

5.2.2. Move-Step Structure of the Algerian Master's Dissertation

Introductions

In the previous sections, I examined the move-step structure of RA introductions authored by Algerian and NE writers and PhD thesis introductions authored by Algerian writers employing the CARS model (Swales, 2004). Using the same model, the following section examines the last group of authors' writings, namely the introductions of MDs that Algerian EFL learners write. With the aim of answering research questions 2 and 2.2, this section provides a thorough description of the moves and steps employed by MD writers. In other words, the frequency of distribution, the linguistic realizations, and the rhetorical patterns preferred in the Algerian MD introductions are highlighted in this section.

5.2.2.1. Overview of the Findings

Fifteen is the number of MD introductions, which represents the fourth sub-corpus of this study. Using the CARS model (Swales, 2004), these introductions were examined in

terms of the move and step structure. Like in the PhD thesis introductions, all the moves (M1: Establishing a territory, M2: Establishing a niche, and M3: Presenting the present work) captured by the CARS model (Swales, 2004) were present in the MD introductions, as indicated by the findings presented in Appendix 5. M 1, *establishing a territory*, was always the opening move in all MD introductions written by Algerian writers, followed by M 2, *establishing a niche*, as the second move. The only exception was in four introductions (AMDI9, AMDI13, AMDI14, and AMDI15), where M1 was totally absent and M2 was the opening move. The closing move in all the MD introductions was M 3, *presenting the present work*. To put these in numbers, the frequency of occurrence of M1, M2, and M3 was 73%, 86%, and 100%, respectively, in the MD introductions authored by Algerian writers. M3 was always present, as it occurred in 15 out of 15 introductions, while M1 and M2 were the less frequently employed moves, as they appeared in 11 and 13 out of 15 introductions, respectively. According to the previously given categorization criteria, M3 can be classified as the obligatory move in the MD introductions of Algerian writers, whereas M1 and M2 are the optional moves.

At the rhetorical step level, the analysis revealed that some steps received great attention because they were widely used, while other steps were rarely used. For instance, the steps *indicating a gap in the real world* (M2S1D) in M 2, *announcing the present research descriptively and purposefully* (M3S1), *presenting RQs or hypotheses* (M3S2), *summarizing methods* (M3S4), and *outlining the structure of the paper* (M3S7) in move 3 were often present, as they were employed by 80%, 93%, 100%, 86%, and 93% of the whole sub-corpus, respectively. On the other hand, the steps of *definitional clarification* (M3S3) and *stating the values of the present research* (M3S6) in move 3 were partially used. The remaining steps, such as *indicating a gap* (M2S1A), *presenting positive justification* (M2S2), *adding to what is known* (M2S1B) in M2, and *announcing principle outcomes* (M3S5), were found to appear in a few introductions. In the following section, more elaboration on how these moves and steps were realized with real examples taken from the MD writers' sub-corpus will be provided.

5.2.2.2. Analysis of Move-Step Structure

The writers of MD introductions utilized a variety of linguistic and rhetorical signals that are representative of the moves and steps displayed in creating a research area. The examples in the next section, which exhibit various manifestations of moves and stages, are taken from the MD introductions.

–Move 1: Establishing a Territory via Topic Generalization of Increasing Specificity.

Establishing a territory is the first move in the CARS model. In writing academic introductions, this move ensures readers that the subject under investigation is intriguing or essential; it also serves to alert readers to the issue or stimulate their curiosity, especially when it appears at the beginning of the introduction (Swales, 2004). In the Algerian MD introductions, *establishing a territory* was found in only 11 out of 15 MD introductions (73%) authored by Algerian writers. In the remaining four introductions, writers started their introductions with move 2 (*establishing a niche*). In realizing M 1, Algerian writers of MD introductions used a number of rhetorical strategies but with different frequencies of occurrence. These include asserting the topic's centrality, making topic generalization, and reviewing previous research. The claiming centrality step was found to be the most prominent strategy in the Algerian MD sub-corpus, as it appeared in 73% (11 out of 15) of the sub-corpus. This is followed by reviewing the previous research, which appeared in six introductions (40%). *The topic generalization step occurred in only 30% of the MD sub-corpus; as a result, this step is regarded as highly optional if not avoided in MD introduction writing.*

• Step 1: Topic Generalization

The least frequent step in MD writers' introductions was *topic generalization*. It was found only in 2 out of 15 introductions. In this step, authors make claims about general knowledge (Ex. 73a) or the difficulty (Ex. 73b) of the subject being researched. This step was usually accomplished in MD introductions by using adjectives like "tough," "complicated," and "interesting," as well as pre-made phrases like (is considered as, is known as, is most commonly).

Example 73a: *Learning vocabulary is **considered as** one of the most ... in language learning.* (AMDI2)

Example 73b: *Vocabulary acquisition is one of **the most difficult** aspects in any learning foreign language. Reading is essential to boost students' vocabulary.* (AMDI8)

• Step 2: Claiming Centrality

Unlike the *topic generalization* step, the step of *claiming centrality* was the most frequently employed rhetorical step, as it appeared in more than 60% of the MD introductions authored by Algerian writers. In this move, MD writers referred to either the importance of (Ex. 74a and 74b) or the popularity of the investigated topic (Ex. 74b). To signal the presence of the claiming centrality step, adjectives such as "important," "powerful," "crucial," "major," and "outstanding," as well as phrases such as "treasured technique" and "as the core," as shown in the examples below, were used. Verbs in the present tense (simple: "is," "leads," "plays"; perfect: "has enjoyed") and phrases indicating the present tense are also used as a linguistic realization of this move. As it was mentioned before, by using the present simple in Move 1, the Algerian writers of MD introductions want to show that their research is new and worth investigating.

Example 74a: *Learning vocabulary **is** considered as one of the **most crucial** linguistic features in language learning. It **leads** to an **important** factor for success within language learning because the absence of the appropriate knowledge of words and their meaning ... from using the target language efficiently.* (AMDI1)

Example 74b: *The writing skill **has been proved** by many researchers **as the core** of education and **has beendescribed** as an **important** path to language learning. It is seen as **a crucial** skill that learners need to master in both native languages (NL) and second/foreign ... it is **a powerful** means of communication ...* (AMDI10)

Example 74c: ***At the present time**, the role of literature as **a treasured technique** and source of authentic model of language use **has enjoyed an outstanding** place as well **aspopularity** in the domain of ELT...Researchers affirm that reading, namely reading literature, plays **a major** rolein the improvement of writing skill in terms of vocabulary. Many educators have acknowledged ... and linguistic **benefits** of the study of literature.* (AMDI5)

• Step 3: Reviewing previous research

In MD introductions, M1 was also realized through the step of *reviewing previous research*. However, this step was found in only 2 out of 15 MD introductions. By employing this rhetorical strategy, the MD writer establishes the credibility of his claim (Samraj, 2008). One of the distinctive features of *reviewing previous research* is that this step usually includes references (citations). The latter can be of two types: integral (Ex. 75a) and non-integral citation (Ex. 75b).

Example 75a: *In the context, **Robert and Misako (2003) claimed** that ‘graded readers might be best used for recycling already known vocabulary than for introducing new words.’ Yamamoto (2011) added that several studies suggest that graded reading texts might help students ... (AMDI8)*

Example 75b: *As most of language learners attempt to develop communication and literacy skills, they have to first learn enough words and their meaning and to know how to use these words appropriately as very little can be said with grammar, but almost everything can be said with words (**Thornbury, 1990**). (AMDI12)*

–Move 2: Establishing a Niche

Establishing a niche is a very important move in academic writing introductions (Ono, 2012; Swales, 2004; Swales and Feak, 1994). It provides a succinct overview of the issues and the need to carry out the study. This move is typically used to provide a description of the problems that the study needs to address. It usually comes after Move 1, or it might be repeated several times in the MD introduction. According to Swales, this move can be realized by one or more of these steps: *indicating a gap*, *adding to what is known*, and *presenting positive justification*. The findings of this study revealed, however, that Algerian MD writers did not prefer either of these steps. Instead, move 2 was mainly realized by indicating a gap in the real world. In this sub-corpus, *indicating a gap* step was identified in only two out of 15 introductions, while presenting a *positive justification* step appeared in one introduction. *Adding to what is known* is a step that was totally absent. Often, MD writers preferred to deal with a local real-world problem, usually at the university where they are studying, trying to find potential solutions to the examined topic. More explanations and examples of these steps are presented below.

• Step1a: Indicating a Gap

Like RA and PhD thesis introductions written by Algerian writers, the step of indicating a gap was not preferred by Algerian MD writers. It was found in only two introductions of MDs, which can be seen as a very optional step in MD introductions. Examples below demonstrate how this step was realized by MD writers.

Example 76: ***Although a lot of work** was devoted to learning how to use learning strategies in the process of learning words and vocabulary, **few studies have explored** the use*

of rankings, especially the use of formative and summative ratings as a tool, ... vocabulary (AMDI2)

Example 77: ***Recent theories** have come to realize the importance of reading and writing skills in achieving language proficiency, **yet** one of the most **challenging** aspects is how to teach or learn writing.* (AMDI10)

The examples above represent the only two instances of indicating a gap identified in the MD introductions. As demonstrated in these examples (Ex. 76 and 77), MD writers reviewed the relevant literature in order to find a gap to be filled in their research. To realize the step of indicating a gap, a variety of linguistic signals were used. These include contrastive connectors (such as "although" or "yet") and negative words (such as "few" or "challenging"). Like RA authored by Algerian writers, no references were provided by MD writers to support their arguments. The lack of reference to literature made their arguments weak and not strong enough to persuade their potential readers.

- **Step1b: Adding to what is Known**

Among the three steps of move 2 in the CARS model, *adding to what is known* was totally absent in the MD introductions authored by Algerian writers. No instance was found in the whole sub-corpus. The rarity of step 1B in this sub-corpus might be justified by the absence of the steps of *indicating a gap* and *reviewing the previous research* as usually the step of *adding to what is known* has a connection with these two steps.

- **Step 1c: Indicating a Problem in Real-Life**

The most common rhetorical step used by MD writers to realize move 2 was *indicating a problem in real life*. This step appeared in 86% (13 out of 15 MD introductions) of the whole sub-corpus. In the majority of MD introductions, this step is usually presented in a short paragraph headed "*statement of the problem.*" In this rhetorical step, no presentation or discussion of the earlier studies was made by the MD writers to highlight the gap. Instead, the MD writers provided a real-world problem in relation to the context within which the study is being carried out. Specifically, MD writers addressed a problem that exists in the present local learning environment. Examples of how this step was realized in MD introductions are presented below:

Example 78: *EFL learners at X University face **many obstacles** when they write an essay and they **suffer** from the lack of motivation which discourages them from promoting their writing abilities. In addition, they face certain **difficulties** in communicating their ideas, and expressing themselves ...organised manner.* (AMDI5)

Example 79: *In the context of Learning English as a FL, students **face several challenges** including **limited** vocabulary, **insufficient** knowledge of grammatical structure and deteriorated development of the writing skill in general. More particularly, **second year English students** need to focus on improving their writing proficiency and also need to be empowered with an expertise that they can use autonomously such as reading. Hence, the **problem** we are confronted with in this research is the relationship between IR and WS development.* (AMDI10)

Despite the fact that *indicating a gap in the real world (statement of the problem)* was included in every MD introduction examined in this study, the authors of MD introductions failed to clearly express the issue that needed to be solved. In some instances, it is impossible to pinpoint the exact issue being addressed. In other cases, the problem statement contains a wide range of issues that cannot be fully addressed by a single study. For instance, in the Example 80b, the writer mentioned a number of aspects that need to be mastered for effective writing production. These include *awareness of lexis, punctuation, grammar, spelling, usage of words, cultural knowledge, and the challenges that are faced by teachers in teaching writing*. The research gap, according to him, is that EFL students face difficulties in learning all those aspects. The question that needs to be raised here is whether one MD paper can cover all these problems. In other statements, no sufficient explanation that specifies and makes the problem clear for readers was provided. In the Example 80a, for instance, the writer did not specify which students of the English language encounter problems in acquiring vocabulary and which type of vocabulary students struggle with. In this Example, *indicating a real-world problem* was not given the weight it deserves as it was presented in one simple sentence. Furthermore, no evidence was offered to establish the existence of the issue. These flaws, combined with others, made presenting *indicating a problem in real life* step (statement of the problem) in the Algerian MD introductions a problem in itself.

Example: 80a

Statement of the Problem

Many students of English language are thought to encounter difficulties when acquiring vocabulary. Teachers regard that reading graded texts and assessment factors may help students improve their glossary. In this study, we will search whether these elements are really efficient and reliable in the development of students' vocabulary.

Example: 80b

Statement of the Problem

Writing is an important skill, it is a complex process which requires awareness of lexis, punctuation, grammar, spelling, usage of word, and cultural knowledge. However, students face difficulties in learning all those aspects of language competence. Teachers as well face a challenge to present and to teach this skill using different strategies. To examine this issue, games are regarded as practical tools to increase teaching-learning writing. To what extent the use of games in teaching descriptive ...skill? (AMDI7)

• Step 2: Presenting Positive Justification

Presenting positive justification was not found in the MD introductions authored by Algerian writers. The only exception was one introduction (AMDI13), where the writer stated his opinion about what they considered a desirable course of action to follow. The writer employed the strategy of a positive justification (the last sentence in Ex. 81) for conducting research about reading. The Example below illustrates how this step was realized.

Example 81: The subject under this research is our interest in the domain of the effect of reading in enriching the students' vocabulary stock and improving their pronunciation. It is very important to undertake this study because it shows the importance of reading for EFL learners to enhance their vocabulary and pronunciation.

–Move 3: Presenting the Present Work

Presenting the present work is the last move in the CARS model. This move can be realized by either the combination of the seven steps outlined in the CARS model or by an individual step. Presented as an obligatory move, presenting the present work appeared in

100% of the MD introductions. After establishing a niche, MD authors presented their research using a number of rhetorical strategies. However, the use of these strategies was characterized by variation in terms of frequency and the number of steps used. In terms of the quantity of steps, in six introductions this move was realized by four steps, while in the other four introductions it was realized by only three steps. In the other three introductions, this move was realized by six steps, and in the remaining introductions, it was realized by five steps. With regard to the frequency of occurrence, some steps were rarely used while others were used in all introductions. For instance, M3S1, M3S2 and M3S7 were mostly present as they were found in 90%, 100% and 90% of the whole sub-corpus, respectively. More illustrations of the use of this move and its linguistic realization, with a focus mainly on the most frequent steps (S1 and S4), are discussed below.

- **Step 1: Announcing Present Research Descriptively and /or Purposefully**

Announcing the present research step was found in almost all MD introductions. This finding is in line with Swales (2004), who described this step as an obligatory step in introduction writing. As this step was found in more than 90%, it can be described as an obligatory step of move 3 in MD introductions authored by Algerian learners. More illustrations of how this step was realized are presented below.

Example 81: *Thus, **this research is an attempt to explore** the effects of watching movies subtitled in students' mother tongue on EFL learners' vocabulary. In other words, this work **aims at investigating** the influence of subtitles on content comprehension of English movies and vocabulary comprehension ...* (AMDI1)

Example 82: ***The general aim behind the present research is to increase** students' writing skills that help them to translate the intention to write on paper. **The study aims at demonstrating** that the use of literature and literary texts... In addition to that, **it aims to support** EFL learners to express and communicate their thoughts to read more clearly and with a great confidence.* (AMAI5)

Example 83: ***The present study aims at examining** the impact of incorporating IR in effort to improve the writing of EFL students in different aspects and enrich ... various problems and difficulties.* (AMDI10)

As it is shown in the above Examples (Ex. 81, 82, and 83), a number of linguistic elements and lexical items were employed to signal the presence of the *Announcing present research descriptively and /or purposefully* step. Determiners (such as "the") and demonstratives (such as "this") preceding nouns (such as "study", "research") were used to present the aims of the research. The article/determiner +noun structure was usually followed by an infinitive ("to increase," "to explore," "to discover") or at + verb in ingform. Verbs (such as "is", "aims") in the present simple were also employed in this step to indicate the recency and newness of the research in question. The writer's identity was totally absent in this sub-corpus. The presence of this step was always signaled by non-human agent linguistic structures (such as "this study aims", "the present study aims").

- **Step2: Presenting Research Questions or Hypotheses**

In MD introductions authored by Algerian writers, *presenting research questions or hypotheses* step was always present. It appears in 100% of the sub-corpus, a fact that makes this step an obligatory step in MD introductions. In this step, the research questions and hypotheses were presented separately and enumerated.

Example 84: *The purpose of this research is to find answers to the following research questions:*

- 1- *How can formative and summative assessment enhance the EFL learner's vocabulary?*
- 2- *Between formative and summative assessment which one is more effective in enhancing the learner's vocabulary?*

The research **hypotheses** that were derived are:

- 1- *Both formative and summative assessment have a positive influence on the learner's vocabulary enhancement.*
- 2- *Formative assessment is more effective than summative assessment in term of vocabulary improvement. (AMD12)*

Example 85: *This study attempts to answer the following questions:*

1. *Can the use of games in teaching descriptive text improve fourth grade middle school pupils' English descriptive text writing skill?*
2. *To what extent the use of games motivates fourth grade middle school pupils in English language to write descriptive texts?*

To answer the research questions, we formulate the following **hypotheses**:

1. *The use of games in teaching descriptive texts will improve fourth grade middle school pupils' descriptive text writing.*
2. *The use of games will highly motivate them to write descriptive texts. (AMD17)*

- **Step 3: Definitional Clarifications**

Similar to PhD thesis writers, MD writers displayed a propensity for using the definitional clarifications step. Since it was only present in 4 out of 15 MD introductions, this step might be regarded as an optional step in MD introduction writing. An example of this step is shown below.

Example 86: Definition of Key Terms

1. *Graded Texts: texts that are simplified and not original. They are specially created for learners of foreign languages...*
2. *Reading: Reading is the process of looking at a series of written symbols and getting meaning from them. When we read, we use our eyes to receive written symbols (letters, punctuation marks and spaces) and we use our brain to convert them into words, sentences and paragraphs that communicate something to us.*

- **Step 4: Summarizing Methods**

The step of summarizing methods was found in most of the MD introductions written by Algerian EFL learners. It appeared in 14 out of 15 introductions, a fact that makes this step a conventional step in MA introductions. However, unlike PhD thesis introductions, the summarizing *methods* step was relatively short. In most MA introductions, it did not exceed two sentences. Hence, there was less explanation of how the research was carried out. Research tools and procedures were provided only in a few introductions, and most of the focus was on the population and the location where the research took place. Examples of this step are provided below.

Example 87: *In order to obtain answers to the previous research questions and to check the validity of the hypotheses, an **exploratory case study** was **designed** dealing with two **research instruments**: a **questionnaire** for 2 year EFL students and an **interview** for EFL teachers at **the Department of English**. (AMD15)*

Example 88: *This study was conducted on 60 Third Year Scientific Stream students who ... in x place. Both authentic and non-authentic texts, relevant to students' field, were used in this investigation.* (AMDI8)

Example 89: *The tools of data collection in this study consist of three instruments:*

A questionnaire that includes closed-ended questions in order to collect quantitative data.

A semi-structured Interview that contains closed and open-ended questions ... qualitative data. (AMDI10)

As the Examples above demonstrate, MA writers present the methodology of their research. In doing so, research tools and instruments as well as the population and location of the study were presented in very brief and non-elaborate statements. In Examples (Ex. 87 and 88), the population of the study was highlighted, but demographic information of the participants, including gender, age, occupation, was missing.

- **Step 5: Announcing Principal Outcomes**

This step was totally absent in the whole sub-corpus of MDs written by Algerian writers

- **Step 6: Stating the Value of the Present Study**

Another strategy employed by MD writers to introduce their research topics was to state the overall impact of whatever the study's findings would be. The researchers will have to consider how useful their findings are to the university, the local community, or the larger discourse community in this part of the introduction. The analysis revealed that *stating the value of the present study* step can be described as an optional step of move 3 in MD introductions written by Algerian learners of English as a foreign language. This is because it was found only in 4 out of 15 introductions, or 26% of the sub-corpus. Examples of this step are presented below.

Example 89: *This study is **significant** to both teachers and students of English as foreign language. In fact, it **highlights** the impact of graded texts and assessment factors in the acquisition of vocabulary.* (AMDI8)

Example 90: ***The value of this study is threefold. First, it raises awareness on the importance of games in... Second, more gaming strategies will be included... Finally, thus this research tackles a modern issue...*** (AMD17)

In the Example above, writers of MD introductions inform their potential readers about the value of their research. In this sub-corpus, stating the value of the study was always done by demonstrating the contributions of the research to language teaching and learning. Linguistically, this step was realized through the use of positive words (such as *significant, important, importance, valuable...etc*). Verbs (*highlight, raise, improve ...*) in the present and future tense are also used to signal this step. The use of these tenses helps the writers demonstrate their expectations about the application of their studies in the real world.

- **Step 7: Outlining the Structure of the Paper**

Presenting the organization of the study is achieved through *outlining the structure of the paper* step. This step was found to be present in most of the MD introductions authored by Algerian EFL learners. It can be considered as an obligatory step as it appears in more than 90% of the sub-corpus. The only exception was the seventh introduction (AMD17), where the writer did not present how his paper is structured.

Example 91: ***This study consists of three chapters. The theoretical framework is classified into two chapters. The first chapter presents ... Second, it handles an overview... Furthermore, the methods of teaching writing... Then, we end up by a shift from teacher centered approach to student-centered approach. Chapter two deals with... Then, we conclude with.... The third chapter is the empirical investigation ...***(AMD13)

Example 92: ***This study contains three chapters. The first part is devoted to a review of related literature. It is divided into three parts. The first part focuses on ...The second part discusses ...text... The third part presents games as... The second chapter presents the methodology and data collection... The third chapter includes the main findings and results. The study ends with...*** (AMD17)

Like PhD thesis introductions, MD writers signal the presence of this step using different linguistic elements and lexical items. The indefinite article "the" or the demonstrative adjective "this" following the noun "thesis" in the present tense ("usually passive"), such as ("is organised," "is structured"), as the most preferred structure employed in

the opening sentence in this step. Since writers wanted to present how their papers are structured in this step, expressions indicating chronological order such as ("first", "second", "the third", "next"... etc.) were extensively used. Verbs in the present tense (passive or active) (such as "is", "gives", "casts", "sets", "examines", etc.) were also used to signal the *outlining structure of the paper* step.

5.2.2.3. Rhetorical Move Patterns

With regard to MD introductions, Table 5.5 shows that only 40% of the introductions were organised linearly. In other words, the writers of these introductions followed the conventional move sequence captured in the CARS model, where writers start with establishing a territory (move1), establish a niche (move2), and close with presenting the present work (move3). In this corpus, approximately 30% of the introductions were organised only with two moves (Ex. M1-M3 (AMDI14 and AMDI12); M2-M3 (AMDI9, AMDI13, and AMDI15)). In some introductions (AMDI4, AMDI12), move 2 was neglected, while in others (AMDI9, AMDI13, AMDI14, and AMDI15), move 1 was omitted. The remaining introductions were organised in cyclical sequence where some moves were reused and with alteration of M1 and M2. This includes M1-M2-M1-M3, M1-M2-M1-M2-M3, M1-M2-M3-M1-M3-M2-M3 and M1-M2-M3-M2-M3. Table 5.8 reveals that 73 % of the MD introductions followed the conventional pattern introduced in the CARS model (Swales, 2004), while less than 30% of the data deviated from the CARS model.

Table 5.5: Move Sequence in MD Introductions Written by Algerian Writers

Move sequence	No	%
MD introductions following Swales's CARS model		
M1-M2-M3	5	40
M1-M2-M1-M2-M3	1	6.67
M1-M2-M1-M3	1	13.33
M1-M2-M3-M1-M3-M2-M3	1	6.67
M1-M2-M3-M2-M3	1	6.67
MD introductions deviating from the strict Swales CARS model		
M1-M3	2	6.67
M2-M3	4	20
Total number of RA introductions	15	100

M: Establishing a territory; M2: Establishing a niche; M3: Occupying a niche

5.2.3. Differences and Similarities between PhD Thesis and Master's Dissertation Introductions

This section examines whether the RSs of the PhD thesis introductions differ from those of the MD introductions authored by Algerian EFL writers, and whether they follow or deviate from Swales' (2004) model. More clearly, the focus is on the similarities and differences between PhD thesis and MD authors with relation to the RS of their academic writing introductions and how well these groups of writers conform to Swales' (2004) model regarding the move frequency, realization, and status. The findings of this study are compared to other previous genre analysis studies.

5.2.3.1. Length and Space of the Introductions

To start with, the PhD and MD introductory sections varied in terms of length and the space allocated to each introductory section. The PhD thesis introductions had 31142 characters with an average length of 2076 words in each introduction whereas MD introductions contained 12890 words with an average of 859 words. In terms of the space allocated to each introduction in these academic writings, it was found that the number of pages ranges from three to sixteen pages with an average of 7.4 pages in PhD thesis introductions while the average number of pages in MD introductions is 3.23 (2 to 9 pages). This finding indicates that the MD has a relatively short, concise introduction, whereas the PhD thesis tends to have a relatively long, detailed introduction. The difference between the PhD theses and MDs in terms of length and the allocated space is attributed to the nature of the genre itself, as the PhD thesis usually tends to be longer when compared to the MD (Kawase, 2015, Paltridge, 2021).

A careful analysis revealed that the PhD thesis writers showed more inclination to use more rhetorical strategies to realize the communicative purpose of the introduction section. In doing so, the writers employed 119 rhetorical strategies, while only 91 rhetorical strategies were used by MD writers. The findings revealed also that while MD writers focused more on move 3 by employing more than 60 rhetorical strategies, the PhD thesis writers put much emphasis on move 1 and move 3, as they employed 30 and 68 rhetorical strategies, respectively. Based on this, it appears that the main aim of the introduction section in MDs is to present the academic writing, while the communicative function of the PhD thesis introductions is to introduce the issue and present the academic writing.

The repetition of some rhetorical strategies made the PhD thesis introductions longer than those in the MDs. For instance, M3S1 was recycled more than three times in 30% and more than two times in most of the PhD thesis introductions. This repetition might be considered a good rhetorical strategy for PhD thesis writers who strived harder to persuade the members of the discourse community to accept their research by reminding them about the aim of their academic writing. The fact that PhD thesis introductions commonly include a thorough review of relevant previous research, which is typically characterized by the frequent use of integral citations, may further account for the introductions' longer average length. In contrast, MD introductions completely failed to review any or all of the prior research findings. Despite these differences in the emphasis on certain moves between PhD thesis and MD writers, substantial attention was given to move 3 by both sets of writers, resulting in the first similarity between the two groups of writers. This move was realized through a variety of rhetorical strategies and presented in great detail. These results support Bunton's (2002) assertion that, in comparison to writers of theses in science and technology, PhD thesis authors in the humanities and social sciences elaborate their studies more thoroughly in their introductions.

5.2.3.2. Move Occurrence and Status

With regard to the move occurrence and its status, the findings (see appendix 6) show (see appendix 6) that all three moves introduced in the CARS model (Swales, 2004) appeared in both sub-corpus. These findings are in line with most of the previous genre analyses (Ono, 2012, 2017, Samraj, 2008, Soler-Monreal, Carbonell- Olivares, & Gil-Salom, 2011) which indicated that the PhD thesis and MD introductions follow the Swalesian model at least at the macro-structure level (the move level). The findings of this study, however, are not in line with those of Kawase (2018), who claimed that authors of PhD thesis introductions in applied linguistics significantly deviated from the Swalesian (2004) model. These findings' inconsistency could be caused by a number of things, such as the source from which the data was gathered or the method used to evaluate the data. Indeed, Kawase (2018) employed Bunton's (2002) model to examine PhD thesis introductions collected from different countries including Australia, Canada, the UK, and the US.

The status of these steps created the second main distinction between introductions in the analyzed MDs and PhD theses, even though the CARS three moves were identified in both sub-corpus. Based on the frequency of occurrence of each move identified, we were

able to determine the status of individual moves, be they obligatory, conventional, or optional (see appendix 6). In the PhD thesis sub-corpus, all the three moves introduced in Swales (2004) were found to be obligatory moves as they appeared in more than 90% of the whole sub-corpus. In other words, move 1 and move 2 were found to be present in 93%, and move 3 appeared in all PhD thesis introductions (100%). The status of moves in the MD introductions, however, differs from those in the PhD thesis introductions. The analysis revealed that the only move that was found to be obligatory was *presenting the present work move (move 3)* as it appeared in 100% of the whole sub-corpus while move 1 and move 2 were found to be conventional moves.

At the micro level (step level), however, the majority of the examined introductions of PhD theses and MDs were not organised in the way assumed in the CARS model. The steps of the three moves were repeatedly used by the authors in various combinations to structure their introductions. Furthermore, in their introduction sections, both groups of writers used several new rhetorical steps not included in the CARS model; however, they were more prevalent in PhD thesis introductions than in MD introductions. In realizing move 1, PhD thesis writers employed two different steps, *claiming centrality* and *reviewing items of previous research*, more frequently in their introductions. In contrast, move 1 in MDs was mainly realized by *claiming centrality* step. The absence of *topic generalisation* is considered one of the similarities between both groups of writers. In realizing move 2, both groups of writers relied heavily on *indicating a gap in the real world* as the main rhetorical strategy to establish a niche in their academic writing introductions.

This step was found in 80% of both sub-corpus. Unlike MD writers, PhD thesis writers resorted to using other rhetorical strategies that were not mentioned in the CARS model. These include the *story-telling* step, which appeared in 40%, and *criticizing the academic context* step, which appeared in 20% of the whole sub-corpus. The use of these rhetorical strategies might be compensation for the lack of the most important rhetorical strategy in academic writing, namely *indicating a gap in previous research*. The latter was found to appear in only 33.33% of the PhD thesis introductions while it was totally absent in MD introductions. For move 3, both groups of writers share a number of similarities in realizing this move. First, move 3 was mainly realized by three obligatory steps in both sub-corpus. The writers announced present research descriptively or purposefully in 100% and 93% of the total sub-corpus, respectively, while RQs and hypotheses were presented in 93% and 100% of both sub-corpus. *The structure of the paper* step was also found to be

prevalent, as it appeared in 100% of the PhD theses and 93% of the MDs. Like in Move 2, PhD thesis writers resorted to employing other rhetorical steps not mentioned in the CARS model to realize Move 3.

This includes *justifications for method selection* (33.33%) (a newly identified rhetorical step), *limitations* (40%), and the *definition of key terms* (20%). The last rhetorical step, however, was also found in the MD introductions, making up 26.66% of the whole sub-corpus. The other rhetorical steps of Move 3 were found to be utilized similarly, both in terms of their frequency of occurrence and their status (see Appendix 6). Based on this, it can be stated that while both sets of authors had certain micro-level commonalities, there are major differences between PhD thesis and MD writers in terms of the frequency of occurrence and the status of both moves and steps.

Only the introductions from PhD theses, out of all the ones we examined, consistently had at least one instance of the steps that accomplish Move 1, which introduced the subject of the study in question. In contrast, only 73% of authors of MD introductions introduced their research topics in the opening paragraphs. The presence of move 1, conforming to Swales' CARS model, was entirely established in the examined PhD thesis introductions. According to Swales (2004), introducing the topic of the study to create research contextuality is the key communicative function in writing an introduction section. To realize Move 1, both groups of writers frequently used the step to claim the centrality and importance of their research topic in the real world rather than in the previous research tradition in the opening paragraphs of their introductions. The linguistic realization of this step was also similar in both sub-corpora.

The analysis revealed that both groups of writers used linguistic features that provide inscribed attitudes (such as adjectives, adverbs, and quantifiers) excessively to claim the centrality of their research topic (for example: *x is considered one of the most crucial linguistic features (AMDI1), x is considered an essential part of life, it is central to... it is an important tool... as it plays central roles... it is seen by some scholars as a life-long activity...(APhDI2)*). Although this strategy is considered a promotional strategy (Yang and Alison, 2015), the overuse of these linguistic elements may lead to the production of language with an assertive tone. In this case, writers need to be aware of the use of these linguistic elements, particularly in the opening paragraphs of their academic writing introductions, where a moderate tone is required.

Though the claiming centrality step was used and realized in both sub-corpus to some extent, the reviewing items of previous research step was used and realized differently, resulting in a significant difference between both sets of writers. In the PhD theses, writers were more inclined to realize Move 1 using reference to literature (60% of the PhD thesis introductions) while only 13% of MD introductions included this rhetorical step. The linguistic realization of this step was also different, with a large number of references and more focus on non-integral citations in the PhD thesis introductions. MD authors, on the other hand, favored the inclusion of fewer references and more balanced citation citations (integral and non-integral) (see chapter six for elaboration on this point).

In move 2, there were also some similarities and many differences in terms of the use and linguistic realization of the rhetorical steps in both sub-corpus. The analysis revealed that the major similarity was that *indicating a gap in the real-world* was the most prevalent rhetorical strategy to realize move 2. Both groups of writers were more concerned with real-world problems encountered by Algerian EFL learners while learning the English language. However, writers of the PhD thesis introductions appeared to indicate a gap by reviewing the previous research (step1a) more than the writers of MDs did, though this step was not preferred by both groups of writers. This finding is not in line with Kawase's (2018) study, in which he found that 75% of the applied linguistic PhD thesis writers were more inclined to indicate a gap in the previous research rather than indicating a gap in the real world (step 1c).

In our study, though the PhD thesis writers used more step 1a than MD writers did, the percentage remains relative when compared to that of Kawase (2018) and other previous studies, as this step was found only in 33.33% of the whole corpus of PhD theses. In Soler-Monreal (2011) and Bunton (2002), this step was found to be present in 70% and 73% of the data, respectively. This comparison leads us to wonder whether the absence of step1a in the Algerian academic writing introduction is a convention or a weakness. The *Adding to what is known* step (step 1b) was totally absent in both sub-corpus with the exception of one PhD thesis where the writers employed this step. It is worth noting that some PhD thesis writers employed step1c (*indicating a problem in the real world*) though they indicated a gap in previous research in their introductions. Using step1a and step1c in one PhD thesis introduction made the research problem to be solved in their research not clear. Whether to solve a problem in the real world or in previous research remains a question that still raises confusion for any reader who reads this type of introduction.

The only difference between the PhD thesis and MD introductions regarding move2 was in the use of the step of *presenting positive justification*. This step was the most preferred rhetorical strategy in the introductions authored by the PhD thesis writers, while it was totally absent in the MD introductions. This step was found to follow either the *indicating a gap* step in previous research or the *indicating a problem in the real-world* step. It should be noted, however, that none of the previous genre studies (Bunton, 2004, Kawase, 2018, Ono, 2017, Soler-Monreal, 2011) mentioned this rhetorical step in their studies.

The only exception was that of Amara (2006), in which 50% of the examined corpus included this step. It is worth mentioning that this step, *presenting positive justification*, was first introduced by Samraj (2002), and then it was integrated into the CARS model. In presenting positive justification, writers need to maintain the need for their research, as an additional rhetorical strategy, to establish a niche in the research field (Samraj, 2008). Indeed, the wide use of this rhetorical step in the PhD thesis introductions examined in this study reflects the writer's tendency to persuade the discourse community about the necessity of conducting such research; hence, it can be regarded as a promotional rhetorical step in PhD thesis introduction writing.

The realization of move 3 marked also a number of similarities between the PhD thesis and MD writers. In both sub-corpus, *presenting the present work* move was established by three obligatory steps. These include *announcing present research descriptively or purposefully*, *presenting RQs and hypotheses*, and *outlining the structure of the paper* steps. These rhetorical steps appeared in more than 90% of both sub-corpus. *Summarising methods* step was the only conventional step as it was found in 86% of both sub-corpus. The remaining steps were found to appear less than 30%; therefore, they are considered optional steps in the PhD thesis and MD introductions.

Announcing present research descriptively or purposefully step (M3S1) was the most prominent rhetorical step in both sub-corpus. This finding is in line with most previous genre studies (Amara, 2006; Kawase, 2018; Ono, 2017; Samraj, 2008), which indicated that M3S1 is one of the most prominent rhetorical steps in the PhD thesis introduction. In addition to this, the linguistic realization of this step was almost similar in both sub-corpus. Both groups of writers preferred to realize this step using impersonal stereotypical phrases (such as 'the study aims...', 'the aim of this study...', 'this paper examines...') in which the writer's identity is totally absent. The only exception was in one PhD thesis introduction where the

writer presented the aim of his study using the personal pronoun ‘we’. The PhD thesis and MD writers used this step differently, even though it was used similarly in terms of frequency and language realization. This difference could be seen in the length and the number of times this step appeared in each introduction. In terms of its length, M3S1 was found to be long in the PhD introductions, contrary to what was found in the MD introductions.

Its length ranged from one sentence to a whole paragraph in PhD introductions, while it was realized in no more than two sentences in the MD introductions. In addition, M3S1 was recycled in most of the PhD thesis introductions. In some other PhD thesis introductions it was repeated more than three times, as demonstrated in this Example: M1S2- M2S1c- **M3S1**- M2S1a- M2S2-M2S1c- M2S2- M2S1c- **M3S1**- M3S2- M2S2- M2S1c- M3S2- M2S1c- **M3S1**- M3S4- **M3S1**-M3S7. The cyclicity of this step might reflect the writers’ insistence on reminding the reader about the aim of their research after accomplishing certain rhetorical steps. One possible explanation for this cyclicity is that, as the introduction in the PhD thesis is usually so long, writers feel the need to help guide the reader through the introduction without losing interest. Another possible reason for the cyclicity of M3S1 in the PhD thesis introductions might be the writer’s intention to avoid delaying announcing the aim of the study (Kawase, 2018). As the PhD thesis introduction is lengthier, writers feel the need not only to present the aim at the outset to avoid creating what Swales (2004) calls "uncertainty in the reader" (p. 160) but also to keep reminding the reader about the aim of their study.

In addition, the step of *Presenting RQs and hypotheses* was found to be an obligatory step in move 3 leading to the second similarity between the PhD thesis and MD introductions regarding move 3 realization. The analysis also revealed that presenting hypotheses was always placed after presenting a series of research questions. The only exception was one PhD introduction where this rhetorical step was totally absent. This finding is in line with that of Kawase (2018), who indicated that *Presenting RQs and hypotheses* was mostly present in the examined PhD thesis introductions as it appeared in more than 75% of the whole corpus. The findings of this study contradict those of Bunton (2002) and Soler-Monreal (2011) where this step was found only in 17.8% and 50% of the corpus, respectively. When compared to our study and Kawase’s (2018), where the corpus belongs to the applied linguistics discipline, the absence of this step in these studies (Bunton,2002; Soler-Monreal ,2011) could be attributed to the influence of the discipline, as the data was collected from hard disciplines (such as chemistry, medicine, computing, and so on).Based on this, we can argue that this step is considered one of the most rhetorical strategies in applied linguistic PhD theses and MDs.

Outlining the structure of the paper step appeared in 100% of the PhD thesis introductions and 93% of the MD introductions. This finding is in line with most previous studies (Bunton, 2002; Kawase, 2018; Soler-Monreal, 2011), which indicated that *outlining the structure of the paper* step is the most prominent rhetorical strategy employed by writers to realize move 3. The prevalent use of this step reflects the writer's awareness of helping the reader to have a general plan of how a particular research paper is organised. Unlike RAs, these types of academic writings are often lengthy, especially the PhD thesis, which typically includes more than 80,000 words (Paltridge and Starfield, 2007; Thompson, 2013), so PhD thesis and MD writers feel the need to include an outlining the structure of the paper step in their academic writing introductions.

The infrequency with which the results are announced is a notable feature of the third move in the PhD thesis and MD introductions. This step was embedded with stating the values of the current research step in only one PhD thesis introduction. The absence of the *announcing principles outcomes* step reflects that both groups of writers were so cautious in delivering the outcomes of their studies. We were not able to predict a good reason for the absence of this step in the Algerian academic writing introductions, but a possible reason might be that both the PhD thesis and MD writers think that including this step in the introduction section is not important as these research papers include a long chapter entitled the "findings" or "results and discussion" where the findings are thoroughly presented, discussed and compared.

While reviewing the abstract sections of both sets of academic writings, we found that this step was not only frequently used but also was given much attention reflected in the space allocated to this rhetorical step. This might be considered as an additional reason for not including this step in the introduction section. When comparing this finding with previous studies, it was found that the PhD thesis and MD writers have a less tendency to include the step of *announcing principles outcomes* in their academic writing introductions. Kawase (2018), for instance, identified this step in only 25% (5 out of 20 introductions) of the examined PhD thesis introductions. MD introductions reviewed by Samraj (2008) and 'magister' thesis introductions examined by Amara (2006) did not contain any instances of this step, while only 22.2% of the PhD thesis introductions examined by Bunton (2002) contained instances of this step. However, none of these studies offered a plausible justification for the absence of this step.

5.2.3.3. Move Patterns

Differences in the move patterns between the PhD thesis and MD introductions have largely prevailed leaving out no room for similarities to emerge. The findings showed that the PhD thesis introductions had a greater variety of move patterns than the MD introductions. In writing their introductions, less than 20% of PhD thesis authors strictly followed the move pattern (M1-M2-M3), and more than 40% did not adhere to the conventional move pattern of the CARS model. The typical move pattern suggested in the CARS model was only adopted by 60% of PhD thesis authors. While more than 40% of MD writers stuck to the rigorous move pattern, more than 73% of them followed the conventional move pattern (M1-M2-M3). As most of the MD writers adhered to the CARS model, only 26.66% deviated from the conventional pattern. These findings are in line with those of Kawase (2018), who revealed that the majority of the introductions of applied linguistics PhD theses were not structured in the way assumed in the CARS model. The move analysis revealed that the PhD thesis writers tended to compose their introductions with more complex move patterns than the MD writers.

This was reflected in a large number of moves and the cycled structure exhibited by the PhD thesis writers. Another difference between these two groups of writers is that whereas the PhD thesis writers paid more attention to Move 3 which was repeated more than three times in most of their introductions, the MD writers did not give more attention to this move. Instead, the two-move structure of M1-M2 characterized the introductions authored by MD writers. Based on this, it can be argued that the PhD thesis writers tended to compose their introductions following more liberal structures, breaking the conventional practices, mostly at the micro level, to create what Bhatia (2004) calls a ‘private construct’ (P. xii).

5.2.3. Differences and Similarities between Academic Writing Introductions Authored by Algerian and NE Writers

This section aims to answer the last question, (3.*what are the major differences between academic writing introductions authored by Algerian and NE writers in terms of the move-step structures?*), of the first part of this study in terms of the macro-textual organization of academic writing introductions written by NE and Algerian writers. In this section, the similarities and differences regarding the RS are highlighted, taking into account the structural move sequence, the presence or absence of moves and steps, and the linguistic realization of moves and steps. It should be noted, however, that the results regarding the move status,

sequence and its realization were already discussed in very detailed manner. Nevertheless, the results might be viewed from a different perspective by relating these findings to the socio-cultural and cognitive elements that have influenced how the introduction section has been achieved. Comparing the findings of this study to previous genre analysis studies provides us with insights that may help the research in his interpretation and evaluation of the current study findings.

Generally speaking, the analysis of academic writing introductions authored by Algerian and NE writers revealed a lot about the moves and steps occurring across the four sub-corpus and even more about the reasons behind giving more importance to some moves over others. First off, the Algerian RA introductions were found to be shorter in size with limited though specific communicative strategies compared to other sub-corpus. The PhD thesis and MD introductions were found to be lengthier with more communicative strategies. This can be attributed, as we have mentioned in the previous section, to the nature of the genre itself. In contrast, the RA introductions authored by NE writers were found to be overcrowded by the necessary and highly valued rhetorical strategies. Of particular importance, in the Algerian academic writing introductions is the fact that *indicating a gap in the real world* was the only and most implemented rhetorical strategy in establishing a niche. Neglecting the *indicating a gap in the previous research*, the RA introductions authored by Algerian writers appeared as if they are condensed abstracts. This is reflected in the absence of the rhetorical strategies relevant to the introduction section as a sub-genre, referring to literature, and the writer's evaluation of the previous research.

In the PhD thesis and MD introductions, ample space was allocated for presenting the problem headed as “the statement of the problem” was unexceptionally integrated into most of the examined graduate and postgraduate academic writings. Although some PhD thesis and MD writers succeed to some extent in establishing the niche, in other introductions the statement of the problem can be a problem in itself as the reader may find difficulty in identifying the problem the paper intends to solve. This phenomenon can be attributed to the Algerian writers’ ignorance of other important ways of niche creation, and to the lack of awareness of establishing a niche. The only similarity between the four sub-corpus was found in occupying the niche as this strategy was found mostly in all examined texts, though the realization of this move was accomplished differently. In the following paragraphs, I discuss the presence, the status, and the communicative strategies implemented in each rhetorical move.

To begin with, the presence of Move 1, adhering to Swales' CARS model, was thoroughly established in the corpora of this study. This move was present in 100% of RA introductions written by NE writers; in RA, PhD thesis, and MD introductions written by Algerian writers as it appeared in 86%, 93%, and 73% respectively. Based on this finding, this move is seen as an obligatory move in RA introductions authored by NE writers and in PhD thesis introductions authored by Algerian writers, resulting in the first similarity in academic writing written by NE and non-native writers (PhD thesis writers). However, this move deserves to be conventional as it appeared less than 90% in both the RA and MD introductions. The wide use of this move revealed that both NE and Algerian PhD thesis writers attempted to use Move 1 to effectively localize their research construction to readers around the target research topic. This fact is confirmed by Swales (1990), who stated that this move (i.e., move 1) "appeals to the discourse community whereby members are asked to accept that the research to be reported is a part of a lively, significant or well-established research area" (p. 144). This finding is in line with most of the previous genre analysis studies (see chapter three) that acknowledged the existence of this move in the introduction section of academic writings (Bunton, 2002, Samraj, 2008; Amara, 2009).

Although the presence of moves was slightly similar in all academic writing introductions written by NE and Algerian writers, NE writers were more likely to stress Move 1 than the Algerian writers did. The emphasis on Move 1 was done by employing different strategies, including offering comprehensive academic background knowledge to readers by referencing to previous studies (see Ex. 2, 3 and 4). This implies that NE writers are more likely than Algerian writers to cite previous and related studies in order to broaden the research territory and situate their work within a larger research area. This concurred with the concept of 'appeal to magnitude' introduced by Wang and Yang (2005), who considered the use of multiple studies being conducted on a particular subject in move 1 as a promotional strategy. In other words, mentioning different issues tackled by previous research together with a number of citations in move 1, according to Wang and Yang (2005), not only enhances the topic being reported but also centers on the meaning of prevalence and grade it. Supporting move 1 with a number of citations also helps writers show that their research is well grounded and helps readers locate the gaps in the previous studies so they can use them in their future research.

In establishing a niche, although this move, which is usually realized by *indicating a gap* step, is highly acknowledged in the Swales CARS model since it guides readers' attention

to the weaknesses and shortcomings of the previous research; it was totally absent in all academic writings written by Algerian writers. The absence of this move can be considered a weakness. Indeed, when writers of RA introductions do not create a research space, their introductions, according to Swales (1990), ‘remains flat’ (p. 159). In *indicating a gap* step, writers are expected to mention the gap in the previous studies to prepare for presenting the issue that the study will address. The findings showed that while *indicating a gap* step was present in more than 90% of the NE sub-corpus, it was present only in 6% of MD introductions, less than 26% in RA introductions, and less than 30% in PhD introductions authored by Algerian writers.

This variation resulted in a significant difference in Move 2 between each group of Algerian writers, on the one hand, and between these groups of writers and the NE writers on the other hand. Indicating a gap in the real world, which is concerned with the educational situation in Algeria, was widely used in the MD, RA, and PhD thesis introductions in frequencies that increase along with the order of academic proficiency, which suggests that the less academic proficiency the writers have, the greater the tendency they will exhibit to refer to actual problems around them rather than provide logical grounds based on previous studies. For RA introductions authored by Algerian writers, it remains, however, unclear why most of the writers were inclined to use indicating a gap in the real world instead of indicating a gap in research, though they are supposed to be more familiar with RA writing conventions.

Still with establishing a niche, the differences between NE and Algerian academic writings were noticed even at the level of linguistic realization of this move and its steps. The linguistic elements and lexical choices were carefully selected in order to indicate a gap in RA introductions authored by NE writers. For instance, in phrases such as *fewer studies*, *few vocabulary studies*, and *a small number of studies*, the word *study*, as a countable noun, indicates that NE writers have good knowledge of a particular subject since they have read at least a number of relevant studies. Exhibiting the recency of knowledge was also expressed by verbs in the present tense and linguistic expressions indicating the newness of knowledge, such as *recently*, *in the last few decades*, *to date*. This strategy, in my opinion, is an effective way to signal indicating a gap for many reasons. First, it is a good way to convince the discourse community members (including the members of international journals) to accept the academic writing.

Second, it promotes, if we borrow a word from Hyland (2013), the academic writing for selling the paper'. To indicate the niche, Algerian writers preferred to rely more on presenting academic issues and problems in real life instead of presenting gaps or problems in previous research and studies. To put it another way, Algerian writers tended to avoid criticizing previous research to highlight the gap in the relevant studies so that they create a demand for their research. The lack of move 2 in most of the Algerian academic writing introductions and the distinctive realization of this move in the remaining academic writing introductions are reasons enough to state that Algerian RA writers deviate to some extent from the conventional patterns set in the CARS model. On the other hand, NE writers of RA introductions adhere more consistently to Swales's (2004) CARS framework. In fact, the ability to dig into real-life related problems instead of research-related problems is not the characteristic of only Algerian writers; it extends to all non-native writers, as demonstrated by well-cited and reputable previous move-step structure studies. Based on this, it appears that more cross-cultural research is necessary to understand the causes of this orientation.

Since move 2 was missing in most of the Algerian academic writing introductions and most of the Algerian writers preferred to substitute *the indicating gap* step in move 2 by *presenting a problem in the real world* Step, it is more valuable to see how previous studies have explained the lack of this move in EFL writers' academic writing introductions. Samraj (2002), in her study which compared RA introductions of Wildlife Behavior and Conversational Biology, attributed the lack of move 2, particularly in Conversation Biology RA introductions, to the differences between the two disciplines. In her view, conversation biology is a newly emerging field of study as it is more applied, interdisciplinary, and young. On the other hand, wildlife behavior is an already established field as it is more theoretical and autonomous. Samraj (2002) attributed the lack of move 2 in Conversation Biology to the research territory that is fluid and emergent, so writers find it difficult to indicate a gap in the research world. Ahmed (1997) and Fredrickson and Swales (1994) explained the lack of move 2 in RA introductions written by EFL writers to the lack of competition in creating a research space in a small discourse community. In Fredrickson and Swales' (1994) study, the writers of RA introductions used *telling a story* as a rhetorical strategy to substitute the missing *indicating a gap* step.

According to Fredrickson and Swales (1994), telling a story is a good strategy for making their RA attractive to readers. Similarly, Ahmed (1997) argued that Malay RA writers do not feel the pressure of competing for research space, especially when writing for a small,

local audience in Malay. Ozturk (2007) accounts for the lack of move 2 in RA introductions of Second Language Writing to the nature of this discipline. Similar to Samraj (2002), Ozturk claimed that second language writing as a newly emerging field makes it difficult for writers to indicate a gap. To overcome this issue, RA writers in this field resort to repeating Move 3 several times to provide more theoretical information in the absence of Move 2.

In occupying the niche, there were also some similarities but more differences between NE and Algerian writers' texts. The findings revealed that the occurrence of this move was similar, as an obligatory move, in all academic writing introductions examined in this study. The only exception is the MD introductions, where this move did not reach the required percentage to be classified as an obligatory move. In addition, all writers of academic writing introductions emphasized the use of step 1 (M3S1) to realize the last move in introduction writing. In spite of these similarities, the Algerian writers of RAs emphasized the use of M3S2 and M3S3 along with M3S1 as the main rhetorical strategies in realizing move 3. In contrast, NE writers showed more inclination to employ M3S4 and M3S7 along with M3S1 in realizing move 3. In other words, the NE writers wanted to show their readers how their research was done and how it was structured by using *summarizing methods* and *outlining the structure of the study* steps. On the other hand, the Algerian writers wanted to clarify the research questions and present the new concept, using *presenting RQs and hypothesis* and *definitional clarification* steps. The realization of Move3 in the PhD thesis and MD dissertation introductions, however, took another path.

In these academic writings, writers put much emphasis on four rhetorical steps. These include *announcing present research descriptively and purposefully*, *presenting RQs and hypotheses*, *summarising methods*, and *outlining the structure of the study* steps. The linguistic realization of move 3 was another difference between the Algerian and NE writers' texts. In the RA introductions authored by NE writers, more appropriate linguistic choices, promotional linguistic expressions, and linguistic elements that involve readers were widely and carefully employed. In contrast, there was a lack of these linguistic devices, which gives us the impression that the Algerian writers are not aware about the importance of these linguistic choices. Reference to previous research in the Algerian academic writings tended to be rare when compared to NE writers' texts, though some writers of academic writings, particularly the PhD theses, employed citation in the three moves.

It appeared from the analysis that references to previous research were employed only to demonstrate the familiarity of these writers on the topic rather than to support their arguments or to find the gap, as it is the case in NE writers' texts.

The difference in the RS based on the nativeness variable was found between the Algerian and NE groups, regarding the extent to which writers adhered to the fundamental conventional framework. While the NE writers kept to the recursive move pattern (Ex: M1-M2-M1-M2-M3) and the strict move pattern (Ex: M1-M2-M3) the most, the Algerian writers, particularly the PhD thesis writers, had rather liberal patterns with the omission of certain moves (Ex: M1-M3, M2-M3), the use of the recursive structure (Ex: M1-M2-M3-M2-M3-M2-M2-M3), and the selection of endings other than M3 (Ex: M1-M2-M1-M2). An acceptable explanation for this distinction might be attributed to some vulnerable points of the Algerian writers, as non-native writers of English, who showed relatively insufficient competence in academic writing and a lack of awareness and knowledge about writing academic writings, which led them to less adherence to conventional writing norms.

Differences in the organisation of the introduction sections may also be caused by the discourse community's cultural influence. Unquestionably, the distinction between the local discourse community and the global discourse community becomes quite clear. In western cultures, knowledge dissemination is marked by fierce competition, with writers working hard to persuade members of the discourse community that their research is worthwhile. In the Arab world, particularly in Algeria, there is no or little competition in the dissemination of knowledge. The Algerian writers' preferences for structural unconventionality entail more empirical research on the RS of Algerian academic writings to deepen our understanding of why these writers rhetorically organise their academic writing the way they do.

Conclusion

In this chapter, we discussed the differences and similarities between the four groups of writers in terms of the occurrence of moves, the linguistic realization of the move and steps, and the rhetorical pattern preferences. It was revealed that though there were similarities between all groups of writers, there were more differences in terms of the three investigated aspects. It was revealed that the introductions authored by NE writers conformed to the M1-M2-M3 pattern. While the MD and RA introductions were found to be similar, showing a slight deviation from the CARS model, the PhD thesis introductions showed more liberal

ways of text organization characterized by mixed discursive, non-linear patterns. The striking difference, however, between the research work introductions authored by NE and Algerian writers was in both the frequency of occurrence and the linguistic realization of Move 2.



Chapter Six:

Metadiscourse Analysis

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Conclusion



Introduction

This chapter examines the use of interactive and interactional metadiscourse in the introductions RAs written by Algerian authors; introductions of RAs written by NE authors; and introductions of PhD theses and MDs written by Algerian authors. As it was mentioned earlier (see chapter 3), metadiscourse on the whole helps writers to organise and to engage readers in the discourse. More specifically, interactional metadiscourse helps signal the writer's stance and engage with readers, while interactive metadiscourse helps writers organise the discourse and lessen the readers' burden of processing and understanding the information presented in the discourse by providing necessary textual linguistic elements. The interactional metadiscourse includes hedges, boosters, attitude markers, engagement markers, and self-mention markers, while the interactive metadiscourse includes transitions, code glosses, frame markers, endophoric markers, and evidentials. The findings of this study on the use of metadiscourse devices in academic writing introductions are first presented. Then, similarities and differences in terms of the use of metadiscourse in these academic writing introductions are discussed. An illustration of how metadiscourse devices were used in all corpora is made possible through the extraction of real examples representing each category of metadiscourse.

It is worth mentioning that the total number of words in each sub-corpus was counted. After that, to quantify the frequency of metadiscourse, all the features of each subcategory in Hyland's (2005) model were searched to identify the occurrence of metadiscourse. Using the working definition and the criteria established in Chapter 3, the researcher reviewed all the instances of search cases. Other cases that were not mentioned in Hyland's (2005) model but serve as metadiscourse devices were included. The instances that did not fit were excluded from the metadiscourse count. Examples of additional metadiscourse devices can be found in Appendix 11. Using the AntConc software, the occurrences of each subcategory of interactive and interactional metadiscourse devices were calculated for each sub-corpus. The data was normalized by expressing it in terms of frequency per 1000 words to compare the frequency of metadiscourse (see chapter three for more details). The log-likelihood test was used to determine whether there is a significant difference in the use of metadiscourse across the sub-corpus studied.

6.1. Metadiscourse Devices in Algerian and Native English Research Article Introductions

In the first section of this chapter, the findings regarding the use of metadiscourse in RA introductions written by NE and Algerian writers are presented. The second section is devoted to the results regarding the use of metadiscourse in the PhD thesis and MD introductions. In both sections, the frequency of the interactive and interactional metadiscourse devices and sub-types of metadiscourse are presented. In addition to that, interpretations are provided to explain the differences and similarities between these groups of writers.

6.1.1. Overall Metadiscourse Frequencies

Table 6.1 shows the raw frequencies, normalized frequencies, and the percentages of the interactional and interactive metadiscourse in the RA introductions authored by Algerian and NE writers. The frequency counts indicate that there are 1512 metadiscourse elements out of a total of 14506 running words in both sub-corpora. This means that in every ten words, there is at least one metadiscourse element. On the whole, interactive metadiscourse (Nf = 53.43, which accounts for 51.60% of all metadiscourse occurrences) was employed more frequently than interactional metadiscourse in both sub-corpora (Nf = 50.81, accounting for 49.07 % of all metadiscourse occurrences). The number of interactive metadiscourse is around 2.53 percent higher than the number of interactional metadiscourse. This could reflect the writers' awareness of the readers' needs and knowledge of what has to be made apparent in order for them to easily understand the message. This finding is congruent with most of the previous metadiscourse studies (Hyland, 2004, Zhang; 2016, Xu and Li, 2020), which indicated that the prominent function of metadiscourse in academic writing is to present the text.

Table 6.1: *Frequencies of Interactive and Interactional Metadiscourse in Algerian and Native English RA Introductions*

	No of words	Interactional			Interactive			Total
		Raw	Nf*	%	Raw	Nf	%	
ARAI	5976	302	50,54	54,81	249	41,67	45,19	551
NSRAI	8530	425	51	45,74	526	61,66	55,31	951
Total	14506	727	50,81	49,07	775	53,43	51,6	1512

Nf = Normalized frequencies per 1000 words*

ARAI : Algerian Research Article Introductions

NSRAI : Native Speaker Research Article Introductions

Using the log-likelihood test, Table 6.2 compares the use of metadiscourse in RA introductions of Algerian and NE writers. It shows the extent to which the two groups of writers use interactive and interactional metadiscourse in their RA introductions. Based on the normalized frequencies set in Table 6.2, it was found that interactive metadiscourse devices were used more frequently in the RA introductions written by NE writers ($Nf = 61.66$) than those written by Algerian writers ($Nf = 41.67$).

Table 6.2: *Interactional and Interactive Metadiscourse in Algerian and Native English RA Introductions*

	ARAI (5976 words)		NSRAI (8530 words)		Log-Likelyhood	
	Raw	Nf	Raw	Nf	LL	p-value
Interactive MD	249	41,67	526	61,66	27,07	$p < .0001$
Interactional MD	302	50,54	425	49,82	0,04	$p > .05$
Total	551	92,2	951	111,49	12,78	$p < .001$

Nf = Normalized frequencies per 1000 words*

MD= Metadiscourse

LL = Log-Likelyhood

The log-likelihood calculation of 27.07 reveals the statistical significance of the higher frequency of interactive metadiscourse in the NE sub-corpus at the level of $p < .0001$. With regard to interactional metadiscourse, Table 6.2 reveals that the use of interactional metadiscourse was to some extent similar in the Algerian sub-corpus ($Nf = 49.82$) and the NE sub-corpus ($Nf = 50.54$). The log-likelihood calculation of 0.04 reveals that there is no significance difference in the use of interactional metadiscourse in the NE and Algerian sub-corpus at the level of $p > .05$. Concerning the overall use of metadiscourse devices, Table 6.2 shows that NE writers employed more metadiscourse devices ($Nf = 111.49$) than Algerian writers of RA introductions ($Nf = 92.20$). The likelihood calculations of 12.78 indicate that metadiscourse devices were more frequent in the NE sub-corpus at a level of $p < .001$. In the following parts, the findings related to the categories and sub-categories of metadiscourse are presented and discussed.

6.1.2. Interactive Metadiscourse

6.1.2.1. Interactive Metadiscourse as a whole

Table 6.3 demonstrates the extent to which Algerian and NE writers of RA introductions employ each interactive category of metadiscourse. Based on the normalized frequencies, the scale preferences in both sub-corpus are evidentials, transitions, code glosses, frame markers, and endophoric markers. With a frequency of 21.37 items per 1000, evidentials are by all means the most frequent metadiscourse devices employed by both groups of writers. Moving onward, transition markers are the second most commonly used category of metadiscourse (Nf = 16.20).

Table 6.3: *Interactive Metadiscourse Sub-Categories in RA Introductions Authored by Algerian and Native English Writers*

	ARAI (5976 words)		NSRAI (8530 words)		All (14506 words)	
Interactive	Raw	Nf	Raw	Nf	Raw	Nf
Transitions	90	15,06	145	17	235	16,2
Code glosses	43	7,2	74	8,68	117	8,07
Frame markers	32	5,35	53	6,21	85	5,86
Endophoric markers	13	2,18	15	1,76	28	1,93
Evidentials	71	11,88	239	28,02	310	21,37

Aside from the similarities, we can see that whereas evidentials recorded the first position in the NE sub-corpus (Nf = 28.02), it was in the second position in the Algerian sub-corpus (Nf = 11.88). Even more so, while NE writers used frame markers (Nf = 6.21) and code glosses (Nf = 8.68) more frequently than the Algerian writers did (Nf = 5.35 and 7.20), the latter used more endophoric markers. Although they were used more by the Algerian writers, the endophoric markers (Nf = 1.93) remain the least frequently utilized interactive category by both groups of writers. One possible explanation is the fact that RAs, particularly their introductions, are usually brief, limiting the usage of endophoric markers. Because RAs are shorter than other research works such as PhD theses and MDs, the writers did not feel the need to remind the readers of earlier or later parts of the introductions. The RA introduction does not usually include tables, figures, and excerpts that require the use of endophoric markers, particularly non-linear references.

6.1.2.2. Transitions

Table 6.4: Transition Markers in RA Introductions Written by Algerian and Native English Writers

ARAI (5976 words)			NSRAI (8530 words)		Log-Likelihood	
Interactive	Raw	Nf	Raw	Nf	LL	<i>p</i> -value
Transitions	90	15,06	145	17	0,82	<i>p</i> > .05

Though transition markers were ranked second in the RA introductions of NE writers, they continue to be one of the most important linguistic choices in written academic discourse because they help writers construct coherent and cohesive texts and readers interpret links between ideas (Cao & Hu, 2014; Hyland, 2005). Table 6.4 reveals that transitions were slightly more frequent in the RA introductions authored by NE writers, but the difference was not significant as determined by the log-likelihood value of 0.82 ($p > .05$). The normalized frequency of transition markers used by Algerian writers ($Nf = 15.06$) is substantially identical to the frequency of transition markers in the sub-corpus of NE ($Nf = 17.00$), as demonstrated in Table 6.4.

Although they used transition markers slightly in a similar way in their introductions of RA, the sub-categories of transition markers were used differently. Table 6.4.1 shows that NE writers employed more addition and contrast transition markers than Algerian writers. Inferential markers, on the other hand, were used in a similar way in both sub-corpus.

Table 6.5: Percentages of transition markers sub-categories in both sub-corpus

	ARAI		NSRAI	
	N°	%	N°	%
Additive	21	33	43	67
Comparison and contrast	45	39	70	61
Inferential	25	53	22	47
Total	91	40	135	60

In this study, additive transition markers were typically realized by grammatical and lexical expressions such as *also*, *in addition*, *moreover*, *furthermore*. This sub-category of

transitions was employed to signal the relationship of addition between two discourse units. Additive markers were, as noted previously, the most common in terms of frequency distribution throughout the corpora. In other words, NE writers used 67% of the additive markers in the corpus whereas only 33% of all additive markers were used by Algerian writers. The following are some examples of how this category is used:

Example 1: *In this paper we propose that **in addition to** these two theoretically and empirically useful aspects of complexity, the operationalization of complexity in written and spoken performance should also consider the linguistic characteristics of the given genre or task-type.* (NSRAI12)

Example 2: ***Moreover**, Chile has one of the most segregated educational systems in the world and long-lasting, masse participation student* (NSRAI14)

Contrast and comparative transition markers were found more in the NE writers' sub-corpus. The most highlighted linguistic expressions that signal this category were *but, in contrast, on the other hand, however, yet*. In the Algerian sub-corpus, 'rather', 'nevertheless', 'contrary to', were the most common contrast transitional markers. This sub-category of transitional markers is used mainly to mark the relationship of contrast between discourse units in a text. Most of these markers were used in move two (*establishing a niche*) by both groups of writers. In this space (move 2), contrast and comparison transition markers are highly required in order to establish a niche.

NE writers, on the other hand, used contrast transitional markers more frequently to highlight the shortcomings and flaws of previous studies, preparing to occupy the niche in move 3. Since move two (particularly when it is realized by step 1 indicating a gap) was mostly absent in the RA introductions of Algerian writers, contrast and comparison transition markers were infrequently used. Instances of the use of this type of transitional markers are presented below:

Example 3: ***Although** previous studies offer useful insights into lexical and syntactic development in L2 writing characteristics.* (NSRAI13)

Example 4: *A large number of studies (e.g., rfs) were carried out in education..... and **yet**, it is still unclear how and why learning transfer occurs or not (e.g., see rfs).* (NSRAI4)

NE writers used contrast and comparison markers to connect two contradictory claims, as seen in the Examples above (*previous studies offer useful insights vs. their findings might not apply; a large number of studies vs. it is still unclear how*). The employment of this rhetorical strategy suggests that NE writers are attempting to persuade the discourse community that there is an area of study that has not been adequately addressed.

The linguistic devices used to express inferential meanings were largely similar across the two sub-corpus. The most common linguistic devices in the sub-corpus of NE writers were ‘because’, ‘therefore’, ‘thus’, ‘accordingly’, and ‘hence’, while Algerian writers preferred to use *as a result, consequently, so*. The main function of this type of transitional marker is to show the causal relationship (cause-effect) between the discourse units in the text. This type of transition was also used to build interaction between the writer and the reader. Writers used the inferential transitional markers in move one to get readers’ acceptance of the importance of the newly proposed study by claiming the centrality of new knowledge (Ex. 5 and 6). The inferential transitions were also used in move three to justify the purpose or the focus of the study (Ex. 7). Examples of the uses of inferential transitions are presented below.

Example 5: *Learning to write effectively in an academic context is very important, not only **because** it is often the only means by which students’ content knowledge is assessed in a large number of disciplines, but also **because** producing academic texts helps ... to gain new knowledge through writing (Ref).* (NSRAI12).

Example 6: *the study reported in this paper, **therefore**, sets out to help develop a better understanding of the extent to which L2 proficiency develops ... Abroad context.* (NSRAI5)

Example 7: *Subsequently, we assume that analyzing the use of English modal verbs in learners’ production might be an effective way of teaching them. **Thus**, the present study is necessary to spot light on learners’ errors ... teaching English modal verbs.* (ARAI5)

6.1.2.3. Frame Markers

As demonstrated in Table 6.5, Algerian and NE writers of RA did not differ in the frequency of using frame markers in their RA introductions though there were slightly more frame markers in NE writers’ sub-corpus. Similarly, Algerian and NE writers used 5.35 and 6.21, respectively, in every 1000 words. The log-likelihood value of 0.45 indicates a non-significant difference between the two groups of writers ($p > .05$).

Table 6.6: *Frame Markers in RA Introductions Written by Algerian and Native English Writers*

	ARA (5976 words)		NSRAI (8530 words)		Log-Likelihood	
	Raw	Nf	Raw	Nf	LL	p-value
Frame markers	32	5,35	53	6,21	0,45	p > .05

Frame markers include linguistic choices which either mark text boundaries, signal elements of text structure, label stages, announce discourse goals, sequence material, or shift arguments (Hyland and Zou, 2020). The analysis revealed that all these types of frame markers (i.e., *sequencing, discourse labels, announcing goals, and topic shift*) identified in this study served similar functions in both sub-corpus.

For instance, sequencers were employed to list discourse elements (e.g., *first, second, first of all... etc*), discourse labels to signal the stage of the unfolding discourse (e.g., *all in all, in sum, overall... etc*), announcing goals to highlight the discourse aims (e.g., *aim, intend to, focus... etc*), and topic shift to determine the beginning of new discourse (e.g., *now, well, to more closely...etc*).

• *Sequencers*

Sequencers are used to connect arguments in a text in a more logical way, making the text easier for potential readers to understand and read. (K, Hyland, personal communication, June 3, 2022). The most frequent sequencers found in both sub-corpus were *first, second, then* and numbers (1, 2, 3). Often, Algerian writers of RA introductions made a list of propositional content in their texts using numbers 1, 2, 3,...(Ex. 10), but this textual feature was not frequently found in the NE writers' sub-corpus. In contrast, NE writers were more inclined to use numerical sequencers (such as *first* and *second*) to sequence the propositional contents in their RA introductions, aiming to guide the reader and give him hints of what was coming next (see Ex. 9). In the NE sub-corpus, these numerical sequencers were usually preceded by an introductory phrase containing a particular classifier (factors) and a quantifier (two) (the underlined words in Ex. 9). According to Hyland and Zou (2020), the structure of *an introductory phrase (classifier +quantifier) + numerical sequencer* is the most common structure in RAs to explicitly present arguments, evidence, procedures, or findings.

Example (8): *The two frameworks, explained **in the next section**, are simplified versions to make them accessible for university EFL writing teachers and students.* (NSRAI3)

Example 9: *This is due to practical difficulties of directly comparing vocabulary acquisition through L1 and L2 (Ref) mainly caused by two factors: **First**, most words learned by L2 users are already known to L1 speakers of the same age, making it difficult to compare acquisition of the same set of words. **Second**, learning through L2 usually involves the mapping of a new L2 word form onto an already existing L1 concept or word (Ref) rather than acquiring both a new concept and a new form simultaneously, as is common in L1 learning.* (NSRAI6)

Example 10: *These include: (1) identifying learners' current abilities through their independent performance; (2) identifying their problems and challenges; (3) designing intervention tasks to address these problems and challenges; (4) working jointly with learners to complete the task by offering feedback targeting their ZPD; (5) ending on a positive note of successful completion of the task; and (6) checking...*(ARAI7)

• **Discourse labels**

Discourse markers are used to mark the stages of text development. Only a few instances of discourse labels were identified in the NE RA introductions; however, no discourse labels were found in the Algerian RA introductions. Among the discourse labels mentioned in Hyland's (2005) model, only 'in summary', 'overall', 'so far', and 'to conclude' were used by NE writers. Examples 11 and 12 demonstrate how this type of frame markers was used in the NE corpus.

Example 11: **Overall**, *in terms of the logogenesis of written text (studying meaning as it unfolds during the writing process), there are just a few studies that examine this in first language writing.* (NSRAI7)

Example 12: **In summary**, *and at the risk of over-simplification, it seems that studies of student text which use existing analytical frameworks to compare groups of texts which were classified by ...* (NSRAI11)

• **Announcing goals**

Announcing goals are the linguistic choices used by the writer to state the aim of their studies. In this study, the nouns 'the *aim*', '*the goal*', and '*the focus*' and the verbs '*aim*' and '*focus*' were the most shared announcing goals between both groups of writers. In most RA introductions, these linguistic choices are situated in move 3 as they help writers state a package of discoursal goals within a short paragraph. A careful analysis, however, revealed that NE writers preferred to announce the goal of their studies using a combinational pattern: determiners (such as *this*, *the*) + nouns (such as *study*, *research*) + verb (such as *aims*) + infinitive (such as *to improve*) (Ex. 13), while Algerian writers were found to use more of the patterns: determiner + adjective + noun + verb, or a determiner + announcing goal + of+ determiner + noun+ to be (Ex. 14a and 14b).

Though they differ in their structure, both patterns were used as announcing goals in most RA introductions authored by both sets of writers. In the NE sub-corpus, announcing the goals of the study using these linguistic choices were always connected with indicating the gap; however, this rhetorical strategy that was totally absent in the Algerian sub-corpus.

Example 13a: *Therefore, **this study set out to determine** the specific types of out-of-class language contact that SA learners in England identify with, and whether a relationship ... and vocabulary gain.*(NSRAI8)

Example 13b: *To address this gap, **the paper investigates** how the explicit teaching of language is introduced and shared among teachers and students in classroom interactions, with **the aim** of illustrating how teachers and students potentially benefit from the explicit teaching of language within the PE classroom.* (NSRAI1)

Example 14a: ***The present study deals** with form and ... for EFL learners' writing development .*(ARAI8)

Example 14b: *The **aim of this study is** to try to shed some light on how to teach the use of connectors in different contexts to raise students' awareness of their different semantic and stylistic variations.* (ARAI11)

• *Topicalisers (shifting topics)*

Topicalisers are the linguistic choices that help signal the shift from one topic to another. They include instances such as ‘in regard to’, ‘so’, ‘concerning’, ‘to look more closely’... etc. In this study, topicalisers were the least frequent linguistic choices in both sub-corpus. In the English native sub-corpus, we did not find any instances of these metadiscourse devices, while in the Algerian sub-corpus, a few instances were identified. In the Example below, there is a clear shift from justifying the aim of the study to presenting the structure of the paper. This shift from one topic to another was indicated through the use of the topicaliser ‘so’.

Example 15: writing strategies would be of great benefit for our work since these strategies help learners to improve their writing. **So**, the first part of this paper will be devoted to LLS. (ARAI4)

Although there were some similarities between the Algerian and NE writers in terms of the use of the four categories of frame markers, Algerian writers seemed to use more announcing goals (see Ex. 17 and 18) when compared to NE writers. The latter, On the other hand, appeared to use more sequencers (ex. 16).

Example 16: ***First**, most words learned by L2 users are already known to L1 speakers of the same age, making it difficult to compare acquisition of the same set of words. **Second**, learning through L2 usually involves the mapping of a new L2 word form onto an already existing L1 concept or word (Jiang, 2000) rather than acquiring both a new concept and a new form simultaneously.* (NSRAI5)

Example 17: *The **main purpose** of the present research is to examine the ... learning style on science.* (ARAI5)

Example 18: *Our **goal** is to concentrate on the learning strategies since this is the aim of our study.* (ARAI11)

6.1.2.4. Endophoric Markers

Endophoric markers occurred less frequently in both sub-corpus. Table 6.6 demonstrates the normalized frequencies of endophoric markers in the Algerian and NE sub-corpus. Both groups of writers exhibited the use of a small number of endophoric markers

but also slightly similar use of this category of metadiscourse. In every 1000 words, Algerian writers of RA introductions used 2.18, while NE writers of RA introductions used 1.76. The log-likelihood value is 0.31, indicating a non-significant difference between the two groups of writers at the level of $p > .05$.

Table 6.7: *Endophoric Markers in RA Introductions Written by Algerian and Native English Writers*

	ARAI (5976 words)		NSRAI (8530 words)		Log-Likelihood	
	Raw	Nf	Raw	Nf	LL	p-value
Endophoric markers	13	2,18	15	1,76	0,31	p > .05

Endophoric markers are the linguistic choices that help writers refer to different sections of the text. They serve as the "road signs" of the text, as Adel (2006) puts it, assisting the reader in navigating through the text. This category of metadiscourse includes linear references and non-linear references (Hu and Coa, 2014)(see chapter 4 for more elaboration). In this study, both groups of writers did not use much of this type of metadiscourse, only a few instances were identified in both sub-corpus. Below, examples of endophoric markers from both sub-corpus are presented.

Example 19: *The two frameworks, **explained in the next section**, are simplified versions to make them accessible for university EFL writing teachers and students.* (NSRAI3)

Example 20: *For L2/FL students to interpret and comprehend those texts, they should recognise the texts' rhetorical patterns of organisation mentioned **above**.* (ARAI5)

It is clear from the Examples above that, through the use of endophoric markers (*explained in the next section* and *above*), writers want to refer back or forward to something that is already covered or will be covered somewhere in the text. In doing so, writers want to orient the reader in connection with what has been going on (Ex.20) or what will be done in the text (Ex.19).

6.1.2.5. Evidentials

Evidentials occurred in both sub-corpus, but more frequently in the RA introductions authored by NE writers. It appears that NE writers are more inclined to scaffold, justify, and surround their arguments with previous research to make them more credible. This can be

seen in the disparity in the use of evidentials in RA introductions authored by Algerian and NE writers. Based on the normalized frequencies, NE writers used evidentials (Nf = 28.02) more often than Algerian writers (Nf = 11.88). The log-likelihood calculation of 46.11 reveals that the higher frequency of evidentials in the NE sub-corpus is significant at the level of $p < .0001$.

Table 6.8: *Evidentials in RA Introductions Written by Algerian and Native English Writers*

ARAI (5976 words)		NSRAI (8530 words)		Log-Likelihood	
Interactive	Raw	Raw	Nf	LL	<i>p</i> -value
Evidentials	71	239	28,02	46,11	$p < .0001$

Evidentials are the linguistic elements used by writers to present information from other texts. This can be done by either using integral, non-integral citations or both (Hyland, 2005). In integral citations, the name of the author is usually a grammatical part of a sentence (Ex: the subject of the sentence), while in non-integral citations the name of the author is placed outside of the sentence. It is usually put within brackets, accompanied by the date of publication at the end of the sentence. In this study, non-integral citations were the most frequent type of evidential compared to the other types of evidentials. This finding is in line with previous metadiscourse studies (Hyland & Jiang, 2019; Wette, 2021; Nesi, 2021; Samraj, 2013), which indicated that the general trend in citation practices should be that non-integral citations prevail across almost all academic disciplines and almost all the time. As Table 6.7.1 shows, Algerian writers of RA introductions used 70% of non-integral citations but only 30% of integral citations. Similarly, NE writers used non-integral citations more frequently (86%) than integral citations (24%). In comparison between the two groups of writers, NE writers of RA introductions used both integral and non-integral citations more frequently when compared to the use of the evidential types in Algerian RA introductions. The Examples below demonstrate how integral and non-integral citations were used in both sub-corpus.

• The integral citations

Example 21: *Canagarajah (2015) draws on developments in L2 writing theory over the past few decades to explain that orientations to voice and writer identities need to be matched up with “effective pedagogical applications or empirical research” (p.122) (NSRAI3)*

Example 22: **Palmer (1974)** noted that the complexity of modal verb forms and their semantic functions cannot be compared with any other grammatical structures and highlights the difficulties learners usually have in handling this grammar feature (ARAI10)

• The non-integral citations

Example 23: *The vast majority of such research has been carried out in the area of reading (e.g. Dupuy and Krashen, 1993; Hulstijn, 1992; Pitts et al., 1989).* (NSRAI2)

Example (24): *No clear and specific definition is given, which makes experimentation difficult (Hussein 1990; Farghal and Obiedat 1995)* (ARAI12)

Table 6.9: Integral and non-integral citations in Algerian and native English RA introductions

Evidentials	ARAI		NSRAI	
	No	%	No	%
Integral	21	30	33	14
Non-integral	50	70	206	86
Total	71	100	239	100

Most metadiscourse studies (Hyland, 1999, 2000, 2004, 2005, 2008; Jalilifar, 2012; Mansourizadeh and Ahmad 2011, Samraj, 2008) agreed that evidentials can serve at least three purposes. The first one is acknowledgment or attribution (Hyland 1999, 2008). Acknowledgment means mentioning the source of a piece of information to acknowledge its originator. The second function of evidentials is to support the arguments. In other words, when references are provided, the writer needs to say that his argument is based on evidence and not just an opinion. The third function of evidentials is to show the novelty of the research and help embed a new work in community-generated literature. Hyland (2000) stated that integrating citations into the text has two strong points. First, it represents an appropriate disciplinary orientation. Second, it informs readers that the arguments held in the text are responses to previous arguments.

In this study, differences in the use of evidential types between Algerian and NE writers were not only in terms of the frequency but also in terms of the functions of these types in texts. A careful analysis highlighted the multifunctionality of evidentials in the English native sub-corpus when compared to the Algerian sub-corpus. In other words, evidentials were found to fulfill several functions in the NE sub-corpus as opposed to the Algerian sub-corpus.

The multifunction of evidentials was found mostly in RA introductions authored by NE sub-corpus.

In the Example below, the NE writer introduced and contextualized his topic, demonstrating why it is significant. In order to support his argument that the transfer of learning is a common theme in literature, the author employed two non-integral citations (see the first sentence in Ex. 25). In the second sentence, the writer moved to claim that the topic is still debatable and that much research has been conducted on this topic. The function of evidentials in the second sentence is not only to support the writer's argument but also to represent an appropriate disciplinary orientation, as the writer listed a number of studies relevant to a particular discipline. In addition to that, these evidentials help the writer move smoothly from move 1 to move 2.

In other words, after establishing the territory, the writer needs to indicate a gap. This can only be done by first indicating that though the topic under question is the focus of many studies, there is still a gap that needs to be filled. In the third sentence, the writer appeared unsatisfied by the two references provided in the second sentence to support the existence of the gap; he supported his claim with another reference after narrowing down the gap to learning transfer in discipline-based academic literacy.

Example 25: (S1) The value of the transfer of learning in academic and professional contexts is widely recognised (**Engle, 2012; Larsenreeman, 2013**). (S2) A large number of studies (**e.g., Butler, 2010; Butler, Godbole, & Marsh, 2013; Foley & Kaiser, 2013; MacRae & Skinner, 2011; Thompson, Brooks, & Lizarraga, 2003**) were carried out in education and psychology in order to understand the nature of transfer with regard to learning over the last century, and yet, it is still unclear how and why learning transfer occurs or not (**e.g., see Day & Goldstone, 2012; Larsen-Freeman, 2013**). (S3) Importantly, there are only a small number of studies on learning transfer ...academic literacy (AL) courses (**Baik & Greig, 2009**). (NSRAI4)

The Algerian writers of the RA introductions, however, were less concerned with the use of evidentials. Even those instances identified in their sub-corpus were limited to only one function. That is the acknowledgment. In most cases, evidentials were exclusively used in the Algerian sub-corpus to acknowledge the contributions of individuals who were cited in the text. Acknowledgment happened when evidentials were used simply to acknowledge the

originators of the cited information without passing evaluative comments (Hyland, 2005). In the Examples (26 and 27) below, the writer used the *name + date + reporting verb* structure to acknowledge the original source of the argument. In most of the RA introductions authored by Algerian writers, references were identified in move 1. In this move, writers use evidentials to introduce, define, and clarify the topic under question. Because of the absence of *indicating a gap* step in move 2 (see chapter five for more elaboration), citations, integral or non-integral, were totally absent.

Example 26: **Brown (2000)** *sees that personality type plays a vital role in SLA. According to him, students do not go through only a cognitive process while learning, but also through an affective one.* (ARAI9)

Example 27: **Palmer (1974)** *noted that the complexity of modal verb forms and their semantic functions cannot be compared with any other grammatical structures ... have in handling this grammar feature.* (ARAI10)

In the Algerian RA, there were no traces of evidential markers in two introduction sections. In five introductions, we identified a small number of integral citations. In the remaining introductions, there was a combination of both integral and non-integral citations. However, we identified the absence of evidentials in some contexts where the use of citations is necessary. The Example (28) below demonstrates that although evidentials are required, the writer did not provide references to support and reinforce his argument. One possible reason for this might be the lack of awareness of the importance of evidentials in academic writing.

Example 28: *Despite the fact that many linguists (**required references**) have reported the countless difficulties non-native students face in terms of modal verbs, not many learner-corpus studies (**required references**) have covered the root of these difficulties by learners and more specifically in the Algerian context. There is not adequate research (**required references**) exploring the potential problems that learners encounter and the underlying reasons behind these troublesome issues.*

6.1.2.6. Code Glosses

Based on the findings presented in Table 6.8, it appears that code glosses were employed more in RA introductions, but the difference was not significant as determined by the likely-hood value of 0.97. The normalized frequencies of code glosses in the Algerian sub- corpus (Nf= 7.20) is substantially identical to the frequency of code Glosses in the NE

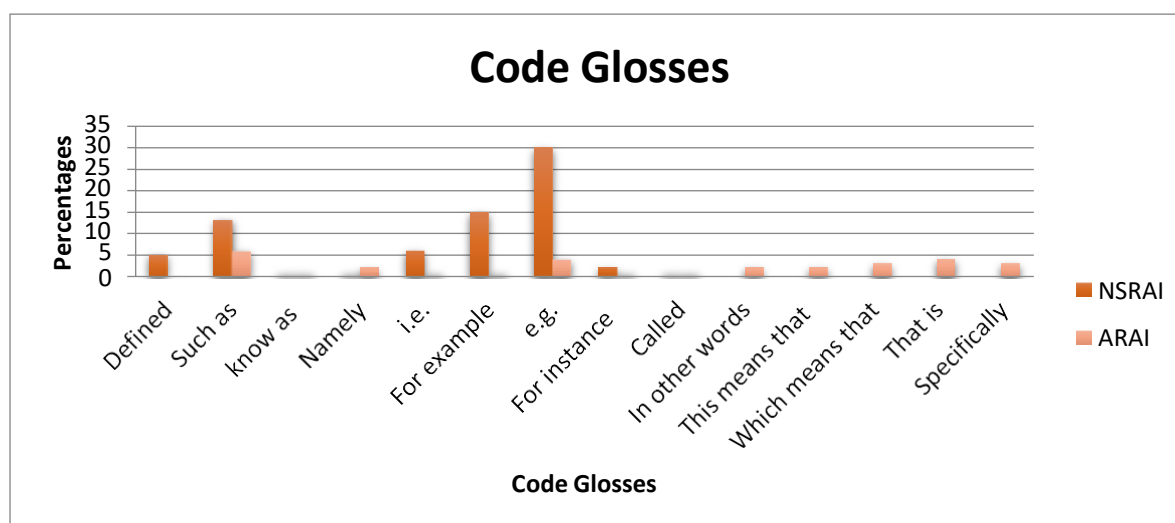
Sub- corpus (Nf=8.68). The log-likelihood value of 0.97 suggests that there is no significant difference in the use of code glosses between the two groups of writers ($p > .05$).

Table 6.10: *Code Glosses in RA Introductions Written by Algerian and Native English Writers*

	ARAI (5976 words)		NSRAI (8530 words)		Log-Likelihood	
	Raw	Nf	Raw	Nf	LL	p-value
Code glosses	43	7,2	74	8,68	0,97	$p < .05$

Although there were no differences between Algerian and English native writers in terms of the number of code glosses used in their RA introductions, some differences in terms of preferences and functions of code glosses were highlighted. According to Hyland (2007) and Cao and Hu (2014), code glosses can be categorized into two main categories: exemplifiers (such as ‘for example’, ‘e.g.’ and ‘i.e.’) and reformulators (such as, ‘in other words’, ‘this means that’, ‘which means that, and ‘that is’). In comparing the use of the two types of code glosses in the Algerian and NE texts, the graph below shows that there were marked preferences that distinguish language choices in the two sub-corpus. Exemplifiers, for instance, were often used in the NE sub-corpus (Ex. 29). Almost all the instances identified in Hyland's list of code glosses were found in the NE sub-corpus; however, instances such as ‘for example’, ‘such as’, ‘i.e.’, and ‘for instance’, were the most commonly used code glosses. In the Algerian sub-corpus, writers showed more preference for the use of reformulators (Ex. 30). Algerian writers frequently used linguistic elements such as that is, in other words, and this means to elaborate on their arguments in their RA introductions.

Figure 0.1: Code Glosses in RA Introductions Authored by Algerian and Native English Writers



Example: 29: *In common usage the term encompasses both cultural exchange programmes (e.g. U.S. students studying in the UK) and programmes designed to . . . such as tertiary-level academic exchanges for university language majors (e.g. the ERASMUS programme in Europe). Academic SA (i.e. programmes delivered by a university/FE college) can last from one semester to one or two academic years. Further variation . . . acquisition (i.e. programmes delivered by private language institutions).* (NSRAI8)

Example: 30: *Ref (1995) stated that learners acquire collocations in chunks rather than as separate words. The same thing goes to L1 users. In other words, L2 learners learn collocations like infants.* (ARAI12)

6.1.3. Interactional Metadiscourse

6.1.3.1. Interactional Metadiscourse as a Whole

With regard to interactional metadiscourse, hedges and engagement markers were given equally more importance in both sub-corpuses. These two types of categories were the dominant interactional metadiscursive strategies adopted by Algerian and NE writers in their RA introductions. From the normalized frequencies presented in Table 6.9, both groups of writers used 16.75 per 1000 words of hedges and engagement markers in their RA introductions. In applied linguistics, as a soft discipline, the arguments are presented as the writers' knowledge rather than as facts, and writers in this discipline feel the need to avoid over-commitment to propositions (Hyland, 2005). For these reasons, hedges are always used more frequently when compared to other interactional categories. On the other hand, the

overuse of engagement markers in the whole corpus reflects the writers' desire to encourage readers to take part in the given research.

Table 6.11: *Interactional Metadiscourse Sub-Categories in Introductions Authored by Algerian and Native English Writers.*

	ARAI (5976 words)		NSRAI (8530 words)		All (14506 words)	
Interactional	Raw	Nf	Raw	Nf	Raw	Nf
Hedges	85	14,22	158	18,52	243	16,75
Boosters	51	8,53	57	6,68	108	7,45
Attitude markers	26	4,35	35	4,1	61	4,21
Engagement markers	100	16,73	143	16,76	243	16,75
self-mentions	45	7,53	42	4,92	87	6

After hedges and engagement markers, the second most used interactional category is boosters. In both sub-corpus, 7.45 instances per 1000 words were employed. Self-mention markers were also used by both groups of writers in their RA introductions. As demonstrated in Table 6.9, the writers used 6 instances per 1000 words in their RA introductions. Finally, the lowest category in both sub-corpus is the attitude markers, as only 4.21 instances were used by both groups of writers.

6.1.3.2. Hedges

The most frequent sub-category in the whole corpus of RA introductions is hedges, which accounts for 33% of all interactional metadiscourse by both groups of writers. A comparison of the use of hedges in the Algerian and NE sub-corpus revealed that NE writers used hedges more often than Algerian writers did. Table 6.10 demonstrates more hedging expressions in the NE sub-corpus (18.52 in every 1000 words) than in the Algerian sub-corpus (14.22 in every 1000 words). The log-likelihood calculation of 3.95 denotes that the higher incidence of hedges in the NE sub-corpus is significant at the level of $p < .01$.

Table 6.12:*Hedges in RA Introductions Written by Algerian and Native English Writers*

Interactional	ARAI (5976 words)		NSRAI (8530 words)		Log-Likelihood	
	Raw	Nf	Raw	Nf	LL	p-value
Hedges	85	14,22	148	18,52	3,95	$p < .01$

Hedges are sub-categorized into epistemic modal verbs, lexical verbs, adjectives and adverbs, nouns, and linguistic expressions for marking qualification. The former was the most frequently used type of hedges in both sub-corpus. When comparing NE and Algerian writers, Table 6.10.1 shows that NE writers used more epistemic modal verbs (Nf = 7.15) than Algerian writers (Nf = 6.36). The other types of hedges were similarly used by both groups of writers, except for adjectives and adverbs, which were used more frequently in the sub-corpus of NE writers. Discussion on the use of hedge types in the sub-corpus is presented with examples in the following part.

Table 6.13:*Sub-categories of hedges in RA introductions authored by Algerian and native English writers*

Hedges	ARAI		NSRAI		All	
	No	Nf	No	Nf	No	Nf
Epistemic Modal verbs	38	6,36	61	7,15	99	6,82
Lexical verbs	16	2,68	20	2,34	36	2,48
Adjectives and adverbs	14	2,34	64	7,5	78	5,38
Nouns	15	2,51	11	1,29	26	1,79
Linguistic expression for marking qualification	2	0,33	2	0,23	4	0,28
Total	85		158		243	

As the Table above shows, one of the most common metadiscourse strategies used by Algerian and NE writers in their RA introductions is modality (epistemic modal verbs). These hedged metadiscursive modals' most preferred linguistic items were 'should', 'may', and 'can'. The use of these modals helps writers to detach themselves from their full commitment to the propositions. In most cases, the use of these models was augmented by verbs in passive forms in the sub-corpus of NE writers (Ex. 31 and 32), whereas this structure was totally absent in the Algerian sub-corpus (ex. 33).

Example 31: *However, no parallel improvement in accuracy **could** be observed.* (NSRAI13)

Example 32: *Links **may** also be forged by phenomena such as grammatical cohesion ..., lexical organization ..., thematic patterning..., and participant tracking.* (NSRAI7)

Example 33: *None of us as teachers **can** deny the fact that sometimes we find ourselves in the situation where our students are bored in our classes.* (ARAI7)

As shown in Table 6.10.1, lexical verbs that function as hedging devices were used more frequently by English native writers than by Algerian writers. A thorough analysis revealed that 'tend', 'seem', and 'assume' were the most commonly used lexical verbs in the Algerian RA introductions, while 'suggest', 'appear', 'argue' were prevalent in the NE sub-corpus. Besides, differences between the two groups of writers were also prevalent in the use of lexico-grammatical patterns. The patterns that include hedging verbs (such as 'suggest', 'indicate', 'tend', etc.) and that clauses (such as 'that listening leads', 'that phraseology is', etc.) were prominent hedging patterns used by NE writers for discussing and presenting previous research findings. The use of 'the findings suggest that' pattern (compared to 'the findings prove that' or 'show that' patterns) lowers the force of the claims, giving more freedom to readers to refute or accept the claim.

Though the patterns 'the findings prove that' and 'show that' indicate the arguments are not based on the writers' personal opinion but the discovery of existing data, these patterns close any other interpretation, hence discouraging readers from getting involved in the texts. The pattern, *hedging verbs + that clause*, is employed not only to demonstrate respect for other views and perspectives (Hyland, 2005), but also to avoid threatening the faces of participants and other researchers being referred to.

Example 34: *Their findings **suggest** that listening leads to even smaller gains than reading does (Refs). Yet, similar to traditional reading research, these studies have used meaning-based tests only* (NSRAI3)

Example 35: *In fact, the interventions compared in these studies **appear** to align with DeKeyser's (2003: 314) distinction between explicit-deductive . . . and explicit-inductive approaches.* (NSRAI5)

Example 36: *Business graduates are **assumed** to transfer the skills and knowledge including cognitive . . . skills from their studies to their workplace as well.* (ARAI7)

As *indicating a gap* step was absent in most of the Algerian RA introductions, lexical verbs were uncommon in their sub-corpus. We identified a few occurrences of this kind of hedge, which was often used to lessen the force of their claims.

Example 37: *In addition, it investigates teachers' attitudes towards teaching this kind of writing and **suggests** some solutions to help learners foster their writing abilities.* (ARAI6)

Example 38: *For looking into the issue at stake, we put the following questions: 1) why do EFL students **tend to** misuse logical connectors in their writing?* (ARAI11)

The difference in the use of adjectives and adverbs, however, is rather striking. NE writers used twice as many adjectives and adverbs as compared to Algerian writers. The use of this type of hedge by NE indicates that NE writers need to communicate with their readers by presenting their evaluation of the present arguments. Adjectives and adverbs were mostly used in move 2, where writers needed to evaluate either the findings or the methodology followed by previous related research. Preferably, patterns such as *epistemic adjective + noun phrase*, *anticipatory-it + to be + epistemic adjective clause*, and *anticipatory-it + to be + adverb* were more frequently used by NE writers. Instances of the uses of these patterns are presented below.

Example 39: *In the case of those reading studies which only used meaning-based tests, **it is likely that** participants did gain* (NSRAI2)

Example 40: *L2 listening has received **relatively** little research attention (refs)* (NSRAI3)

Example 41: *and yet, **it is still unclear** how and why learning transfer occurs or not(e.g., see refs).* (NSRAI4)

In the Algerian sub-corpus, the use of adjectives and adverbs such as *probable, possible, generally, mostly* and few others, is rather limited.

Example 42: *Classroom observation allowed us to say that a **probable** cause of some of the EFL students' problems in using the cohesive devices appropriately is in providing them*

with lists of connectors, **generally** known as charts of connecting words or simply transitional signals.(ARAI11)

Other types of hedges, nouns and Linguistic expression for marking qualification, were rarely used in both sub-corpus. One possible reason might be attributed to the nature of the introduction as a sub-genre.

6.1.3.3. Boosters

Unlike hedges, boosters were used slightly in a similar way by Algerian and NE writers. Table 6.11 shows that Algerian and NE writers of RA introductions used 8.53 and 6.68, respectively in every 1000 words. This similarity is reflected in the log-Likelihood calculation which equals 1.6. A non-significant difference between both groups of writers in terms of the uses of boosters is indicated also by the *p* value which is more than .05 ($p > .05$)

Table 6.14: Boosters in RA Introductions Written by Algerian and Native English Writers

	ARAI (5976 words)		NSRAI (8530 words)		Log-Likelihood	
	Interactional	Raw	Nf	Raw	Nf	<i>p</i> -value
Boosters		51	8,53	57	6,68	1,6 $p > .05$

The analysis of boosters in the RA introduction sections authored by Algerian and English native writers revealed that the level of being certain was found to occur more frequently in the Algerian sub-corpus. Although both groups of writers employed boosters to convince their readers about the extent to which they were certain about the proposition being presented, boosters were more frequently used by Algerian writers. The use of boosters was mostly about what their research might contribute to their fields. In other words, both groups of writers wanted to highlight the importance of why the research had been carried out and why the readers should continue reading. In comparison to Algerian writers, NE writers used slightly fewer boosters in their introduction sections. The Examples presented below clearly demonstrate the writers' full commitment to their readers and how they let them discover the contribution of their research.

Like hedges, boosters are also sub-categorized into five categories, namely epistemic modal verbs, lexical verbs, adjectives and adverbs, nouns, and emphatic expressions.

However, in the current study, only lexical verbs, adjectives, adverbs, and modal verbs were found to be used by Algerian and NE writers. In terms of similarities, both groups of writers used lexical verbs more frequently than adjectives and adverbs. Within the lexical verbs, verbs such as ‘demonstrate’, ‘show’, and ‘find’ were the most linguistic elements used to express certainty. Within the second category, adverbs such as ‘clearly’, ‘obviously’, ‘indeed’, and ‘really’ were the most boosting adverbs in both sub-corpus. ‘Should’ and ‘must’ were also used by both groups of writers, but more frequently in Algerian RA introductions.

With regard to differences in the use of boosters, Algerian writers appeared to prefer the use of verbs such as ‘believe’, ‘think’, and ‘prove’, and more adjectives such as ‘certain’ and ‘clear’. In contrast, verbs such as ‘demonstrate’, ‘show’, ‘find’, and adverbs such as ‘clearly’, ‘certainly’, and ‘indeed’ were the most frequently observed ones in English native writers’ sub-corpus. Another difference between Algerian and English writers in terms of the use of boosters has to do with the discourse functions of boosters in the RA introductions. Although both groups of writers used boosters to increase authorial commitment to knowledge claims, some differences in terms of their functions were noticed. First, English-native writers used verbs such as ‘show’ and ‘find’ to focus on reporting the expected findings of their studies and other findings achieved by other research. Including previous studies in the discourse as strong evidence motivated English native writers to be certain about their claims, and this was reflected in their preferences in using boosters such as ‘show’ and ‘find’. Besides, the use of these verbs in these cases indicates that EN writers want to convince their potential readers that what is presented should be regarded as facts and that other interpretations of these arguments (research findings) are not accepted. Examples of the use of these verbs are presented below

Example 43: *This is seen in the findings of Ref (2004) and Ref and Ref (2007), in the field of developmental child language acquisition, which **show** that in expository texts one can **find** a higher number of relative clauses and passive constructions (NSRAI12)*

Example 44: *By exploring differences or similarities **found** between native and non-native speakers of the language of instruction this investigation **will** contribute to more targeted pedagogical approaches to the teaching of subject terminology than has been possible so far (NSRAI6)*

With regard to boosting adjective and adverbs category, adverbs such as ‘really’, ‘clearly’ and ‘certainly’ were preferred by NE writers to enhance the degree of acceptance of their research findings. Instances of the uses of these adverbs are presented below

Example 45: *The current study uses more sensitive vocabulary tests in order to **find** how much learning **really** occurs from listening, and how this compares to reading. It **appears** to be the first study to employ a vocabulary dimensions framework to investigate incidental vocabulary acquisition from L2 listening.* (NSRAI2)

Example 46: *To date, DA research has not employed a theoretically-based linguistic framework to analyse DA data despite previous studies **clearly** focusing on language and communicative aspects such as investigating aspects of listening (e.g., Ref, 2010), speaking (e.g., Ref, 2008)* (NSRAI4)

In this Example (Ex.45), the writer used both the verb ‘find’ and the adverb ‘really’ to convince his audience that listening as a language skill will help learners to acquire more vocabulary. However, when it comes to his study originality (the second sentence in Ex.45) the writer used the hedge ‘appears’ to lessen the force of his argument and to protect himself against possible attacks concerning the originality of his research. This is because claiming that one’s study is the only study that focused on particular topic is based on his opinion.

Concerning modal verbs, both groups made substantial use of modal verbs, although Algerian writers of RA introductions appeared to depend far more heavily on this type of metadiscourse; hence, they were more authoritative in tone. This is reflected in the more frequent use of strong modals such as *must*, *should*, and *will*. In contrast, assertive language was not found in the English native RA introductions. The following Examples illustrate how modals were used in the Algerian sub-corpus.

Example 47: *Therefore, teachers **should** be clear in providing feedback on their learners’ writing where they can focus on the form or/and content to guide them to achieve better writing output.* (ARAI8)

Example 48: *Teachers **must** incorporate in their curriculum activities related to each of these learning styles and consequently give an equal opportunity to their learners to succeed in their classes.* (ARAI5)

In the Examples above, the Algerian writers used the modals *must* and *should* as a strategy to reinforce the argument and talk directly to their potential readers (teachers in these cases) while presenting their studies implications. By doing so, Algerian writers wanted their potential readers to take the expressed message into consideration, imposing on them that their suggestions were urgently needed in a particular context. In other words, the use of modal verbs by Algerian writers of RA introductions implies that no room is left for negotiation and forcefully makes readers accept what the writer has suggested. Although this strategy is useful in academic writing as it helps to convey the author's confidence in the truth of the inferential information and involves the reader in texts, it can be a risky strategy according to a number of researchers' perspectives (Hyland, 2002; Tseng and Liu, 2021; to name a few). For instance, Hyland (2002) has warned that the use of strong modals (particularly *must*) in academic writing is seen generally to carry the strongest sense of strong obligation as they suggest the writer's clear authority; hence, it can be, in most cases, face-threatening. Based on this, authors are asked to moderate the definiteness of their arguments in order to ensure the ratification of their claims.

In contrast to NE writers who used boosters to present the findings of their and others' research, this type of metadiscourse was mostly used to indicate a gap in the real world by Algerian writers. Through using boosters in this way, Algerian writers want to convince the discourse community that a gap (or a problem) does exist in a particular situation and that finding a solution is highly required. Instances of the use of boosters by Algerian writers are presented below.

Example 49: We **think** that exploring the theoretical aspect of the repertoire of the writing strategies would be of great benefit for our work since these strategies help learners to improve their writing. (ARAI4)

Example 50: None of us as teachers can deny **the fact that** sometimes we **find** ourselves in the situation where our students are bored in our classes (Ref & Ref, 2003). They are not motivated, confused and look tired. If so, it is time to **think** about a different teaching style in our classes. (ARAI7).

6.1.3.4. Attitude Markers

Table 6.12 demonstrates the normalized frequencies of attitude markers used by the Algerian and NE writers. 4.35 and 4.10 are the normalized frequencies of attitude markers

used by both groups of writers of RA introductions. The Log-Likelihood calculations of 0.05 indicate that the attitude markers were used similarly in both sub-corpus of Algerian and NE writers at the level of $p > .05$

Table 6.15: Attitude Markers in RA Introductions Written by Algerian and Native English Writers

	ARAI (5976 words)		NSRAI (8530 words)		Log-Likelihood	
	Raw	Nf	Raw	Nf	LL	p -value
Attitude markers	26	4,35	35	4.10	0,05	$p > .05$

Attitude markers are the linguistic choices writers use in order to add their evaluation to propositions in texts and to show the importance of their claims to the audience (Zou and Hyland, 2019). This category of metadiscourse is usually realized through the use of adjectives such as 'important', adverbs such as 'appropriately' and verbs such as 'expected' that reflect the writers' opinions towards a proposition.

In this study, the analysis showed that the adjectives: 'important', 'appropriate', 'essential' and the adverbs 'appropriately', 'surprisingly' and 'importantly' were the most silent and shared attitude markers over the two sub-corpus. However, when the total frequencies of these attitude markers were examined in both sub-corpus, it was found that 'important' appeared more frequently. The analysis revealed that both groups of writers used the structure of attitude adjective + noun in their RA introductions. Nouns such as 'factor', 'differences', 'similarities', 'areas', and 'step' were the most frequently used nouns after the attitude adjective (Ex.51). Although the use of attitude markers was quantitatively similar in both sub-corpus, a careful analysis revealed that the two groups of writers used this type of metadiscourse differently in terms of position and function. Algerian writers were found to use the attitude markers (particularly the attitude adjectives) in the first move, aiming to convince the discourse community members that their topics are worth investigating. In contrast, English native writers used this type of metadiscourse in the first and second move, focusing more on the use of the structure of *the anticipatory it + be + attitude adjective + infinitive* (Ex. 53 and 54).

Example 51: *One of the most **important areas** of difficulty in English language teaching is how to develop the productive skills, namely, speaking and writing.* (ARAI6)

Example 52: *As motivation is one of the most **important factors** driving ...* (NSRAI4)

Example 53: ***It is important to know** what a learner may be able to do in the ...* (NSRAI4)

Example 54: ***It is preferable to focus** at content level issues such as cohesion, organization, and relevance rather than focusing on grammatical and lexical errors* (NSRAI8)

The use of the anticipatory *it + be + attitude adjective + infinitive* by NE writers reflects not only the inclination of this group of writers to show their attitudes towards a proposition, but also as a means for helping and directing readers to understand a proposition in certain way.

6.1.3.5. Engagement Markers

Table 6.13 shows that there is a difference between Algerian and EN writers in terms of the use of engagement markers. However, when the data is normalized, it appears that both groups of writers used this type of metadiscourse in a similar way. In their RA introductions, EN writers employed 16.73 instances in every 1000 words, while the normalized frequency of engagement markers in the Algerian sub-corpus is 16.76 in every 1000 words. The log-likelihood calculation of 0 reveals that there is no statistical significance in the use of attitude markers at the level of $p > .05$.

Table 6.16: *Engagement Markers in RA Introductions Written by Algerian and Native English Writers*

	ARAI (5976 words)		NSRAI (8530 words)		Log-Likelihood	
Interactional	Raw	Nf	Raw	Nf	LL	p-value
Engagement markers	100	16,73	143	16,76	0	$p > .05$

As demonstrated earlier (Table 6.9), engagement markers ranked as the second most preferred interactional metadiscourse in both sub-corpus. The use of these markers reflects the need of both Algerian and NE writers to establish a relationship with their potential readers. Like other metadiscourse categories, engagement markers include several types, namely: directives, reader references, questions, appeals, references to shared knowledge, and personal asides (Hyland, 2005). The first two types of engagement markers were more

frequent in the NE sub-corpus, but questions were more frequent in the Algerian sub-corpus. Appeals or references to shared knowledge and personal asides were found in the English native sub-corpus, while they were totally absent in the Algerian sub-corpus. More elaborations on the uses of the engagement marker types are presented below.

Directive expressions are usually realized by the grammatical form of imperatives (*see, note*) and modal verbs (*must, should*) (Hyland, 2003). These linguistic choices were frequently used by NE writers to encourage readers to take action or to underline what should be taken into consideration. One of the most common imperatives found in NE sub-corpus was the verb *see*

Example 55: *In a recent series of analyses of writing development in the Michigan State University (MSU) corpus of descriptive essays (for a description of the corpus see Ref & Ref, 2014). (NSRAI12).*

Example 56: *but only a few studies have considered lexical development in conjunction with syntactic changes in students' written production (for exceptions see Ref & Ref). (NSRAI14)*

Reader reference markers are the linguistic devices that are used to engage readers in the study. This type of engagement markers is mostly realized through the inclusive first-person pronouns (*we, us*), the inclusive determiner *our*, the second person pronoun *you*, the determiner *your*, and the noun *reader*.

Example 57: *For a physical activity of **your** choice, **explain** how to reduce a variety of risks associated with that activity in order to maintain physical health". (NSRAI1)*

Example 58: *Many of the research articles that **we** publish have strong connections to teaching and learning in academic contexts. (NSRAI10)*

Not all instances of the determiner 'our' and inclusive pronouns 'we' and 'us' identified in the analysed corpus were used as engagement markers. Most of these linguistic elements were used as self-mentions. In other words, through the use of these linguistic items, the writers were seeking self-representation rather than encouraging readers to take part in the study. Examples 58 and 59 highlight the difference between engagement markers and self-mentions. In the Example 59, we can observe that the writer using the determiner 'our' and the personal pronoun 'we' to represent himself in the study. In the first two cases of 'we',

(**we** collected the questionnaire and **we** applied multiple analyses), the author represented himself as the researcher, while in the last case (**we** will first review the most important), the author appeared as the writer of the paper. However, in Examples 60 and 61, the reference to readers was apparent through the use of ‘our’ (Ex. 60) and ‘we’ (Ex. 61).

Example 59: *In **our** research **we** collected questionnaire data from 740 secondary school students... **We** applied multiple analyses of variance (MANOVA) to explore how language learning motivation... In this paper, we will first review the most important theoretical constructs investigated in **our** study...*(NSRAI14)

Example 60: ***Our** knowledge of measuring L2 ... period of time is limited* (NSRAI5)

Example 61: *Does this mean that **we** should adapt our teaching to fit our students’ learning styles?* (ARAI7)

References to shared knowledge, which are used to refer to readers as participants who have similar or familiar shared background knowledge established within the aim and scope of the study, were mostly found in the English native sub-corpus, while they were totally absent in the Algerian sub-corpus. In most cases, references to shared knowledge were realized by the use of the present (simple or perfect) passive voice. Examples of these linguistic choices are presented below.

Example 62: *The value of the transfer of learning ...**is widely recognized*** (NSRAI4)

Example 63: *Mastering technical vocabulary **has been widely recognized** as one of the most strategies for enhancing reading comprehension* (NSRAI15)

Example 64: ***There is general agreement** that the teaching of pronunciation should be part of language teaching even though it is possible for . . . pronunciation instruction.* (NSRAI15)

Personal asides are the writers’ personal comments on their claims. They usually come as a phrase or a short sentence set within brackets. This type of markers was totally absent in the Algerian RA introductions. Similarly, in the sub-corpus of English native writers, only two instances of this type of engagement markers were found. Examples of this type of metadiscourse are presented below:

Example 65: *Misleading (and often inaccurately worded) promises are also made about the L2 contact that learners will experience on SA.* (NSRAI8)

Example 66: *We included L1 and L2 groups that were similar in age, education level, and major of study so that we could make direct comparisons on their unfolding choices (there is no existing data that we know of on how L1 writers manipulate texture and cohesion as they write).* (NSRAI7)

6.1.3.6. Self-mentions

With respect to self-representation in the text, the employment of self-mentioned markers (including first-person pronouns *I* and *we*, possessive adjectives *my* and *our*, and self-reference words such as *the researcher*) was interestingly different across the two sub-corpus. It is surprising that the desire to self-display using self-mention markers seems to be greater in the Algerian writers than in the NE writers. Based on the Table below (Table 6.14), self-mentions were most frequent in RA introductions written by Algerian writers. The latter used 7.53 items per 1000 words, whereas NE authors only used 4.92 items per 1000 words. The log-likelihood calculation of 3.91 indicates that Algerian RA writers used self-mentions more frequently than NE writers at the level of $p < .01$. This finding is not consistent with previous comparative studies on the use of metadiscourse in academic writing (Al Harbi, 2021; Gao, 2018; Kim and Lim, 2013; Wu and Zhu, 2015; to name a few), which found that there was no significant difference between native and non-native English writers in terms of the use of self-mentions.

Table 6.17: *Self-Mentions in RA Introductions Written by Algerian and Native English Writers*

	ARAI (5976 words)		NSRAI (8530 words)		Log-Likelihood	
	Raw	Nf	Raw	Nf	LL	<i>p</i> -value
self-mentions	45	7,53	42	4,92	3,91	$p < .01$

Although self –mentions were used differently in the sub-corpus of Algerian and NE writers, the types and the functions of this category were employed slightly in a similar way. Table 6.14.1 shows that the markers of ‘we’ and ‘our’ were the most commonly used self-mentions by both groups of writers.

Table 6.18: *Frequencies of self-mention markers in RA Introductions Written by Algerian and Native English Writers.*

Self-Mentions	ARAI			NSRAI		
	No	%	Nf	No	%	Nf
We	17	37,78	2,84	19	45,24	2,23
I	4	8,89	0,67	6	14,29	0,7
Our	14	31,11	2,34	15	35,71	1,76
Us	4	8,89	0,67	1	2,38	0,12
The writer	3	6,67	0,5	1	2,38	0,12
The researcher	3	6,67	0,5	0	-	-
Total	45	100	7,53	42	100	4,92

Despite the fact that most of the RAs were single-authored, Algerian and English native writers tended to utilize the plural first-person pronoun 'we' and the possessive adjective 'our' or, more frequently, inanimate forms, which suggest lower degrees of authorial intervention and personal voice than singular first-person pronouns (Hyland; 2005; Li and Xu, 2020). As the Table above shows, first singular pronouns (such as *I*) and (such as *the researcher*) were less commonly employed in both sub-corpus. This could be explained by the necessity for RA authors to be invisible and downplay their positions, as well as their ownership of their arguments.

Regarding the function of self-mentions, several metadiscourse studies identified several self-mention functions (five functions by Hyland, 2002; twelve functions by Kuo, 1999; eight functions by Mur-Denas, 2007; six functions by Tang and John, 1999). In this study, we follow Hyland (2002), who listed five exclusive functions of self-mentions. These include *explaining a procedure*, *stating results or claims*, *elaborating an argument*, *stating a goal/purpose*, and *expressing self-benefit*. In this study, we separate stating results from stating claims. This is because, as we believe, stating the results is usually based on some evidence, while claims are based on the writers' opinions and perspectives. Careful analysis revealed that all these functions were found except for *expressing self-benefit*, which was totally absent and stating results, which was rarely used by both groups of writers in their RA introductions. Besides, both groups of writers were found to share the use of self-mentions to fulfill some of these functions. The only difference is that stating claims using self-mention markers were found to be more prevalent in the English native sub-corpus and mostly absent in the Algerian sub-corpus. Examples of how self-mentions were used in the current study corpus are presented below:

– **Stating goals/aims of the study**

Example 67: *In this paper, **we** aim to re-emphasize the significance of higher education learners' self-directed learning through encouraging them to . . .* ARAI14)

Example 68: *They also distinguish between 'action discourse' which relates to the action in PE and 'reflection discourse' as talk about social practice. In this paper, **we** focus on the latter, reflective discourse.* (NSRAI1)

Example 69: **Our** research specifically focuses on linguistic features that were shown to be typical of academic writing among L1 writers and that exemplify advanced and experienced writers' texts (refs). In this respect, **we** have taken a novel approach to . . . in line with Ref, Ref, and Ref (2011).(NSRAI12)

In the above Examples, the writers demonstrated the goals of their research using self-mentions markers (*we* and *our*) after reviewing previous studies and stressing the gap. In the NE sub-corpus, the use of self-mention markers is usually preceded by a phrase (such as *in this paper, in this research*), then followed by a first-person pronoun and a verb indicating the purpose of the study (such as *aim, focus, investigate*). Concerning the rhetorical moves, this structure was mainly found in move 3 (establishing a niche), where writers felt the need to establish the niche after indicating a gap. This structure, however, was rarely used in the Algerian corpus. Instead, Algerian writers preferred to use inanimate subjects (such as "*this paper aims at*" or "*this research focuses on*") to announce the goals of their studies (Ex. 70). In other words, through the use of passive voice or inanimate subject construction, Algerian writers preferred to be invisible when stating the aims of their research. Drawing on this structure (ex. 70 and 71) while stating the goals is, according to Hyland and Zou (2020), the most common way of announcing goals in RAs.

Example 70: **This paper aims at exploring** the students' levels of vocabulary comprehension and use by means of the administration of two . . . and proficiency vocabulary tests.(ARAI9)

Example 71: The focus **has mostly been** on the use of FSs from the perspective of learners. Therefore, **the present study aims** to bridge this gap by investigating Algerian EFL teachers' opinions and beliefs on the place ... regarding their inclusion in writing classrooms. (ARAI6)

– *Explaining a procedure*

Using a self-mention marker to explain a procedure was shared by both groups of writers. Specifically, the Algerian and NE writers used self-mention markers to provide more information about the tools and instruments used in their research. However, the Algerian writers showed a high tendency to use the nouns ‘the researcher’ and ‘the writer’ instead of personal pronouns, as is the case in NE sub-corpus. Examples of this function are presented below.

Example 72: ***The researcher** used the focus group discussion to explore this issue; it was found that students really experience many difficulties in writing.*(ARAI7)

Example 73: *To find out more about the effect of specific pronunciation teaching methods, **we** investigated the effects of two feedback conditions on students’ L2 pronunciation. In **our** study, students received implicit feedback in the form of repetitions and recasts.* (NSRAI15)

In the Examples above, the writers chose to explain the procedure of their studies not only to demonstrate how their studies were conducted but also to strengthen their studies and findings. Besides, explaining procedures in the introduction sections may have a positive association with the writers' academic identity, because the more understandable the study is for the readers, the more forcefully the writers' academic identity is presented to their readers.

– *Stating and elaborating arguments*

Stating arguments and claims using self-mention markers were also found in both sub-corpus. In the Examples below, both groups of writers employed self-mentions followed by hedging verbs, implying that what is stated is not the truth but the writer's insights. This strategy helps writers to tone down the strength of their arguments and opens access to other interpretations, encouraging potential readers to take part in the study.

Example 74: *There are just a few studies that examine this in first language writing (Refs) and no studies—as far as **we** know—on logogenesis in second language writing.* (NSRAI7)

Example 75: **We argue** that the complexity of learners' output **should** be considered with reference to the mode, genre, and communicative demands of the particular task to be performed. (NSRAI7)

Example 76: **We believe** that the reason behind such a handicap **may** lie in their ignorance of the use of effective writing strategies. (ARAI4)

Example 77: **We think** that exploring the theoretical aspect of the repertoire of the writing strategies **would** be of great benefit for **our** work since these . . . improve their writing. (ARAI5)

However, to state arguments and claims using *self-mentions+lexical verbs* appeared to be used more by NE writers when compared with Algerian writers. Most of these lexical verbs function as hedging devices. In academic writing, using hedges with self-mentions in stating arguments is a good discursive strategy (Hyland, 2002; Hyland and Jiang, 2018; Wang and Zeng, 2021). This is because, according to the researchers, hedges enable writers to express their argument as 'provisional and subject to current objections and future revisions' (Hyland and Jiang, 2018; p. 26). In contrast, self-mentions in the Algerian RA introductions are usually followed by boosters (such as *we believe, we think*), which make the writers appear more confident and authoritative in their claims.

In one of his earlier studies, Hyland (2000) characterized academic writers who use first-person pronouns and boosters (such as *I think or I believe*) as demonstrating "an overt acceptance of personal responsibility for a judgment" and showing "a confident and expert mind in full control of the material, making judgments and passing comment on issues of concern to the discipline" (p. 123). However, it remains arguable whether the Algerian writers of RA who employed the same expressions did so with the same confidence and proficiency and with full control over the subject matter. Based on this, we can argue that stating arguments using self-mentions and boosters might be a risky strategy. This is because using such expressions may close down and provide no space for other interpretations, thereby discouraging readers from taking part in the text.

–*Stating the results*

With regard to *stating the results* function, the findings revealed that self-mention markers were rarely used by both groups of writers to present the findings of their studies.

The only exception is one introduction (NSRAI1), written by an NE writer in which the writers used the determiner *our* followed by the findings as demonstrated in the Example below. Similar to the NE writers, the Algerian writers of RA did not prefer to use self-mentions to present the results of their studies.

Example 78: ***Our** findings in the large project and other recent work by . . . demonstrate that the explicit teaching of language for curriculum learning is also valuable . . . subjects (NSRAI1)*

6.2. Comparison of Metadiscourse Use in the Algerian and NE Research Article Introductions

In response to the fifth question (question 5) of the second part of this study, "To what extent does the use of metadiscourse devices in RA introductions written by NE writers differ from those employed by Algerian writers?", this section focuses on the extent to which the Algerian and NE writers employed metadiscourse in their RA introductions. The findings of the previous studies on metadiscourse devices are included in this section. This is because, in our opinion, the results of prior studies enable us to clearly interpret the findings of this study, as they give us useful insights into the use of metadiscourse devices in academic writings by authors with various linguistic and cultural backgrounds. On the whole, this study found significantly more occurrences of metadiscourse in RA introductions authored by NE writers than those written by Algerian writers and more interactive than interactional metadiscourse in both sub-corpus. Generally, this finding is in line with most of the previous metadiscourse studies (Kim and Lim, 2013, Mur-Duenas, 2011), which indicated that non-native English writers often use less metadiscourse in their academic genres when compared to NE writers.

The best explanation, in this case, appears to be Mur-Duenas' (2011) assertion that there is a connection between the widespread use of metadiscourse and publishing in international journals. Mur-Duenas (2011) asserted in his study that the widespread use of metadiscourse in NE sub-corpus is attributable to the fact that authors of worldwide RAs in English are under great pressure as a result of increased demand to publish their findings in international journals. Therefore, they must explicitly explain their ideas, which call for more metadiscourse elements. The Algerian writers might not have encountered the same pressure

to publish since their RAs were taken from local journals. Hence, they relied on a small number of metadiscourse devices.

Within metadiscourse categories, the analysis revealed also that NE writers were found to rely more on the interactive metadiscourse when compared to the Algerian writers use. That is to say, NE writers showed the inclination to focus more on the organisation of the texts, trying to provide coherent discourses. This style of writing is typical of cultures that hold writers responsible (British writers in this study), who are responsible of making texts easier to understand. In reader- responsible societies (Algerian authors in this study), however, writers favor implicitness leaving the reader to be responsible in making the text understandable (Hind, 1987; Hyland, 2005; Hu and Cao, 2014). See chapter two, section 2.6.3 for further clarification on this subject. Based on this, it can be argued that the less use of interactive metadiscourse in the Algerian sub-corpus might attribute to cultural factors.

The analysis also revealed that when compared to Algerian writers, NE writers relied more on interactive metadiscourse. That is to say, NE writers showed an inclination to focus more on the organization of the texts, trying to provide coherent discourses. This style of writing is typical of cultures that hold writers responsible (British writers in this study), who are responsible for making texts easier to understand. In reader-responsible societies (the Algerian authors in this study), however, writers favor implicitness, leaving the reader to be responsible for making the text understandable (Hind, 1987; Hyland, 2005; Hu and Cao, 2014). See chapter two, section 2.6.3, for further clarification on this subject. Based on this, it can be argued that the lesser use of interactive metadiscourse in the Algerian sub-corpus might be attributed to cultural factors.

6.2.1. Comparison of the Use of the Sub-Categories of Interactive Metadiscourse in both Sub-Corpus

Similarities in the use of metadiscourse devices between the Algerian and NE writers were highlighted in terms of the use of particular metadiscourse categories, including transitions, frame markers, endophoric markers, code glosses, and attitude markers. The resemblance in the use of these devices, however, remains at the frequency level, as the qualitative analysis revealed some differences in the employment of these categories. For instance, transitions were found to be employed similarly by both groups of writers. However, it was found that NE writers preferred the use of addition and comparison and contrast devices, while Algerian writers showed the inclination to use more inferential devices. What

follows is a brief discussion of the similarities and differences in the use of metadiscourse categories in RA introductions authored by Algerian and NE writers.

Transitions are the interactive items employed to deal with text-internal realities through which the writers add, contrast, and conclude. They are typically conjunctions and adverbial phrases of addition, comparison, and consequence (Hyland, 2005). In this study, the quantitative analysis revealed that transition markers were the second most commonly used metadiscourse category in both sub-corpus. This finding contradicts the majority of the previous studies (Akbas, 2012; Alharbi, 2020; Hyland, 2015; Hyland and Tse, 2004; Jalilifar, 2012; Qin and Uccelli, 2018), in which transition markers were consistently the first and most used category in academic writings. However, it should be noted that our decision to omit the transition marker 'and' from the list of interactive metadiscourse in this study is the reason which made the transition markers to occupy the second position. This is because the transitional marker 'and' is one of the most distinguishing features of academic writing; hence, it is widely employed in academic research. Consequently, it cannot serve a pragmatic purpose. For a more detailed explanation of this note, see chapter four, section 4.5.2). Qualitatively speaking, NE writers employed more additive, contrast, and comparison devices than Algerian writers did, but the use of the last category, inferential metadiscourse, was similar in both sub-corpus.

An essential interactive metadiscursive strategy used to inform readers about specific discourse actions undertaken by the writers is constructing the text through text-internal activities such as stating goals, labeling discourse stages, ordering discourse acts, and shifting topics. This can be done only by making use of a significant number of various frame marker subcategories. For a variety of reasons, frame markers are crucial in academic writing. First, it is important to keep the readers informed about the purposes, goals, and objectives of the study so as to help them understand what the writers are seeking to achieve. Second, naming discourse stages helps in drawing readers into the conversation with their attentive presence. Third, the discourse order improves the coherence and clarity of the writers' discourse activities. Last but not least, providing topic change signals helps readers prepare to continue reading along with the writers at the expected rate of information flow. The frequency analysis of all these four categories of frame markers indicated that Algerian and NE writers mostly made use of items to state the aim of the study and, to a certain extent, to sequence arguments and ideas rather than making topic shifts and or labeling text stages. In other

words, while announcing goals and sequencers were heavily used, topicalizers and discourse labels were rarely used in both sub-corpus.

This finding is in line with previous metadiscourse studies (Hyland and Zou, 2020; Rubio, 2011; among others). Hyland and Zou (2020), for instance, found that topicalizers account for the lowest proportion of frame markers in RAs and blogs. One explanation for this, according to them, is that this type of frame markers interferes with the discourse flow, leading to a digression that may be difficult to follow. However, in RA introductions, one possible reason for the brevity of both topicalizers and discourse labels, from our perspective, might be the shorter length of the RA introduction. In most cases, writers usually introduce their RAs in no more than one paragraph, which affects the use of topic shift and discourse labels. Because of this, the authors of RA introductions did not feel the need to indicate the change in topic or the level of text development.

A similar observation can also be made regarding the use of endophoric markers. In addition to being employed similarly in both sub-corpus, this category was also used infrequently. One likely reason is that RA introductions are frequently brief; authors are required to produce an introduction of 400–600 words. Because of this, the writers are not compelled to use this metadiscourse category. This type of metadiscourse may be extremely important when used in larger academic writings, such as the introduction of PhD theses and MDs (see section 6.3). This type of metadiscourse may be extremely important when used in larger academic writings, such as the introduction of PhD theses and MDs (see section 6.3). This is because, from our perspective, these language choices, particularly in lengthy writings, help readers make connections between ideas located in various contexts, so they may somewhat understand the writer's message. Without this type of metadiscourse, readers would otherwise become lost in the text. With regard to endophoric marker sub-categories, the non-linear references were absent in both sub-corpus. It is not necessary to use this sub-category because the RA introductions frequently do not include tables, figures, and excerpts.

Code glosses were found to occupy the third position in the whole corpus of RAs. They followed transition markers and evidentials. This finding is consistent with the majority of previous studies (Hyland, 2004, 2015). For example, in Hyland's (2004) study, code glosses were found to be the third most frequent interactive and the fifth most frequent metadiscourse in RAs, while in Hyland's (2015) study, code glosses were found to be the third most frequent interactive metadiscourse with a frequency of 27.4 and 31.7 items per 10,000 in PhD theses

and master's dissertations, respectively. However, the finding of this study contradicts other previous metadiscourse studies (Ho and LI, 2018; Qin and Ucelli, 2019), which indicated that code glosses were the least frequently employed metadiscourse devices. One possible explanation for this difference might be the influence of the genre itself, as the data in the last group of studies were argumentative essays written by university students. Indeed, previous studies (Bahtia, 2006; Kawase, 2015; Swales, 2004) have indicated that the nature of genre impacts the way arguments are constructed and structured in texts. In comparing the use of these linguistic items between both sub-corpus, it was found that both sets of writers were aware of the use of these markers to help the readers get their messages.

This is reflected by the fact that the use of code glosses was to some extent similar in both sub-corpus. Although the frequency distribution of code glosses was similar, the Algerian and NE writers had different preferences for the types of code glosses. Although the frequency distribution of code glosses was similar, the Algerian and NE writers had different preferences for the types of code glosses. Within the code glosses category, the analysis revealed that NE writers of RA introductions preferred the use of exemplifiers more than reformulators. This is in line with Hyland (2007), who clarified that soft fields, such as applied linguistics, employ more examples to reconstruct contexts for a broader audience with less of a shared background. In contrast, Algerian writers of RA introductions preferred the use of more reformulators and fewer exemplifiers. These differences in terms of the writers' preferences might be attributable to the writing style of each group of writers. Culturally speaking, the Anglophone world is known to belong to an individualistic culture, while the Arab world belongs to a collectivist world (Hofstede, 2001). Previous studies have demonstrated that this variation influences writing as the Anglophones' writing style is often characterized as being direct and explicit, while that of Arab learners of English is characterized by certain stylistic features including repetition, indirectness, elaborateness, and effectiveness (Abu Rass, 1994; Al-khatib, 2001; Feghali 1997). Another possible reason might be that Algerian writers of RA introductions did not pay more attention to their potential readers as their RAs were submitted to the Algerian local journals. The impact of culture together with attention to the audience might be the reasons that made NE writers accompany their arguments directly with examples, whereas Algerian writers preferred to repeat their propositions using different words and structures.

6.2.2. Comparison of the Use of Sub-Categories of Interactional Metadiscourse in both Sub-Corpus

With regard to the frequency distribution of attitude markers, the analysis revealed that although the descriptive data showed that Algerian writers of RAs employed attitude markers more frequently on average, there were no statistically significant variations in the frequency distribution of attitude markers across both sub-corpus. Regarding the attitude marker categories, it was revealed that this type of metadiscourse was best represented by adjectives and adverbs. The other sub-categories, deontic modals, and expressions conveying stance, were mostly absent. It was also found that adjectives such as *significant*, *important*, *appropriate*, *preferred*, and *expected* were the most preferred and shared attitude markers across the two sub-corpus. Even though there were shared attitude markers across both sub-corpus, the adjective *important* was the most prominent attitude marker employed by both groups of writers. This finding is congruent with most previous metadiscourse studies (Hyland, 2005; Wu and Paltridge, 2021; Swales and Burke, 2001; Yang, 2016). The functional analysis revealed; however, some differences regarding the function and location of this metadiscourse category. While NE writers employed these attitude markers to add their evaluation and signal their attitude towards the previous studies in move 2 to indicate a gap, Algerian writers employed attitude markers mainly in move 1 to establish the niche.

Despite the observed similarity between the two sub-corpus, four categories of metadiscourse were individual attributions to one but not the other. The quantitative and qualitative analyses revealed clear cross-cultural differences in the employment of certain metadiscoursal resources between both groups of writers. There were significant differences in the incidence of hedges, boosters, evidentials, and self-mentions. To make things more clear, while NE writers showed the inclination to use more evidentials and hedges, Algerian writers focused more on the use of endophoric markers, boosters, and self-mentions. The differences between the two groups of writers were highlighted not only in terms of metadiscourse types but also in terms of the specific sub-types of metadiscourse. What follows is a summary of the most common differences between Algerian and EN writers in terms of the use of types and sub-types of metadiscourse in their RA introductions.

To start with, the more prevalent occurrence of hedges in both sub-corpus is within the researcher's expectation. This is because, in academic writing, especially in applied

linguistics, writers need to demonstrate that their arguments are based on their judgments rather than on specific facts or knowledge (Hyland, 2005).

This finding confirms previous studies (Alharbi, 2021; Dontcheva-Navratilova, 2016; Hyland, 2005, Mu, Zhang, Ehrich, and Hong, 2015) which indicated that hedges are the most frequent interactional metadiscourse in academic writing. According to Hyland (2005), ‘the soft-knowledge fields are typically more interpretive and less abstract than the hard sciences and their forms of arguments rely more on a dialogic engagement and more explicit recognition of alternative voices’ (p. 145). In other words, the use of hedges in academic writing allows for more alternative voices and opinions; as a result, writers can withhold a full commitment to a proposition and prevent unanticipated counterarguments. However, the frequency of hedges was found to be high in RAs authored by NE writers when compared to those written by Algerian writers. This finding is generally in consonance with the results of previous metadiscourse studies which revealed that non-native writers use fewer hedges than NE do (Hinkel, 2003; Hu and Cao, 2011; Hyland, 1995; MacIntyre, 2017; Milton and Hyland, 1996; Li, 2016; Mur-Duen~as, 2013). These studies reported also that non-native writers tend to be more assertive and strong in their tone. In addition, the overuse of booster and the inclination to use fewer hedges in non-native writing, according to these studies, is attributed to a number of factors including the L1 transfer and the ways arguments are constructed. However, the lack of tentative language in the Algerian RA introductions might be explained by the fact that Algerian writers did not receive sufficient instructions on the pragmatic functions of hedges and boosters in academic writing. In contrast, NE writers prefer tentative argumentation reflected in the use of more hedges. The substantial use of hedges by NE writers may stem from the requirement to acknowledge a wide range of different voices and perspectives within the globally interconnected academic discourse community and to contextualize the writers’ position. Within the hedging category, it was revealed that NE writers preferred the use of epistemic modal verbs, and adjectives and adverbs whereas Algerian writers preferred the use of lexical verbs. This does not mean that Algerian writers did not use the first two types but they were used less in their RA introductions when compared to NE writers.

Evidentials were found to account for the highest proportion of metadiscourse in the whole corpus of RA introductions; the finding confirms most of the previous metadiscourse studies (Hyland and Jiang, 2018; Kim and Lim, 2013). In their diachronic study on metadiscourse, Hyland and Jiang (2018), for instance, noticed that there was an increasing use

of evidentials in academic writing in the last 50 years. This, however, was much more evident in the NE writers' sub-corpus when compared to the Algerian sub-corpus. To elaborate more, the arguments in the NE writers' texts were found to be supported by evidence (citations) and more grounded in the literature, while the Algerian writers' texts appeared as opinion-based writing. Statistical analysis revealed a huge difference between both groups of writers in the use of evidentials. While the Algerian writers of RA introductions used only 11.88 items per 1000 words, NE writers employed 28.02 items per 1000 words. A large number of evidentials in RA introductions authored by NE writers may be pertinent to the premise that any potential problem must have already been researched and discussed by the relevant literature, so what needs to be done by the researchers is to determine the extent of research on a particular problem, identify a gap, and determine the plausibility of the research findings. Earlier metadiscourse studies indicated that EFL writers tended to use fewer evidentials in their academic genres when compared to L1 writers (Hu and Wang, 2014; Mur-Duen~as, 2011; among others). These studies and others have attributed the brevity of evidentials in EFL writers' texts to the influence of several factors, including the nature of cited information, discipline, and ethnolinguistic norms of communication.

Many previous metadiscourse studies emphasized the importance of evidentials in academic writing (Ahmed, 1997; Becher, 1989; Hyland, 2004, 2005; Nesi, 2020). These studies indicated that in soft disciplines (such as applied linguistics), evidentials, as a sub-category of metadiscourse, are widely required. According to Hyland (2005), soft concepts are more detached from the immediate preceding developments and are presented as arguments rather than facts. As a result, writers are required to embed their ideas in networks of references to support their credentials, demonstrating the relevance and impact of their work. Furthermore, when citations are used, they give the reader the impression that the writer is well-informed about the literature context related to his domain of study (Ahmed, 1997). Although other researchers (such as Bitchener, 2009) argued that extensive use of evidentials is not the norm in the introduction but the literature review, the use of evidentials in academic work introductions is central as it helps writers to justify the research by demonstrating how it is to extend previous research or fill gaps in previous research (Hyland, 2004; Kawase, 2015; Samraj, 2008; Swales and Feak, 2012). Hyland (2004), for instance, asserted that 'citation is central to the social context of persuasion in academic writing as it helps provide justification for arguments and demonstrates the novelty of the writer's position' (p. 141).

With regard to self-mentions, the results revealed that the frequency use of these markers was high in the Algerian sub-corpus when compared to the NE sub-corpus. In fact, this result is far from our expectation, as we expected authors writing for large international audiences—British writers in this case—to feel compelled to emphasize their contributions and emphasize their arguments. Instead, we noticed self-representation using self-mention markers in the RA introductions of Algerian authors writing for local journals with limited readership. The finding is also not expected because, as we know, the Algerian university students were instructed to avoid being visible in their academic writing as this style may lead to subjectivity. This finding contradicts most previous metadiscourse studies (Akbas, 2014; Mur-Duenas, 2011), in which NE writers were found to be frequently present in their texts. Although the use of self-mention by Algerian and NE writers of RA introductions differed quantitatively, the qualitative analysis, however, revealed that NE writers appeared to have a strong tendency to reveal their voice explicitly and to appear more confident through the use of self-mention markers. Unfortunately, the high frequency of self-mentions in the Algerian sub-corpus did not help them to appear self-confident and to show their authority, as the use of these markers was mainly used to explain the procedures of their studies. Unlike NE writers, Algerian writers expressed their arguments and opinions more implicitly and indirectly, which made them invisible in their RA introductions, though the number of self-mention markers was high. This style of implicitness in academic writing, according to Hyland (2002), is more commonly connected with hard disciplines (such as physics and biology) than with soft disciplines (such as applied linguistics), where the writer's interpretations serve as the basis of the research. The importance of using self-mentions in academic writing has been highlighted by several studies (Hyland; 2002, 2011; Hu and Kao, 2015). Hyland (2011) stated that 'Presenting a discoursal self is central to the writing process, and we cannot avoid projecting an impression of ourselves and how we stand in relation to our arguments, discipline, and readers' (p. 200). In other words, writers need to be present in their texts not only to show their positions towards their propositions but also to help writers understand to whom the arguments belong. In addition to that, 'the presence or absence of explicit author reference is a conscious choice by writers to adopt a particular stance and disciplinary-situated authorial identity' (Hyland, 2011, p. 200).

To go back to the first point, the fact that NE writers use more metadiscourse in their RA than non-native English writers do is not new. Most of the previous cross-cultural studies on metadiscourse (Al Shahrani, 2015; Li and Xu, 2020; Martinez, 2005; Mu, Zhang, Enrich

and Hong, 2015; Ozdemir and Longo, 2014) have noted that a higher incidence of metadiscourse was found in the NE texts compared to non-native English texts. If we agree with these cross-cultural studies that the wide use of metadiscourse in the NE writers' texts is due to their status as native speakers of English, it remains unclear why Algerian writers of RA introductions focus less on the use of evidentials, hedges, and transition markers.

In conclusion, the remarkable competence of NE authors in the use of metadiscourse devices in their RA introductions, particularly the subcategory of interactive metadiscourse, may have some impact on the English publications' special readership and high level of publishing competition. Writers who contribute to these worldwide journals must address an audience that is presumably larger and more diverse and may not have much in common with them in terms of knowledge. Under these circumstances, writers who contribute to these worldwide journals might face fierce competition.

6.3. Metadiscourse Devices in the Algerian PhD Thesis and Master's Dissertation Introductions

6.3.1. Overall Metadiscourse Frequencies

Table 6.19: *Interactional and Interactive Metadiscourse in Introductions of PhD Theses and MDs Written by Algerian Writers*

	Interactional			Interactive		
	Raw	Nf*	%	Raw	Nf	%
AMDI	409	31,73	45,04	499	38,71	54,96
APhDTI	986	31,66	42,03	1360	43,67	57,97
Total	1395	31,68	42,87	1859	42,22	57,13

*Nf = *Normalized frequencies per 1000 words*

Table 6.15 shows the raw frequencies, normalized frequencies, and percentages of the interactional and interactive metadiscourse in the PhD thesis and MD introductions authored by Algerian EFL learners. As demonstrated in Table 6.15, the frequency counts indicate that there are 3254 metadiscourse elements out of a total of 44032 running words in both sub-corpus. This means that in every 13.5 words there is one metadiscourse element. On the whole, interactive metadiscourse (Nf = 42.22, which accounts for 57.13 % of all metadiscourse occurrences) is used more frequently than interactional metadiscourse in both sub-corpus (Nf = 31.68, accounting for 42.87 % of all metadiscourse occurrences). The

number of interactive metadiscourse is around 14.25 percent higher than the number of interactional discourses.

Table 6.20: *Interactional and Interactive Metadiscourse in the Algerian PhD Thesis and Master's Dissertation Introductions*

	APhDT (31142 words)		AMDI (12890 words)		Log-Likelihood	
	Raw	Nf	Raw	Nf	LL	p-value
Interactive MD	1360	43,67	499	38,71	5,4	p < .001
Interactional MD	986	31,66	409	31,73	1,17	p > .05
Total	2346	75,33	908	70,44	2,98	p < .0001

Table 6.16 compares the use of metadiscourse in PhD thesis and MD introductions to show the extent to which the two groups of writers use interactive and interactional metadiscourse in their academic writing introductions. Based on the normalized frequencies set in Table 6.16, it was found that interactive metadiscourse devices were used slightly more frequently in the PhD thesis introductions (Nf = 43.67) than in those written by MD writers (Nf = 38.71). At the level of p.001, the log-likelihood calculation of 5.4 reveals the statistical significance of the higher frequency of interactive metadiscourse in the PhD thesis sub-corpus. With regard to interactional metadiscourse, Table 6.16 reveals that the use of interactional metadiscourse was to some extent similar in the PhD thesis sub-corpus (Nf =33.66) and MD sub-corpus (Nf =31.73). The log-likelihood calculation of 1.17 reveals that there is less statistical significance of interactional metadiscourse in both sub-corpuses at the level of p > .05.

6.3.2. Interactive Metadiscourse

6.3.2.1. Interactive Metadiscourse as a Whole

Table 6.17 shows the extent to which PhD thesis and MD writers use categories of interactive metadiscourse in their academic writing introductions. Based on the normalized frequencies demonstrated in Table 6.17, transitions were the most frequently used interactive metadiscourse in both PhD thesis and MD sub-corpuses.

Table 6.21: *Interactive Metadiscourse Sub-categories in PhD These and MD Written by Algerian Writers*

Interactive	AMDI (12890 words)		APhDTI (31142 words)		Log-Likelihood	
	Raw	Nf	Raw	Nf	LL	p -value
Transitions	200	15,52	438	14,06	1,31	$p > .05$
Code glosses	63	4,89	218	7	6,72	$p < .001$
Frame markers	124	9,62	279	8,96	0,34	$p > .05$
Endophoric markers	66	5,12	210	6,74	3,99	$p < .005$
Evidentials	46	3,57	215	6,9	18,88	$p < .0001$
Total	499		1360			

The second most used interactive category is frame markers in the corpus of PhD theses and MDs. The dominance of these two categories can be interpreted by the fact that PhD theses and MDs are longer in terms of their length. In this case, more linguistic devices that assist in logically connecting ideas and clearly presenting their arguments are needed. Similar to PhD thesis writers, MD writers used code glosses and endophoric markers to add more elaboration to their texts and support their arguments using a good number of references to previous studies. Evidentials were also used by both groups of writers; however, they were used sparingly in the MD introductions.

6.3.2.2. Transitions

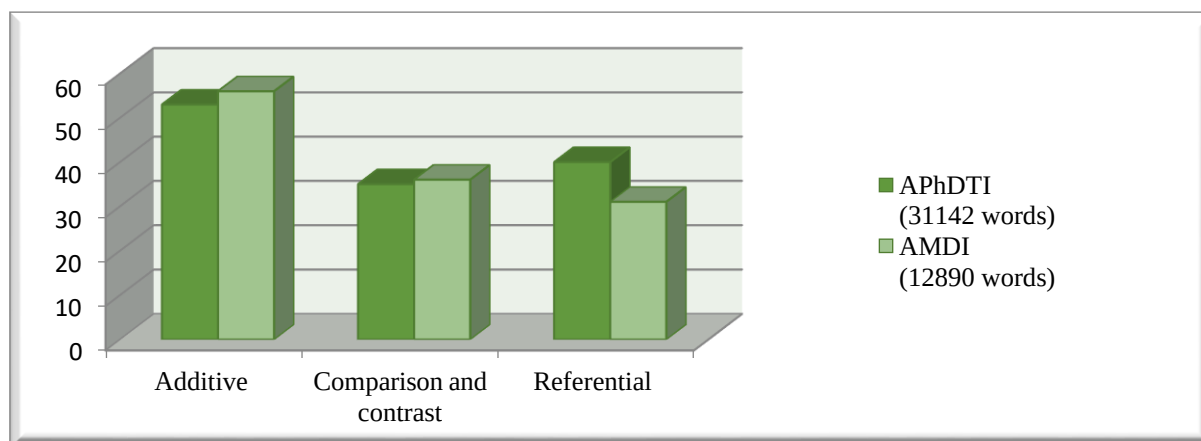
In comparing the use of transitions in introductions of PhD theses and MDs written by Algerian writers, Table 6.18 shows that in the two corpora, though there are different lexical categories that manifest transitional markers, the manifestations of this type of metadiscourse in the introduction sections are quite equal with the averages of 14.06 and 15.52, respectively. The log-likelihood calculations of 1.31 indicates no significant difference between PhD thesis and MD writers at the level of $p > .05$

Table 6.22: *Transition Markers in Introductions of PhD Theses and Master's Dissertations Written by Algerian Writers*

Interactive	AMDI (12890 words)		APhDTI (31142 words)		Log-Likelihood	
	Raw	Nf	Raw	Nf	LL	p -value
Transitions	200	15,52	438	14,06	1,31	$p > .05$

Transition markers are very important in academic writings as they provide writers with ample choices to join arguments together, making the whole discourse appear as one single unit (Hyland, 2005). In the current study, transition markers were slightly used similarly by both groups of writers. However, when it comes to transition types and individual transition markers, the analysis revealed that there were some variations between the two groups of writers. First, MD writers appeared to use more additive and comparison and contrast transition markers (56 and 39 instances per 10,000, respectively) than PhD thesis writers did (53 and 35 instances per 10,000). On the other hand, PhD thesis writers showed an inclination to use more inferential transitions (40 instances per 10,000) than MD writers did (31 instances per 10,000). The analysis showed also that the additive transitions (such as furthermore, moreover, also, besides, an addition), comparison and contrast transitions (such as rather, while, however, although, but), and inferential transitions (such as accordingly, thus; hence, therefore, as a result) seemed to enjoy the highest frequency of use in the two sub-corpus. One difference between the PhD thesis and MD introductions is that PhD thesis writers showed the inclination to use transitions like phrases (clusters), such as, ‘on the other hand’, ‘as a consequence’, ‘as a result’, and ‘as a matter of fact’.

Figure 6.2. *Average of Transition Marker Types in the Algerian PhD Thesis and Master's Dissertation Introductions.*



— **Additive**

Additive transitions were used in both sub-corpus to mark the relationship of addition between two discourse units. This type of transition was found in the three rhetorical moves that constitute the introduction section of the academic writing. In the first move, for instance, writers join together arguments using additive transitions to show that their topic is worth

investigating. In the second move, both groups of writers used additive transitions to present strong arguments for the need to fill the gap (a problem in the real world). In the last move (move3), additive transitions were often used to present the structure of the research paper. Examples of the use of additive transition in both sub-corpus are demonstrated below.

Example 79: *The post intervention phase is characterized by the use of two research instruments: a posttest and a questionnaire... **in addition** to their attitudes and views about the intervention. Accordingly, the researcher opts for a mixed-method approach for data analysis including.... **Additionally**, a full exploration of the research issues necessitates the exploration of theoretical bases underpinning this research. **Accordingly**, the work is divided into two main phases a theoretical one and a practical one.* (APhDTI1)

Example 80: *The second chapter tackles all the practical research issues and methodology. The first part is designed to the description of research design and procedures. **Besides**, this chapter is **also** devoted to present the research results and it **also** tends to ... **In addition**, it introduces some suggestions and ...*(AMD15)

– **Comparison and contrast**

Transition markers for comparison and contrast reflect the contrastive meaning of propositions in distinct segments. The majority of the comparison and contrast transitions in this study were used in move two. In this move, writers convey the norm in the first discourse unit and then present what is happening in the real world in the second discourse unit, which contradicts what is happening in the first discourse unit. This strategy, which is more prevalent in the MD introductions, helps writers demonstrate the gap in the real world that must be filled.

Example 81: *Reading is an important means by which students of English as a foreign language learn new vocabulary words. **However**, developing vocabulary knowledge... is not an easy activity.* (APhDTI13)

Example 82: *Some students spend their multiple efforts to have a good level in writing an essay, **but** still make mistakes because they feel stressful when practicing writing skill in a foreign language.* (AMD13)

– Inferential

Inferential transitions help writers specify the causes and results of particular actions. In the current study, PhD thesis writers showed a strong inclination to provide a justification for what has been discovered or present a rationale for arguments being made. This is reflected in the wide use of inferential transitions (such as *thus, accordingly, therefore, because* and *since*) when compared to what the writers of MDs did. This type of transition appeared more in the second move (M2), where writers felt the need to justify their claims about the gap in the real world, trying to convince the discourse community to accept their claims. Examples of the uses of inferential transitions are presented below:

Example 83: *As a result, students in our educational institution are noticed to skip, on purpose, some basic steps of the writing process such as outlining, revising and editing which result in poorly written works which are difficult to understand because of the wide range of error they embody* (APhDTI12)

Example 84: *Recent theories have come to realize the importance of reading and writing skills in achieving language proficiency, yet one of the most challenging aspects is how to teach or learn writing. Therefore, many researchers have investigated the reading-writing...*(AMDI10)

6.3.2.2. Frame Markers

Like transitions, frame markers were also used in a similar way by the writers of PhD thesis and MDs. Table 6.19 shows that PhD thesis and MD writers used 8.96 and 9.62, respectively, in every 1000 words. The log-likelihood calculation of 0.34 indicates no significant difference between the two groups of writers at the level of $p > .05$.

Table 6.23: *Frame markers in introductions of PhD theses and master's dissertations written by Algerian writers*

	AMDI (12890 words)		(12890 APhDTI (31142 words))		Log-Likelihood	
	Raw	Nf	Raw	Nf	LL	p-value
Frame markers	124	9,62	279	8,96	0,34	$p > .05$

– Sequencers

The analysis revealed that ‘first’, ‘second’, ‘third’, ‘the first chapter’, ‘the second section’, ‘then’, ‘finally’ were the most shared frame markers in both sub-corpus. It was also revealed that most of these linguistic choices are exclusive to one move only (i.e., move 3). In this move, writers feel the need to present the aims and frame the structure of their research in an organised way (ex. 85). In most cases, MD writers preferred to present the aims of their studies using listing sequencers (such as 1.2.3) or letters (such as a, b, c). However, this textual feature was not preferred by PhD thesis writers. Instead, PhD thesis writers were more inclined to use numerical sequencers (such as *first, second...etc*) in presenting the aims of their studies. Another area where sequencers are highly required is in presenting the structure of the study. Both writers succeeded in the use of sequencers, making the last part of their academic writing introduction appear clear and well organised (ex. 85 and 86).

Example 85: **First**, we will try to find out the causes for the errors which most if not all students make **Second**, we will attempt to prove . . . rather than telling students off because they are wrong. **Third**, focus will be laid on learners’ written productions to identify and to analyze the most recurring errors in writing essays (APhDTI12)

Example 86: **The first chapter** is divided into three sections; **the first section** is devoted to vocabulary knowledge **Then**, it will move to types of vocabulary and techniques of teaching it. **Finally**, the focus will shift to study some difficulties in learning vocabulary. **The second section** is about the writing skill **Then**, this section will show the different types of writing and approaches to writing. **The third section**; will give a review on vocabulary, the importance of writing, learners’ writing problems and will shed some light on the influence of vocabulary knowledge on writing. **The second chapter** is ... (AMDI5)

– Topicalisers and Discourse labels

Topicalisers (linguistic choices that signal a shift to another topic) and discourse labels (linguistic choices that specify a discursive stage in the text) were unusual in both sub-corpus as only few instances were identified. This is a surprising result since we expected to find more instances of topicalisers and discourse labels in the PhD thesis and MD introductions. Examples of how topicalisers (ex. 87 and 88) and discourse labels (ex. 89 and 90) were employed by writers of PhD thesis and MD introductions are presented below.

Example 87: **With respect to** reading, they should deal with more advanced texts with different genres and purposes in order to practice complex strategies, reach good learning... (APhDTI3)

Example 88: **Regarding** the general layout, the current research is divided into two chapters. (AMDI5)

Example 89: **To conclude**, some limitations and suggestions are provided for further research in the field of LLSs, writing strategies and cooperative learning strategies. (APhDTI5)

Example 90: **To sum up**, the final findings of the study as well as some recommendations and proposals about intensive reading and its effects on the development of ... (AMDI10)

– **Announcers**

Announcers or announce goals markers (linguistic elements which state discursive purposes) were used, but more extensively in the PhD thesis introductions. Nouns such as the aim, objective, goal and focus, verbs such as intend, seek, investigate, were often combined with nouns referring to the research (such as this study, this work, this paper) to announce the aims of the study. So, structures such as the ‘current study intends to’, ‘the present study aims at investigating’... etc., were mostly shared by both groups of writers.

Example 91: the current study **aims at investigating** the phenomena of ethnocentric in the context of EFL classroom discourse. (APhDTI6)

Example 92: Thus, **the objective of** teaching instruction **is to** connect learners to real-life situations and active classrooms where activities and discussions in groups are emphasized. (APhDTI5)

Example 93: In this research, **the focus is** on the impact of ... linguistic accuracy. (AMDI9)

6.3.2.4. Endophoric Markers

Table 6.20 demonstrates the normalized frequencies of endophoric markers in the Algerian PhD thesis and MD sub-corpus. Both PhD thesis and MD writers exhibited the use

of a substantial number of endophoric markers in their texts. However, the use of this type of metadiscourse was slightly similar in both sub-corpus. In every 1000 words, Algerian writers of PhD thesis introductions used 6.74, while writers of MD introductions used 5.12. The log-likelihood value is 3.99, indicating a non-significant difference between the two groups of writers at the level of $p > .005$.

Table 6.24: *Endophoric Markers in Introductions of PhD Theses and Master's Dissertations Written by Algerian Writers*

	AMDI (words)		(12890 APhDTI (31142 words))		Log-Likelihood	
	Raw	Nf	Raw	Nf	LL	p-value
Endophoric markers	66	5,12	210	6,74	3,99	$p < .005$

According to Cao and HU (2014), the category of endophoric markers includes linear and non linear references which used ‘as signposts that help the reader recover the writer’s intended meanings’ (p. 21). More illustration on this category is provided below

– ***Linear references***

Linear references are the linguistic choices used by writers to direct readers through each stage of the text (Cao and Hu, 2014; Hyland, 2005). In this study, the most common linear references identified in the PhD thesis and MD introductions are *above*, *as mentioned*, *earlier*, *below*. Although these linguistic choices help writers orient the readers to locate a piece of information somewhere in the text, they may make the argumentation less linear (Li and Xu, 2020). Indeed, the use of the linear references may make the topic to develop in a non clear manner especially with the use of such ambiguous references. The latter remain not clear as they do not refer to a specific context where the information is located. In the Examples below, although the linear references (*as mentioned earlier* and *above*) were used with the intention to help the readers find the necessary information; these linguistic choices do not refer to a specific location in the text. They refer to a piece of information in the first paragraph or the second or it may refer to something in the abstract. So, in order for writers to clearly orient and guide readers to a particular piece of information, they need to carefully choose appropriate linear reference.

Example 94: *Authors select text structures that best suit the intended message, and the readers' role is to use besides textual elements, contextual and schematic knowledge, as mentioned earlier, to interpret the conveyed message. (APhDT8)*

Example 95: *On the basis of the above-mentioned questions, the ... put forward. (AMDI1)*

– **Non-linear references**

Non-linear references are the linguistic choices used by writers to orient readers to other information presented in tables, figures, and charts (Hyland, 2005). In this study, non-linear references were found to be rare in both sub-corpus. One reason for this is that the introductions in RAs are usually short and do not include tables and figures. Only a few instances were identified in the PhD thesis introductions but not in the MD introductions. The following Example illustrates the use of non-linear references.

Example 96: *Second-year students of English were chosen as they are required to write different types of essays of certain communicative type as set up by the ministry of higher education and research in the programme of written expression (see appendices 04 and 05) (APhDT8)*

6.3.2.5. Evidentials

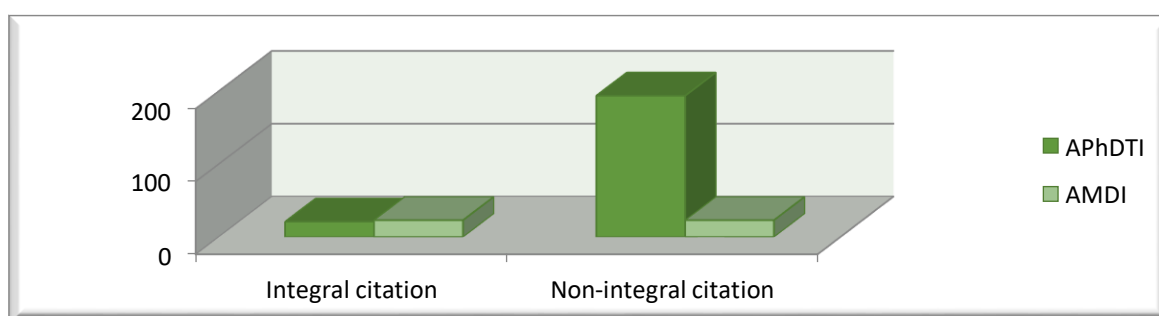
Table 6.21 shows that PhD thesis and MD writers did not use evidentials in the same way in their academic writing introductions. While PhD thesis writers used 6.90 instances in every 1000 words, MD writers employed only 3.57 markers in every 1000 words. The significant difference between the two groups of writers in terms of the use of evidentials is indicated by the log-likelihood calculations of 18.88 at the level of $p < .0001$.

Table 6.25: *Evidentials in Introductions of PhD Theses and Master's Dissertations Written by Algerian Writers*

	AMDI (12890 words)		(12890 APhDTI (31142 words))		Log-Likelihood	
Interactive	Raw	Nf	Raw	Nf	LL	p-value
Evidentials	46	3,57	215	6,9	18,88	$p < .0001$

As it is demonstrated in the Table 6.20, the frequency of evidentials in the PhD thesis introductions is twice that of the evidentials in the MD introductions. Incorporating a large number of citations in the introductions of PhD theses was the most common discursive strategy followed by PhD thesis writers. With regard to evidential types, Figure 6.3 showed that while MD writers similarly used both integral and non-integral citations, PhD thesis writers appeared to use more non-integral citations. This indicates that PhD thesis writers were more concerned with or focused more on the findings of the previous studies than on who made the findings. In other words, PhD thesis writers tend to focus more on the message than the source of the message. Contrary to PhD thesis writers, MD writers appeared to be concerned by both the message and the source of the message, though the frequency of citation was so small when compared to the use of this type of metadiscourse in PhD thesis introductions. Examples of evidentials extracted from both sub-corpus are presented below:

Figure 6.3. *Types and Frequency of Evidentials in the PHD Thesis and MD Introductions*



Integral citation: This type of citation includes the cited source as a part of the sentence. In this study, the integral citation was realized by either the author + date pattern (ex. 97 and 98), which functions as a subject of the sentence (ex. 97), or the adjunct according to + author pattern (ex. 99, 100, and 101). These patterns were found to be used in both sub-corpus; however, they were preferred more by MD writers. In contrast, as it was mentioned, PhD thesis writers showed an inclination to use more non-integral citations.

– ***Integral citation***

Example 97: ***Nunan and Miller (1995)*** define authentic texts as those which “were not created or edited expressly for language learners. (APhDTI8)

Example 98: *According to Thelen (1986), using dictionaries, glossaries, definitions, and word recognition skills may not be adequate means as they may ... and quick forgetting of vocabulary.* (AMDI15)

- **Non-integral citation**

Example 99: *After conducting two major national surveys of university-based language and area studies, they found out that the problem of language skills loss ... Asian studies (cited in Köpke& Schmid, 2004).*(APhDTI3)

Example 100: *Studies on LLSs were fundamentally concentrating on the qualities of good L2 learners and the strategies they employ in the learning process (Stern, 1975; Rubin, 1987; Oxford, 1990).* (APhDTI5)

Example 101: *through peer correction, students will be engaged in the correction process, as it allows to read their peer's written essays and make the students acquire critical thinking (Rotim, 2015).* (AMDI3)

As demonstrated in the Example above, different realizations of this type of evidential were identified in both sub-corpus. The author-date pattern (ex.100 and 101) is one of the most common implementations of the non-integral citation. Other realizations of this type of citation were the *directive see +author+date* and a cluster of authors+dates.

In several situations, however, PhD thesis and MD writers did not employ evidentials, despite the fact that they were used to some extent in both sub-corpus. Both groups of authors occasionally failed to use even one citation, though a citation was clearly necessary to substantiate their claims. The inappropriate use of evidentials in some contexts might be explained by the writers' lack of experience in academic writing or might be due to a lack of understanding of the significance of this kind of metadiscourse in elevating research in literature. As the Examples below (ex. 102, 103 and 104) show the writers did not support their claims (many researchers..., recent studies..., few studies...) with references to previous research, which made their claims not clear.

Example 102: *On the basis of this work, many researchers explored formative assessment in different contexts and with various aspects including language skills. For the present study, formative assessment is explored in relation to text comprehension.* (APhDTI1)

Example 103: *Admittedly, **recent studies on LLSs** have demonstrated extensive zeal and enormous interest for both second and foreign language contexts.* (APhDTI5)

Example 104: *Although **a lot of work was devoted** to learning how to use learning strategies in the process of learning words and vocabulary, **few studies have** explored the use of rankings . . . to increase vocabulary.* (AMDI2)

6.3.2.6. Code Glosses

Like evidentials, code glosses were also more frequent in PhD thesis introductions when compared to MD introductions. Table 6.22 demonstrates that PhD thesis writers used 7.00 instances in every 1000 words, while MD writers employed only 4.89 (per 1000 words) instances in their MD introductions. According to log-likelihood calculations of 6.72, the higher incidence of code glosses in PhD thesis introductions is statistically significant at the level of p.01.

Table 6.26: *Code Glosses in Introductions of PhD Theses and Master's Dissertations Written by Algerian Writers*

	AMDI (12890 words)		APhDTI (31142 words)		Log-Likelihood	
	Raw	Nf	Raw	Nf	LL	p -value
Code						
Glosses	63	4,89	218	7	6,72	$p < .01$

Code glosses category includes words (such as *namely, say, called...etc*) , phrases (such as *that is to say, in other words, defined as ...etc*) and abbreviation (such as *e.g., i.e., vis...etc*) which they can appear as an integral part of a sentence or within parentheses (Hyland, 2005). These linguistic choices are very important in academic writing since they help writers explain, elaborate, exemplify or rephrase the whole proposition, making the ideas and information easy to grasp for readers (Hyland, 2007). In the current study, most of the code glosses identified in both sub-corpus were found to serve two main functions. First, writers feel, in some cases , the need to provide examples to limit the meaning of a particular proposition so as it can be easily understood by potential readers. Second, writers used code glosses to rewrite their sentences using different words to make the propositions very clear.

When comparing PhD thesis authors to MD writers, the former demonstrated a great tendency to apply a variety of glossing elements of exemplification. The most frequent discursive strategies for glossing in PhD thesis introductions included providing supplemental information in parenthesis (), using abbreviations like ‘i.e.’, ‘Vis’ and ‘that is’, phrases such as ‘such as’, ‘for example’ (ex. 105,106 and 107). In contrast, such discursive strategies were quite absent in the MD introductions. For instance, MD writers appeared to be satisfied with using glossing phrases such as, ‘for instance’, and ‘for example’. The wide use of code glosses (in terms of quantity or quality) is justifiable by the fact that PhD thesis introductions are usually longer than MD introductions. In the PhD thesis, the writers felt the need to explain, rephrase, and reformulate the adapted or adopted new concepts. In addition to that, a PhD thesis introduction often includes a sub-section entitled a ‘definition of terms’ section, which explains the key words employed in the study; hence, more code glosses are required.

– Exemplifiers

Example 105: *Moreover, thorough studies on the role dictionaries play in improving students’ vocabulary knowledge are important especially when EFL learners increasingly depend on new types of reference materials **such as** electronic dictionaries.* (APhDTI13)

Example 106: *Shifting our discussion to the independent variable, the term WDA is used by different researchers, **for example**, Grabe (1984) and Ferris (2003) to distinguish the analysis of written discourse from the whole realm of discourse analysis.* (APhDTI9)

Example 107: The complexity of reading can be clearly observed in the interaction between different levels of processes (high-level, **i.e.**, use of reading strategies and low-level processes, **i.e.**, linguistic ability in reading), it is the effective use of these processes (APhDTI1)

Example 108: *Learning a foreign language, **namely** “English” requires huge efforts implications for students to take into consideration that this is not again.* (AMDTI4)

Example 109: *Literature was one of the primary sources for teaching English for a long time in the past. **For instance**, literary texts used to be among the best tools in Grammar translation method.* (AMDTI3)

– Reformulators

Example 110: *It reflects the structure and the organisation of ideas by an author in order to transmit and communicate his message to the reader. **In other words**, it refers to the form of ... are presented.* (APhDTI8)

Example 111: *Nevertheless, it has to be taught with other pre-, during-, and post-reading strategies such as questioning, predicting, skimming, scanning, and the remaining ones. **This means that** text structure awareness strategy is not to . . . reading strategies* (APhDTI9)

Example 112: *In addition, they face certain difficulties in communicating their ideas, and expressing themselves in a coherent and an organized manner; **that is to say**, they do not use the language appropriately.* (AMDTI5)

Example 113: *Thus, this research is an attempt to explore the effects of watching movies subtitled in students' mother tongue on EFL learners' vocabulary. **In other words**, this work aims at investigating the influence of subtitles on content comprehension of...*(AMDTI1)

6.3.3. Interactional Metadiscourse

6.3.3.1. Interactional Metadiscourse as a Whole

According to the Table below (Table 6.23), the writers of the PhD thesis introductions expressed interaction using expressions of interactional metadiscourse more frequently than the writers of MD introductions. It is noteworthy to mention that PhD thesis introductions were dominated by the use of hedges (11.50 per 1000 words) and engagement markers (6.10 per 1000 words), while boosters (8.38 per 1000 words) and self-mentions (5.20 per 1000 words) were used more frequently across the MD introductions. Both groups of writers likewise employed attitude markers; however, the MD introductions featured them more prominently (5.20 per 1000 words). In the sections that follow, various categories of interactional metadiscourse are explored in further detail.

Table 6.27: *Interactional Metadiscourse Sub-Categories in PhD Theses and Master's Dissertations Written by Algerian Writers.*

	AMDI (12890 words)		APhDTI (31142 words)		All (440,32 words)	
Interactional	Raw	Nf	Raw	Nf	Raw	Nf
Hedges	112	8,69	358	11,5	470	10,67
Boosters	108	8,38	220	7,06	328	7,45
Attitude markers	67	5,2	114	3,66	181	4,11
Engagement markers	55	4,27	190	6,1	245	5,56
self-mentions	67	5,2	104	3,34	171	3,88

6.3.2.1. Hedges

Table 6.24 demonstrates the use of hedges in PhD theses and MD introductions authored by Algerian writers. PhD thesis writers employed more hedges (Nf = 11.50) than MD writers (Nf = 8.96). The log-likelihood calculation of 7.01 indicates the higher frequency of hedges in PhD thesis introductions is statistically significant at the level of $p < .001$. The significant difference in the use of hedges suggests that PhD thesis writers were much more tentative in putting forward claims and in rejecting or affirming others' opinions, avoiding threatening the others' faces. In contrast, the analysis revealed less tentative language in the MD introductions. This, from our perspective, was primarily due to the writers' lack of English competence, as English is the S/FL in Algerian higher education, and using hedges in FL writing requires a very sophisticated command of the language.

Table 6.28: *Hedges in Introductions of PhD Theses and Master's Dissertations Written by Algerian Writers*

	AMDI (12890 words)		APhDTI (31142 words)		Log-Likelihood	
Interactional	Raw	Nf	Raw	Nf	LL	p-value
Hedges	112	8,69	358	11,5	7,01	$p < .001$

The analysis of hedge sub-categories in the Algerian PhD and MD introductions revealed that both groups of writers used all four types of hedges to withhold the full commitment to propositions and demonstrate uncertainty over assertions. However, a number of similarities and differences were identified regarding the use of these types of hedges.

Concerning similarities, as Table 6.24.1 shows, epistemic model verbs were the most preferred sub-category of hedges in both sub-corpus. Both groups of writers used more than 5.59(per 1000 words) model verbs in their academic work introductions. The sub-category of adjectives and adverbs was the second most commonly used hedging device, while other sub-categories (nouns, lexical verbs, and linguistic expression for marking qualification) were rarely used by both groups of writers.

Table 6.29: *Comparison of Sub-Categories of Hedges in Maser Dissertation and PhD Thesis Introductions*

Hedges	APhDTI		AMDI		All	
	No	Nf	No	Nf	No	Nf
Epistemic Model verbs	185	5,94	61	4,73	246	5,59
Lexical verbs	82	2,63	25	1,94	107	2,43
Adjectives and adverbs	123	3,95	45	3,49	168	3,82
Nouns	10	0,32	22	1,71	32	0,73
Linguistic expression for marking qualification	8	0,26	2	0,16	10	0,23
Total	408	13,1	155	12,02	563	12,79

By comparing PhD thesis introductions to MD thesis introductions, it seems that epistemic model verbs were more prevalent in the PhD thesis introductions. PhD thesis writers used 5.94 (per 1000 words) model verbs, while MD writers used only 4.73 instances per 1000 words. Lexical verbs were also used slightly more in PhD thesis introductions when compared to MD introductions. Adjectives and adverbs were used 3.95 and 3.49 times (per 1000 words) in the PhD thesis and MD introductions, respectively, which indicates that this sub-category was preferred by both groups of writers. When it comes to nouns, It seemed that MD writers favoured this sub-category. Linguistic expressions for making qualifications were rare in both sub-corpus.

– *Epistemic model verbs*

With reference to the functions of hedges, epistemic model verbs were used extensively by PhD thesis writers to present the findings of their research (see ex. 114 and 115). In the example (114), the writer used the epistemic models (*may* and *can*) to distance himself from his claim and give more space to the reader to either accept or refuse the his claims. Through the use of these models, the writer is communicating with their potential readers informing them that he is not sure about his arguments, opening more space to other alternative voices.

Example 114: *The findings **may** uncover considerable amount of information as regards vocabulary instruction and learning at the university level. It **can** elucidate the variables that **may** have an impact on vocabulary attrition. Besides . . . be attritted.* (APhDTI3)

Example 115: *In other words, students **usually** face problems in understanding English texts in any field of ESP. These problems **might** be related to the general ... texts.* (APhDTI4)

– **Adjectives and adverbs**

The second most frequently used sub-category of hedges was adjectives and adverbs. Table 6.23.1 shows that these linguistic choices were used slightly in a similar way by both PhD thesis and MD writers. So, in order to show tentativeness in texts, both groups of writers shared the use of certain adjectives such as ‘possible’, ‘apparent’, ‘clear,’ unclear’, and ‘certain,’ and adverbs such as ‘apparently’, ‘mainly’, ‘usually’, ‘about’, and ‘frequently’. However, PhD thesis writers employed more adverbs, while MD writers used more adjectives in their academic writing introductions.

Example 116: ***Apparently**, as it is claimed that each interlocutor belongs to different discourses, it is expected that he/she demonstrates different layers of ‘self’.* (APhDTI7)

Example 117: *Taking into account that a **certain level** of vocabulary is needed to learn the target language and therefore for producing the language, it can be said that vocabulary plays an important role in writing by enabling the use of language* (AMDI11)

Example 118: *An authentic text is **usually** taken to mean a text which was not written for the language classroom and bits of the text have not been cut out.* (AMDI8)

– **Lexical verbs**

Differences between the PhD thesis and MD writers were not only apparent in the large disparity of epistemic modal verbs but also in the use of lexical verbs. In particular, PhD thesis writers used slightly more lexical verbs in their academic writing introductions when compared to MD introductions. Table (6.23.1) shows that PhD thesis writers used 2.63 items (per 1000), whereas MD writers used only 1.93 items (per 1000). Verbs such as *suggest*, *tend*, *indicate*, and *claim* were highly preferred in the Algerian PhD thesis sub-corpus, whereas only a few instances of lexical verbs (*tend* and *seem*) were identified in the MD introductions. Another rhetorical difference between the PhD thesis and MD introductions is that MD

writers rarely used lexical verbs to express their arguments, particularly with first personal pronouns. In contrast, the pattern '*personal pronoun + lexical verb + that*' was prevalent in the PhD thesis introductions (ex. 119). One possible explanation might be that MD writers were unwilling to take responsibility for the role of the research in their arguments to avoid potential counterarguments.

Example 119: *As a result, we **claim** that due to this uncontrolled exposure, we are afraid we should reconsider our consideration of what could be a foreign discourse* (APhDTI6)

Example 120: *Another reason is that many applied linguists have currently **suggested** a discourse-based approach to teach . . . to formal approaches to language (refs).* (APhDTI10)

Example 121: *Teachers **tend** to be more creative by adopting new techniques and methods taking into consideration that each method has its own advantages* (AMDI7)

Other types of hedges, nouns and Linguistic expression for marking qualification, were rarely used by either PhD thesis writers or MD writers; therefore, they are not discussed in this study.

6.3.3.2. Boosters

Although the PhD thesis introductions presented a large number of boosters when compared to the MD sub-corpus, the normalization of data and the likelihood test revealed that MD writers used more boosters in their MD introductions than PhD thesis writers did. As it is demonstrated in Table 6.25, writers of MDs used 8.38(per 1000 words), while only 7.06 (per 1000 words) employed by PhD thesis writers. The log-likelihood calculations of 5.07 indicate that there is a statistically significant difference between the two groups of writers at the level of $p > .01$.

Table 6.30: *Boosters in Introductions of PhD Theses and Master's Dissertations Written by Algerian Writers*

	AMDI (12890 words)		APhDTI (31142 words)		Log-Likelihood	
Interactional	Raw	Nf	Raw	Nf	LL	p-value
Boosters	108	8,38	220	7,06	5,07	$p < .01$

Boosters, according to Hyland (2005), can perform two main functions: reducing alternatives and emphasizing shared information. By closing down alternative voices, boosters allow writers to express conviction in their statements. They can also strengthen a claim by highlighting its commonality among the discourse community. Like hedges, boosters are also divided into five sub-categories, namely modal verbs, lexical verbs, adjectives and adverbs, nouns, and emphatic expressions. With regard to differences between PhD thesis and MD writers in the current study, it was revealed that while PhD thesis writers preferred the use of modal and lexical verbs, MD writers showed an inclination to use more adjectives and adverbs to boost their arguments. The remaining sub-categories of boosters, nouns, and emphatic expressions, were mostly rare in both sub-corpora. There were similarities in the word choices between PhD thesis and MD writers, despite minor differences in the frequency of use and subcategories of boosters. Accordingly, epistemic modal verbs such as *will*, lexical verbs such as *find*; *know*, *show*, and *think*, and adjectives and adverbs such as *certain*, *clear*, and *in fact* were the most shared boosters in both sub-corpora. What follows is a brief discussion of how boosters were used in the Algerian PhD thesis and MD introductions.

– *Epistemic modal verbs*

Epistemic modal verbs such as *must* and *will* help writers to add strength to their claims and arguments. In his classification of epistemic modal verbs, Hyland (2005) added only 'must' that expresses a possibility to the list of boosters. However, in this study, since 'must' expresses the writers' judgment of propositions in terms of necessity and their desire to talk to their potential readers about the evaluated propositions, *must* (obligation) is considered as an interpersonal metadiscourse device. The presence of a reader reference together with the modal 'must' in the academic writing demonstrates writer-reader interaction. In the Examples below (ex. 122), the teacher reflects the presence of readers and the use of 'must' reflects an interaction between the thesis writer and their potential readers. By adding an emphasis to a particular message, writers want their potential readers (the teacher: any teacher) to take the expressed message into consideration. However, in the current study, modal verbs that function as boosters were found to be rare in both PhD thesis and MD introductions. The analysis identified only three instances of *must* and a few instances of *will* in the Algerian PhD thesis introductions. In contrast, these two models were rarely used by MD writers. All instances of 'will' in the MD introductions did not serve a pragmatic function; rather, they were used as helping verbs that express future activities (ex. 123). The writer of MD

introductions, as shown in the Example, used the auxiliary *will*+ to be or *will*+ lexical verb to state what he intends to do in the following sections of his academic writing.

Example 122: *The teacher **must** consider both reading and writing as interactive processes involving the writer, the reader as well as the text, and offer specific strategies . . . understand and apply.* (APhDTI11)

Example 123: *Chapter two **will** be for the data collection including the sample, the questionnaire, the test and the results **will** be described and analyzed to check the hypothesis.* (AMDI12)

Table 6.31:Types of Boosters in the Algerian PhD Thesis and Master's Dissertation Introductions

Types	Boosters	APhDTI (31142 words)		AMDI (12890 words)	
		No	Nf	No	Nf
Epistemic modal verbs	Must	4	1	0	0
	Will	39	13	8	6
lexical verbs	Find	22	7	13	10
	Know	24	8	10	8
	Prove	7	2	8	6
	Show	17	5	5	4
	Think	10	3	4	3
	Demonstrate	6	2	2	2
Adjectives and Adverbs	Certain	15	5	4	3
	Clear	10	3	2	2
	True	5	2	1	1
	Actually	4	1	2	2
	Always	5	2	3	2
	In fact	10	3	4	3

– *Lexical verbs*

'Find,' 'prove,' and 'show' were the most frequently used and shared lexical verbs among PhD thesis and MD introduction writers. The main function of these lexical verbs is to warrant the certainty of research findings and establish strong arguments. In most cases , these verbs were preceded by research nouns such as 'the findings', 'the data' ,'the analysis', and 'the results' .Through the use of these structures (boosting verb + noun) , PhD thesis and MD writers wanted to express that what is stated is not based on their opinions but rather on some evidence (their study results).

Example 124: *The findings **showed** that SBI was successful on the whole. It helped learners change their views about writing which was considered as a tough skill . . .* (APhDTI5)

Example 125: *Results **show** that writing for these Arab students of English is still of great difficulty even at a relatively higher level of education.* (APhDTI11)

Example 126: *The analysis **proved** that writing process involves important steps the students have to follow during their writing process, pre-writing that is concerned with choosing the topic, collecting data and organise it.* (AMDI3)

PhD thesis and MD writers wanted also to appear more confident while presenting the aim of their research. So, in this case, using boosting verbs can be considered as a persuasion strategy to establish a strong claim with a confident voice. In doing so, writers wanted to express strong arguments which do not accept other alternatives, aiming to persuade the discourse community members.

Example 127: *We will attempt to **prove** that the way we respond to our students' errors is very important and vital because we should be seen as providing feedback rather than telling students they are wrong.* (APhDTI13)

Example 128: *in this research, we aim to **demonstrate** the importance of vocabulary knowledge . . . therefore produce better written texts. Thus, we aim to **show** the correlation between and writing.* (AMDI11)

– **Adjectives and adverbs**

The adjectives 'certain', 'clear' and 'evident' and the adverbs 'actually', 'always', and 'in fact' were mostly used and shared by both groups of writers; However, these boosting devices were more preferred by MD writers, while PhD thesis writers used more the adverb 'indeed'. The main functions of boosting adjectives and adverbs are to reinforce the argument and to confirm something already suggested. In most cases, these boosting devices appeared in move one, establishing a territory. This is because both groups of writers, particularly MD writers, wanted to appear more confident while presenting their research to the discourse community.

Example 129: ***Indeed**, learners who read constantly are better able to read fluently, write skillfully, have a good mastery of grammar, and possess a large vocabulary amount. **Certainly**, reading can engage students actively in the foreign language* (APhDTI2)

Example 130: *It is **evident** that corrective feedback is beneficial to the student writers because they gain much benefit from doing much practice and simultaneously . . .* (APhDTI12)

Example 131: *These two elements were **really** important in steering this research. Finally, it ends by referring to the dimensions used for assessing vocabulary.* (AMDI14)

Example 132: *It seeks to draw a **clear** description of vocabulary and subtitling as it relates to language learning and vocabulary comprehension.* (AMDI1)

– **Nouns**

Nouns that express certainty were mostly used by PhD thesis writers when compared to MD writers. However, this type of boosters was rarely used in both sub-corpus when compared to other types of boosters. The Example below presents how nouns used as boosters in the PhD thesis sub-corpus

Example 133: *The overwhelming evidence corroborating the focus of competence in teaching is **the fact** that students have already language knowledge such as conjugation verbs in present perfect tense or past simple, constructing compound or complex sentences that convey certain semantic meaning, etc.* (APhDTI9)

Example 134: *To check the first research hypothesis, a true randomized, two-group post-test only experimental design that offers the **possibility** of establishing cause and ... between variables is used.* (APhDTI14)

6.3.3.3. Attitude Markers

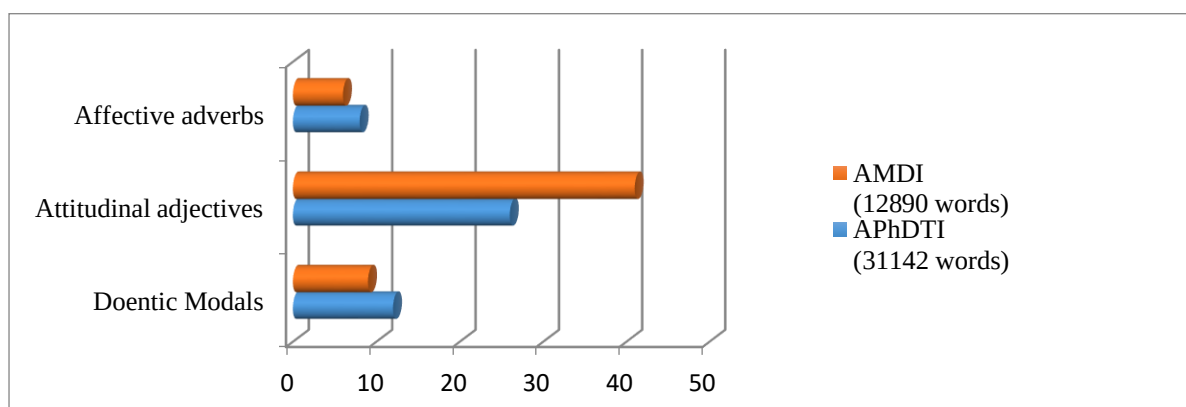
Attitude markers were not used in the same way in the introductions of PhD theses and MDs. Surprisingly, MD writers used more attitude markers (Nf=5.20) than PhD thesis writers (Nf=3.66). The log-likelihood calculation of 5.01 indicates the higher incidence of attitude markers in the introductions of MDs at the level of $p < .01$

Table 6.32: *Attitude Markers in Introductions of PhD Theses and Master's Dissertations Written by Algerian Writers*

	AMDI (12890 words)		APhDTI (31142 words)		Log-Likelihood	
Interactional	Raw	Nf	Raw	Nf	LL	<i>p</i> -value
Attitude markers	67	5,2	114	3,66	5,01	$p < .01$

According to Hyland (2005), academic writing includes not only words and sentences but also other information about the writers' positions, attitudes, and opinions. In other words, the writers' affective attitudes, such as surprise, agreement and disagreement, importance, and obligation, are realized through the use of attitude markers. The latter are divided into four sub-categories: deontic modals, attitudinal adjectives, affective adverbs, and expressions conveying stance. In the current study, we limited our analysis only to the three first attitude marker types. For two reasons, we did not look for expressions conveying stance and evaluation. First, these types of attitude markers were rarely used in both sub-corpus. Second, even though stance and evaluation expressions were found, we faced a problem in how to count them since they are just attitudinal adjectives followed by *it* and *to be*. To make things clearer, when attitude markers such as '*it is expected*' or '*it is important*' were identified, we considered them as altitudinal adjectives (the underlined words) rather than as expressions conveying stance and evaluation.

Figure 6.4. *Sub-Categories of Attitude Markers in the Algerian PhD Thesis and MD Introductions*



In using attitude markers, the analysis revealed that the writers of PhD thesis introductions preferred the use of affective adverbs and deontic modals, while MD writers showed more inclination to use attitudinal adjectives more frequently. Although there was

some variation in the use of attitude markers between PhD thesis and MD writers in terms of quantity and types, the analysis revealed a number of shared attitude markers across both sub-corpora. These include ‘appropriately’, ‘appropriate’, ‘important’, ‘essential’, ‘expected’, ‘significant’, and ‘should’. However, the adjective ‘important’ was the prominent attitude marker in both sub-corpora. Examples of how attitude markers were used in both sub-corpora are presented below:

– *Attitudinal adjectives*

Attitudinal adjectives were the most frequently employed type of attitude markers in both sub-corpora. However, they were more frequent in the MD introductions (41 items per 1000) than in the PhD thesis introductions (26 items per 1000). In PhD thesis introductions, most of these linguistic choices were located in move 1 (establishing a territory). In this move, PhD thesis writers feel the need to add positive evaluation using attitudinal adjectives such as ‘important’, ‘essential’, aiming to convince the discourse community that their research is worth investigating (ex. 135). In the MD introductions, most of these linguistic choices were employed in move 3 to add positive evaluation to the method followed, the instruments and tools used in the study (see ex. 136). Below, some of the attitudinal adjectives are presented within the sentences extracted from the corpus.

Example 135: *For literate communities, reading is considered as an **essential** part to life. It is central to learning in school, work, and in everyday life. It is an **important** tool in education and individual development as it plays central roles in individuals’ careers.*(APhDTI2)

Example 136: *The main objective of this study is to identify the students’ errors, classify them and explain the reasons behind. Thus, the most **appropriate** tool of research is a corpus ... randomly chosen.* (AMDI14)

– *Deontic modals*

Deontic modals were the second most frequently used type of attitude markers in both sub-corpora. There were 12 per 1000 and 9 per 1000 in the PhD thesis and MD introductions respectively.

Example 137: *On these premises, students as readers **need to** understand ... use.* (APhDTI10)

Example 138: *Literature and language teaching **should** be linked and ... supportive and reinforcing* (AMDI4)

– *Affective adverbs*

Affective adverbs were the least frequently found items in the introductions of the PHD thesis and MD. Nonetheless, Figure 6.4 shows that PhD thesis writers used more affective adverbs than MD writers did. The analysis revealed also that ‘importantly’, ‘appropriately’, ‘admittedly’, ‘necessarily’ were the most shared affective adverbs across the two sub-corpus. Most of these items were located in move 2. In this move writers indicate the gap in the research world; therefore, they need such linguistic items to add personal evaluation to propositions.

Example 139: ***Admittedly**, recent studies on LLSs have demonstrated extensive zeal and enormous interest for both second and foreign language contexts.* (APhDTI5)

Example 140: *They face certain difficulties in communicating their ideas, and expressing themselves in a coherent and an organised manner; that is to say, they do not use the language appropriately.* (AMDI15)

6.3.2.4. Engagement Markers

Engagement markers were also used by writers of PhD thesis and MD introductions. However, these markers were used slightly in a different way by both groups of writers in their academic writing introductions. Table 6.28 demonstrates that PhD thesis and MD writers employed 6.10 and 4.27 instances in every 1000 words, respectively. The log-likelihood calculation of 5.81 indicates that there is a statistically significant difference between the two groups of writers at the level of $p > .001$.

Table 6.33. *Engagement Markers in Introductions of PhD Theses and Master’s Dissertations Written by Algerian Writers*

	AMDI (12890 words)		APhDTI (31142 words)		Log-Likelihood	
	Raw	Nf	Raw	Nf	LL	p -value
Engagement markers	55	4,27	190	6,1	5,81	$p < .001$

– **Directives**

Directive expressions are usually realized by the grammatical forms of imperatives (such as *see, refer to, etc*), modal verbs (such as *should, ought to, etc*), and predicative adjectives (such as *it is necessary, it is important to remember, etc*). PhD thesis writers showed an inclination to use more imperatives, particularly those which help writers to direct readers to other parts of the text. In contrast, MD writers proffered to use modal verbs instead of imperatives. Predicative adjectives were found to be totally absent in both sub-corpus.

Example 141: *This framework applies to reading as well (See Appendix B). The interactive reading processing allows the combination of both top-down and bottom-up processing.* (APhDTI8)

Example 142: *Choosing the most suitable approach for teaching writing **should** be considered in light of the contributions that reading could offer to improve the learning process of writing skills.* (AMDI10)

– **Reader references**

Reader references are the linguistic devices that writers use to draw the reader into texts. This type of metadiscourse includes pronouns such as *you, your*, and the inclusive *we*. According to Hyland (2008), these devices help identify the reader as someone who shares similar understandings to the writer as a member of the same discipline. In this study, *you* and *your* were totally absent in the PhD thesis introductions, while only a few instances were found in the MD introductions. This might be attributed to the nature of the genre itself, as the PhD thesis and MD writers address the local discourse community (supervisors and jury members). On the other hand, reader pronouns were mostly realized by the use of inclusive ‘*we*’ (ex. 143 and 144) as it was often used, particularly by PhD thesis writers.

Example 143: *That is, in literary streams, EFL learners’ exposure to ethnic otherness is larger than that of scientific stream if **we** consider exposure to ... the number of foreign languages taught.* (AMDI3)

Example 144: *Students can be involved in reading if they determine their setting, reading goals, invest in tools that encourage reading and link it directly to writing through identifying the basic principles of writing, grammar, and spelling but also **you** have to write like it is **your** job and practice regularly* (AMDI5)

- **Questions:**

Writers may employ rhetorical questions to directly capture the reader's attention in an attempt to engage and include them in the text. Writers invite readers to participate in a discourse by asking these questions. Unfortunately, questions were totally absent in both sub-corpus.

–**Appeals or references to shared knowledge**

Another type of engagement markers is appeals or references to shared knowledge. Typically, linguistic choices, such as obvious, as seen, we already know, are used to realize this category. By employing these linguistic choices, writers openly immerse readers in the text by sharing a common understanding with them (Hyland, 2005). In this study, only a few instances were identified in both sub-corpus. Some examples of these linguistic choices are presented below.

Example 145: *The **well-known work** within this area is the one of Black and William (1998) who investigated the effects of formative assessment more than 200 reports.* (APhDTI1)

Example 146: *Reading **is regarded as** a powerful tool in helping students to learn a new language that is to say language specialty known as foreign language.* (AMD14)

Example 147: **On these premises**, students as readers need to understand texts in their context of use. (PhDTI10)

In some cases, authors make very brief interruptions to offer a comment on assertions they have made. This discursive strategy (intentional interruption) is referred to as 'personal asides'. According to Hyland (2008; 2020), the use of this type of metadiscourse allows writers to talk directly to their readers by interrupting the argument to comment on what has been said. The author acknowledges and responds to an active audience by turning to the reader in the middle of a sentence, frequently to create a brief interpersonal interaction that adds more to the author-reader connection than to propositional growth. In the current study, however, personal asides were found to be rare in both sub-corpus.

–*Personal asides:*

Example 148: *reading can engage students actively... When opportunities to speak or hear the foreign language are rare, reading is (as I believe all people will acknowledge) the only practice that gives learners access to boundless amount of* (APhDTI10)

6.3.3.5. Self –mentions

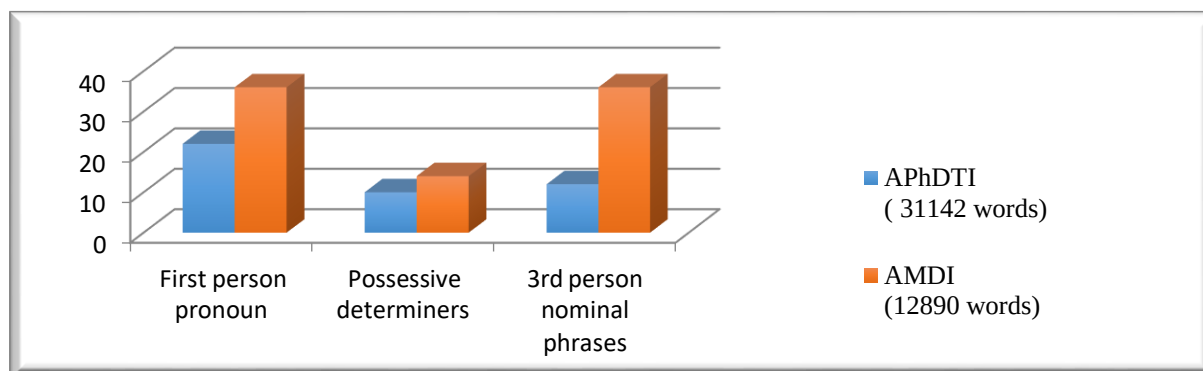
Table 6.29 shows the use of the self-mention markers in the introductions of PhD theses and MDs authored by Algerian writers. The analysis revealed that MD writers used more self-mentions (Nf = 5.20) than PhD thesis writers (Nf = 3.34). The higher incidence of self-mentions in MD introductions is indicated by the log-likelihood value of 7.67 at the level of $p < .01$.

Table 6.34. *Self-Mentions in Introductions of PhD Theses and Master’s Dissertations Written by Algerian Writers*

	AMDI (12890 words)		APhDTI (31142 words)		Log-Likelihood	
Interactional	Raw	Nf	Raw	Nf	LL	<i>p</i> -value
self-mentions	67	5,2	104	3,34	7,67	$p < .01$

Self-representation or visibility is important in academic writings because it is a component of stance-taking resources (Ädel, 2010; Hyland, 2002). It can be realized by self-mention markers including first-person pronouns (such as *we*, *I*), possessive determiners (*our*, *my*), and third-person nominal phrases (such as *the present author*, *the researcher*) (Hu and Cao, 2015). All these sub-types of self-mentions were identified in both sub-corpus. Nonetheless, compared to PhD thesis writers, MD authors seemed to be more involved in their academic writings.

Figure 6.5. Percentages of Sub-Categories of Self-Mention Markers in the PhD Thesis and Master's Dissertation Introductions.



Although the use of self-mentions was not similar in both sub-corpus; there were some similarities in terms of the function of these markers. As it was mentioned earlier (see section 1), Hyland (2002) listed several functions that self-mentions can fulfill. These include explaining a procedure, stating results or claims, elaborating an argument, stating a goal/purpose, and expressing self-benefit. In both sub-corpus, all these functions were found except for *expressing self-benefit*, which was totally absent. Besides, both groups of writers were found to share the use of self-mentions to fulfill some of these functions. The only difference is that stating claims using self-mention markers were found to be more in the PhD thesis when compared to the MDs. What follows is a brief discussion on the function of self-mentions, illustrated by examples from both sub-corpus.

– *Stating the goals of the study*

Stating aims /goals of the study using self-mention markers was totally absent. Instead, PhD thesis writers preferred the use of inanimate subjects to present the goals of their studies (ex. 149, 150 and 151). The structure *this study/ it + aims+ at* was prevalent in the writing of PhD thesis writers which made the writer invisible. This kind of framing, as I believe, may not be appropriate in academic writing as it denotes that the writer is not sure and his focus is unclear in the research. In contrast, MD writers were found to be more authoritative while stating the goals. This is reflected in the use of the first personal pronoun (*we*) and announcers (such as *aim to* and *focus on*) followed by lexical verbs functioning as boosters. This kind of framing (*we +aim at + booster*) supports the writers' claims and promotes the writers' powerful presences as they establish their commitments in the texts (Wang and Zeng, 2021).

Example 149: ***It aims at identifying** different problems faced by students to comprehend a particular English text related to their field of specialization.* (APhDTI4)

Example 150: ***The current study aims at** investigating the phenomenon of ethnocentrism in the context of EFL classroom discourse* (APhDTI6)

Example 151: *In this research, **we aim to demonstrate** the importance of vocabulary knowledge Thus, **we aim to show** the correlation between vocabulary knowledge and writing.* (AMDI11)

Example 152: Through the present research, **we aim at** examining the use ... students' writing skill. (AMDI5)

• **Explaining a procedure:**

Similar to the first function of self-mention markers, explaining procedures using these metadiscoursal devices was almost absent in the PhD thesis introductions. PhD thesis writers preferred once again to be invisible while discussing the instruments, tools, and methods followed in their research. In only one PhD thesis introduction (APhDTI8), the writer presented the adopted instruments and methods in a well-organised way and chronological order (ex. 15). In the remaining introductions, the use of passive and inanimate subjects was the most preferred discursive strategy to explain the procedures. MD writers, on the other hand, used a significantly higher proportion of self-mentioned markers to explain the procedures in their research (ex. 154, 155 and 156). This finding is in line with Hyland (2002), who stated that 'the ability to plan and carry out a viable and appropriate research methodology is highly valued in learners' papers (p. 1101).

Example 153: ***We used a number of tools for collecting data. First, we conducted a pilot study. Second, we held classroom discussions... Third, we distributed a questionnaire of 36 questions to ... about their reading habits, academic English reading comprehension and the use of reading comprehension strategies. Fourth, we tested the students prior the intervention during one hour and a half. Fourth, we trained them for five sessions, one hour and a half each. Finally, we conducted a post-test ... type of tasks as the pre-test.*** (APhDTI8)

Example 154: *The collected data represents subjects' written discourse as responses to pretest and posttest. In addition, a pilot study **was carried out** to check the feasibility of the study. This includes pretest and posttest submitted to EFL learners other than the ones*

participating in the study. Furthermore, a needs analysis questionnaire **was addressed** to EFL learners meant to draw a sketch about their ethnic ideology in relation to English ethnic other. (APhDTI6)

Example 155: *The participants in **our** research are 45 second year LMD students and 5 teachers of written expression from English Department ...**Our** sample is selected to investigate the role of peer correction...investigation we have used various tools* (AMDI3)

Example 156: *In order to answer the research questions, **we opted** for experimental design with one group pretest, treatment, and posttest. In addition to that, **we designed** interview for teachers. This methodology aims to collect data on the effect of using games in teaching writing skills.* (AMDI7)

– Stating and elaborating or claims

In stating results and claims, PhD thesis writers were found to be more present in their text than MD writers. However, self-representation in the PhD thesis introductions was expressed by the use of first-person pronouns followed by hedging devices (such as *claim, are afraid, might, could, assume*). Stating claims using *we / I +hedging device* structure denotes that PhD thesis writers were cautious in presenting their arguments. Because arguments and claims are more subjective, particularly in the humanities, PhD thesis writers rely on a tentative language to state their arguments, avoiding potential counterarguments and providing more space for other interpretations. In contrast, stating results and claims using self-mention markers was totally absent in the MD introductions. This is not to say that MD writers did not have claims to make, but I believe that, as inexperienced writers, they preferred to remain elusive and distant while making their claims.

Example 157: ***The researcher** believes that the development of text comprehension can be achieved thanks to ongoing assessment which will lead to practice ..., in sum thanks to formative assessment.* (APhDTI1)

Example 158: *As a result, **we claim** that due to this uncontrolled exposure, **we are afraid we** should reconsider our consideration of what could be a foreign discourse. One might even question the validity of such research if an exposure to Englishness would render it less foreign.* (APhTI6)

Example 159: *I do assume promoting both autonomous and collaborative learning in language classrooms. These implications could be a change in the approach of teaching and learning the English writing in the Algerian context through designing new teaching syllabuses which would stress the strategic teaching of English writing in the future. We hope this research will add to . . . research for the Algerian context.* (APhTI6)

–Stating the Findings

Using self-mention markers to state the findings of the study was not found in both sub-corpus. The only exception was one PhD thesis introduction (APhDT5); however, the writer was invisible. As the Example below shows, the writer used an inanimate subject to present the findings of his research. The absence of this function in both sub-corpus might go back to the nature of the sub-genre itself. That is the beginning of the PhD thesis and MD. According to Swales (2004), the *announcing principle outcomes* step (i.e., stating the findings) is not only optional in the introduction writing but also specific to some disciplines.

Example 160: *The **findings showed** that SBI was successful on the whole. **It** helped learners change their views about writing which was considered as a tough skill, and have positive attitudes towards writing in English. **It** also enhanced students' writing performance and how to use different strategies in each stage of the writing process.* (APhDT5)

6.4. Comparison of Metadiscourse Use in PhD thesis and Master's Dissertation Introductions

The use of metadiscourse in the PhD thesis and MD introductions is discussed in this part, along with some points of similarity and distinction. This discussion is presented in response to the seventh question (question 7) that was posed earlier in the general introductions. To put it another way, this section emphasizes the similarities and contrasts between the two sets of data in terms of frequency of distribution, forms of metadiscourse, and metadiscourse preferences. The findings are contrasted with those of the earlier metadiscourse research.

The descriptive statistics of the frequency distribution (per 1000 words) of each metadiscourse category across the PhD thesis and MD introductions revealed several similarities and clear cross-genre differences. In general, it was found that the PhD thesis introductions contained more metadiscourse devices than the MD introductions. This result is

consistent with the majority of earlier metadiscourse studies (Bunton, 1998; Hyland, 2004; Hyland and Tse, 2004; Paltridge and Starfield, 2007; Swales, 2004), who asserted that the PhD thesis, as an academic genre, is characterized by much greater use of metadiscourse. Swales (2004), for instance, claimed that "metadiscourse goes with extensive textual territory" (p. 89). The length of the text might be the reason for the wide use of metadiscourse. However, in this study, we contend that the use of metadiscourse is determined by the writers' language skills and capacity for text organization rather than text length. While longer texts do, in our opinion, necessitate more metadiscourse, the relationship is still a relative one. For instance, Kawase (2015) examined the use of metadiscourse in the introductions of RA and PhD theses. Even though RA introductions are shorter than PhD thesis introductions, he concluded that the authors of RA introductions used more metadiscourse than the authors of PhD thesis introductions. Master writers, as novice students, might give more attention to bringing the ideas into the text rather than to the organization of the content. On the other hand, PhD thesis writers paid more attention to text organization, which indicated the use of more metadiscourse, particularly interactive devices, as they had more experience reading international academic writings.

With regard to metadiscourse types, it was revealed that both sets of writers employed more interactive than interactional metadiscourse. This finding is consistent with the majority of previous metadiscourse studies (Alharbi, 2020; Hyland, 2004, 2005a; Kim and Lim, 2013; Mu, Zhang, Ehrich, and Hong, 2015, to name a few), which found that interactive metadiscourse devices are more commonly used in academic writings than interactional metadiscourse items. In a study of metadiscourse devices in MD and PhD theses, Hyland (2004), for instance, revealed that writers employed slightly more interactive than interactional devices in both sub-corpus. The dominance of interactive metadiscourse, according to Hyland (2005a), is attributed to the role of this metadiscourse category in "guiding the reading process by indicating discourse organization and clarifying propositional connections and meanings" (p. 92). Careful analysis revealed that several metadiscourse sub-categories were used similarly, at least at the frequency of distribution level by both groups of writers. These include the use of transitions, frame markers, and endophoric markers. Concerning the differences, PhD thesis writers preferred using hedges and engagement markers, while MD writers showed more inclination to use boosters, self-mentions, and attitude markers. Within the interactive category, PhD thesis writers tended to use more code glosses and evidentials than MD writers did.

Frame markers were used more frequently by MD writers while endophoric markers were employed more by PhD thesis writers, but there was no significant difference in the use of these two categories. The differences between the two groups of writers were highlighted not only in terms of metadiscourse categories but also in terms of the specific sub-categories of metadiscourse. What follows is a brief discussion of the most common differences found between the PhD thesis and the MD introductions in terms of the use of types and sub-types of metadiscourse.

Among the ten categories of metadiscourse, only three categories were found to be employed in a similar way by both sets of writers. These include the use of transitions, frame markers, and endophoric markers. With a focus on cohesion and coherence, it appeared that MA writers employed slightly more transition markers than PhD thesis writers, but there was no discernible difference between the two groups of writers. 15,52, and 14,06 items per 1000 were the frequencies of transition markers in the MD and PhD thesis introductions, respectively. One possible explanation for this might be that PhD thesis writers relied on other metadiscourse categories, such as frame markers and code glosses, in organizing their arguments in texts. Within the transition category, PhD thesis writers showed an inclination to use more referential markers. In contrast, more instances of additive and contrast markers were found in the MD introductions. Another way that PhD thesis introductions differ from MD introductions is that PhD thesis writers demonstrate a tendency to employ more transitional phrases (clusters), such as, *on the other hand*, *as a consequence*, *as a matter of fact*, and *on the other hand*, as opposed to MD writers who rely mainly on single-word transitions.

However, this result contradicts that of Hyland (2008). In his study, which analyzed the use of clusters in PhD theses, MDs, and RAs, Hyland (2008) found that MD authors demonstrated a greater tendency to employ clusters when compared to PhD theses and RA writers. He suggested that one explanation for this is that, as inexperienced authors, MD writers relied more on "prefabricated clusters" to establish their arguments (p. 50). However, in this study, we suggest that the use of transitional phrases by PhD thesis writers may indicate that they have a strong command of the language and well-developed linguistic competence. This is because they frequently used more diverse transition markers as opposed to MD writers, who relied mainly on single-word transition markers. Another explanation is that since PhD theses are usually longer than MD, PhD authors felt the need to utilize a greater variety of transition indicators, such as transitional phrases.

Frame markers, another important category of interactive metadiscourse, are used to "organise larger segments of texts to explicitly spell out to readers where the argument is going and what the writer intends to do next" (Hyland & Zou, 2020, p. 32). The category is equally as significant as the previous one since it shows an imagined but precisely defined map that allows readers to view the content from both a broad perspective and a close-up perspective. It has the second-highest number of markers in the whole corpus of PhD thesis and MD introductions, after transition markers among all the interactive categories. Despite the fact that frame markers were slightly used in a similar way by both groups of writers, some variation was revealed regarding their sub-categories. For instance, announcers were mainly preferred by PhD thesis writers. The latter preferred the use of numerical sequencers (first, second...) while MD writers preferred the use of listing sequencers (1, 2, 3, or a, b, c,...etc). The last two sub-categories, topicalisers and discourse labels, were rarely used by both groups of writers. The scarcity of the use of topicalisers and discourse labels might be due to the nature of introductions in PhD theses and MDs. As the introductions in these genres are usually written under headings and sub-headings, PhD thesis and MD writers do not feel the need to shift the topic or label the discourse using these sub-types of frame markers. All of these subcategories were used exclusively in Move 3, where the writers demonstrated the structures of their papers. The only exception is the sub-category of announcers, which was found to be used mainly in move 2 in order to present the aims of the study.

As the fourth most used metadiscourse category, endophoric markers were employed in a similar way by both groups of writers. The similarity in the use of this category exceeds to the use of its sub-categories. In other words, both groups of writers shared the use of linear markers including, *above*, *as mentioned earlier* and *below*. With regard to non-linear reference, it was revealed that this sub-category was totally absent as the introduction sections in these two genres are usually free from tables, figures and excerpts.

The striking differences between PhD thesis and MD writers were mostly in the use of hedges, boosters, evidentials, and self-mention markers. Regarding the use of hedges and boosters, this study revealed that while PhD thesis writers produced more tentative texts, MD writers were more assertive in their writing. This is reflected in the more frequent use of hedges and less frequent use of boosters in the PhD thesis sub-corpus when compared to the use of these devices in MD. This finding is in line with most of the previous metadiscourse studies (Hyland, 2004; Wu and Paltridge, 2021). In their study, Wu and Paltridge (2021), for example, compared the use of metadiscourse in PhD theses and MDs. The result showed that

MD thesis writers exhibited greater assertiveness than PhD thesis writers. This result conflicts with that of Qui and Ma (2019), who found that PhD thesis writers rarely used hedges in their writing. However, it was difficult to manage the variables influencing the use of hedges because their data was produced by both L1 and L2 writers. The use of boosters in Algerian PhD thesis introductions is lower than in MD introductions for a variety of reasons. First, at this level, PhD writers might be less assertive in stating their arguments after receiving a certain amount of training (Wu and Paltridge, 2021).

The special audience (jury members and a large number of readers) that characterizes the PhD thesis is reason enough for PhD thesis writers to be less assertive and more tentative to avoid counterargument. In contrast, MD writers were observed to be strong and assertive in tone. This might be explained by the fact that MD writers, at this level, lack the experience to manipulate the expression of tentativeness in their statements, as writing a MD is their first academic research project. Although hedging devices were employed more frequently by PhD thesis writers, MD writers preferred the use of hedging adjectives and adverbs. This is because, according to Milton and Hyland (1996), this type of metadiscourse may be easier for inexperienced authors to confidently work with. Adjectives and adverbs are more syntactically mobile in clause structure and provide clear scalable distinctions. This allows writers to increase or decrease their commitment to propositions while avoiding the significant risk of error associated with other hedging devices. On the other hand, although there were some shared lexical choices that functioned as boosters between PhD thesis and MD writers, careful analysis revealed that PhD thesis writers tended to use more verbs and nouns and fewer adjectives and adverbs for boosting than the MD writers did. This is also consistent with Wu and Paltridge (2021), who argued that the differences between PhD thesis and MD writers were not only in the frequency of occurrence but also in the use of specific boosting types.

In addition to that, PhD thesis introductions appeared to be more contextualized and grounded in the literature when compared to MD introductions. This is reflected in the frequency with which evidential is used in PhD thesis introductions. Through the use of evidentials, readers are invited to conceive of the author as a competent disciplinary member and to take his research seriously. In contrast, the low frequency of evidentials in the MD introductions makes these texts appear as if they are detached from the literature. Indeed, texts in which the arguments are not grounded in or supported by evidence (citations) may leave the reader unsatisfied. This finding agrees with the study carried out by Hyland (2004). In his

study, which examined the use of metadiscourse in MDs and PhD theses, Hyland (2004) found that evidentials were used more frequently in the PhD thesis when compared to MD. Evidentials, according to him, are very important in academic writing as they help to justify the writer's arguments and show the novelty of the writer's position. The importance of the evidentials in the PhD thesis is much more than this as they allow PhD thesis writers 'to display the field's literature and to establish a credible ethos that values a disciplinary research tradition (p. 141-142). With regard to the sub-categories of evidentials, it appeared that PhD thesis writers used more non-integral citation than integral citation. This finding is in line with most previous studies (Hyland and Feng, 2018; Nesi, 2021). Hyland and Feng (2018), for instance, revealed that the use of non-integral citation in academic writing has increased by over a third during the last 50 years while integral citation has decreased, representing only 15 percent of all citations. MD writers, however, showed the inclination to use fewer evidentials and balance their writing with both integral and non-integral citations, with a slight focus on the integral citations. The questions that lurk around are why did PhD thesis writers focus more on the message rather than on the source of the message and why did MD writers focus on the source rather than on the message? One possible reason is that PhD thesis writers might have access to international journals and recent scientific publications, which helped them to have some knowledge about the conventional ways of citation. Another reason might be that in the introduction section, PhD thesis writers present new arguments with the hope of being accepted by the discourse community members.

Therefore, there was a high tendency to focus on the message rather than on the source. This finding is in line with most of the previous studies (Jalilifar 2012; Mansourizadeh and Ahmad 2011, Samraj; 2013) in which MD writers generally use more integral citations than PhD thesis and RA writers. In his comparison of citation in introductions of Applied Linguistics MD and RAs, Jalilifar (2012) found more use of integral citation in student writing when compared to RAs. He justified his finding by arguing that the integral citation might be the easiest way for novice writers to acknowledge the others' information. Indeed, the use of citations in students' writing was found to increase as they progress through the years of undergraduate study (Nesi, 2021). Mansourizadeh and Ahmad (2011) is another study which compared the use of citation in RAs authored by ESL expert writers and master students. Their findings revealed a greater use of integral citation by master students. The latter used the integral citation mainly to provide comparison of their results with other

research. In the same vein, Samraj (2013) found that the integral citation is prominent in master students' writing in comparison with RAs.

One surprising and noteworthy finding in this study is the overuse of self-mentions in the MD introductions when compared to the employment of this type of interactional metadiscourse in the PhD thesis introductions. Although this finding is in line with that of Wu and Paltridge (2021), who asserted that there is an overall decreasing trend in the use of self-mentions from MD to PhD thesis, this finding was not expected. This is because MD writers (Algerian master students) are taught that self-representation is against academic writing requirements. Despite the fact that all academic writings in this study are single-author papers, we noticed the absence of the self-mention 'I' in both sub-corpus. Instead, MD writers were found to rely on the self-mention marker *we* more frequently than PhD thesis writers. This might be due to the MD writers' overdependence on their supervisors when performing their research. Another reason might be the linguistic and cultural background influence on master students' writing (Feghali, 1997; Hamadouche, 2005; Smith, 2005). Hamadouche (2005), for instance, argued that the influence of Arabic culture and language on Arab learners' English writing persists even at an advanced level. The excessive use of self-mentions in MD introductions served to establish what Hyland (2002) calls a "personal standing" in the text in order to demonstrate "a respectable scholarly identity" (p. 3), but this practice might be taken negatively. It could be interpreted as an overuse of a resource that is generally underused, as well as an inability to employ other resources like passive voice and anticipatory *it*.

Indeed, careful analysis revealed that MD writers were present in their text only when presenting the methodology of their research. This denotes that these writers preferred to be only researchers, leaving out other important roles such as reader-guiders and arguers (Flottum, 2012). In other words, MD writers were found invisible while making decisions, stating arguments, and presenting the findings of their studies. On the other hand, the low frequency of self-mention markers in the texts of the Algerian PhD thesis writers compared to those of MD writers might be the result of a lack of awareness and a misunderstanding of the rhetorical conventions of academic writing. Algerian PhD thesis writers were more likely to conceive academic writing as statements of objective fact rather than subjective personal arguments. As a result, they tried to be invisible, hiding their positions and showing less awareness to their readers. This is reflected in the absence of personal pronouns, possessive determiners, and third person nominal phrases.

However, the notion that being invisible in texts promotes objectivity is no longer accurate since it has been refuted by numerous scholars working in the area of metadiscourse theory. Hyland and Tse (2004), for instance, argued that as authors gain experience, they become more at ease using self-mentions to make claims about themselves. Other researchers conceive the use of the self-mention marker as a promotional strategy (Soler-Monreal, 2015; Thompson, 2012). These studies contend that in order to be convincing while producing academic writings, authors must convey their own individual authority as subject matter experts and accept responsibility for all the decisions made at different stages of the research. Based on these Algerian writers of academic writings, particularly PhD thesis writers are advised to be more visible in all parts of their texts. To achieve this, writers need to be present as researchers, writers, and arguers in their academic texts.

Conclusion

This chapter presented and discussed the use of metadiscourse in the four sub-corpus. It also compared the use of metadiscourse devices in the RA introductions authored by the Algerian and NE writers. In doing so, It was revealed that the NE writers of RA demonstrated a higher tendency to use interactive metadiscourse than the Algerian writers of RA. More interactive metadiscourse was used by PhD thesis writers than by MD thesis writers. The analysis of nativeness and non-nativeness showed that although NE writers were more interested with establishing an international context for their studies, Algerian writers were more concerned with the structure of their academic works.



General Conclusion



General Conclusion

The aim of the present study is twofold. First, this study aimed to explore the ways Algerian authors rhetorically organize their academic writing (RAs, PhD theses, and MDs) introductions and the ways these authors use metadiscourse devices either to organise their texts or to create relationships with their readers. This study compared Algerian academic writings (RAs) to those written by native English speakers. The motivation behind this thesis is to provide a detailed and in-depth linguistic analysis of introductions as a sub-genre in RAs, PhD theses, and MDs in applied linguistics. This study, which is based on move-step analysis and metadiscourse theory, is intended to fill a gap in the literature, as the majority of other studies have only focused on RA introductions written by NE writers, and there has been little research into the genre and metadiscourse of the PhD thesis and MD. By doing this, we hope to give university students who are non-native writers, including Algerian writers, a deep understanding of how to write an acceptable introduction for a research paper. We are not suggesting that Algerian authors should write their academic works in the NE style or that NE academic writing is the standard that must be strictly followed. Instead, we are attempting to present the most acceptable and conventional methods of rhetorical organization or the use of metadiscourse devices in academic writing in English.

In conducting this study, two corpora were created. The first corpus consists of RAs authored by NE and Algerian writers, while the second corpus comprises PhD theses and MDs produced by Algerian EFL learners. Thus, there are 60 academic research papers in the corpus as a whole: 15 PhD theses, 15 MDs, 15 RAs written by Algerian writers, and 15 RAs written by NE writers. To examine the RS of these academic writings' introductions, we adopted Swales' (2004) model. Concerning metadiscourse analysis, we adopted Hyland's (2005) taxonomy.

There has been very little research on move analysis and metadiscourse use with a thorough and detailed linguistic analysis that might help EFL learners produce their academic writings. Most of the previous genre studies focused on the introduction of RAs. Although the number of these studies was high, most of these, if not all, were carried out quantitatively. In other words, rather than providing a comprehensive explanation of how academic works are rhetorically organised, these studies focused on the frequency of moves and metadiscourse devices. Besides, we found few studies on genre analysis and metadiscourse use in PhD theses, while similar studies on MDs were found to be rare in the literature. Studies on

academic writings that employ a combined methodology (move analysis and metadiscourse theory) are also often scarce. Furthermore, few genre and metadiscourse studies were conducted on how Algerian learners of English as a foreign language rhetorically organise their academic writings and how these writers use metadiscourse devices to organise their texts or to create relationships with their potential readers. Based on this, this paper addressed the following research questions to fill this gap:

a) The rhetorical structure questions

2. What are the move-step structures of RA introductions written by native English-speaking experts and Algerian EFL experts?

1.1. To what extent do the move-step structures in the RA introductions written by Algerian EFL experts differ from those written by native English-speaking experts?

1.1. Do the move-step structures of RA introductions written by Algerian EFL expert and native English-speaking experts conform to Swales (2004) model?

2. What are the move-step structures of PhD thesis and MA dissertations introductions written by Algerian EFL learners?

2.1. To what extent do the moves –step structure in PhD thesis introductions written by Algerian EFL learners conform to those in research article introductions written by Experts?

2.2. Do the move –step structures of PhD thesis introductions written by Algerian EFL learners conform to Swales (2004) model?

2.3. Do the move –step structures of MA dissertation introductions written by Algerian EFL learners conform to Swales (2004) model?

2.4. What are the major differences between different academic proficiency levels in terms of the move-step structures?

b) Metadiscourse questions

3. What are the metadiscourse devices used by Algerian EFL experts and native English speaking experts in their RA introductions?

3.1. What are the metadiscourse devices used by Algerian EFL learners in their PhD thesis and MA dissertation introductions?

3.2. To what extent does the use of metadiscourse devices in RA introductions written by native English- speaking experts differ from those employed by Algerian experts?

3.3. What are the metadiscourse devices used by Algerian EFL learner in their PhD thesis and MA dissertation introductions?

To address these research questions, we relied on both qualitative and quantitative methods. We read all the academic writing introductions, trying to make boundaries between different rhetorical moves relying on their communicative purposes and to identify all metadiscourse devices in the corpora. In demarcating the moves and steps in the corpus, we relied on the adapted CARS model (Swales, 2004). To identify the metadiscourse devices employed by Algerian and NE writers in their RA introductions, we employed the adapted Hyland's (2005) model and the AntConc software to locate all metadiscourse in the corpora. The identification of metadiscourse devices was not an easy task since most of the metadiscourse devices can function internally or externally. In other words, some metadiscourse devices can be used to rhetorically organise the text and bring the reader into the text (internally), or they can be used to talk about situations in the world (externally).

The results obtained from study revealed much with regard to the RS and metadiscourse use. In considering the RS, the frequency of moves and steps, and preferences of the rhetorical patterns were highlighted and discussed. With regard to metadiscourse use, the frequency of distribution, categories and sub-categories of metadiscourse and functions of these metadiscourse devices were also highlighted and discussed. In both cases, similarities and differences regarding both aspects were identified and interpreted.

Regarding the RS of introductions, this study showed that, in terms of the frequency of distribution and the status of the moves and steps, the three moves introduced in the CARS model were not only widely employed but also obligatory moves in the RA introductions written by NE writers. In contrast, the CARS three moves were mostly conventional or optional in most academic writing introductions authored by Algerian writers. In addition, the absence of Move 2 and its unconventional realization in most Algerian academic writing introductions was the prominent characteristic that made NE and Algerian writers' academic writings different. In other words, the Introductions generally tended to follow a two-move framework when compared to those written by NE writers.

The analysis also revealed that NE writers used more moves in their RA introductions when compared to the Algerian writers of RAs. Additionally, the two groups of writers used different rhetorical strategies to realize each move. The Algerian writers chose to realize the

moves succinctly by using a limited number of rhetorical strategies in each move, in contrast to NE authors who tended to use all the steps outlined in Swales' (2004) model. With regard to the PhD thesis and MD, the analysis revealed that while the PhD thesis followed a liberal rhetorical framework, where newly identified steps were employed and no common pattern could be identified, the MD writers deviated to some extent from the CARS model. The linguistic realization of the moves and steps also highlighted a difference in the writers' preferences for linguistic choices. The RA introductions authored by NE writers were highly and clearly structured using a rich source of appropriate linguistic elements.

The introductions of RAs written by Algerian authors, however, were poorly constructed, making it difficult to discern the employed moves and steps. In addition, NE writers are more likely to use move cyclicity in their RA introductions than Algerian writers are. Although 60% of the NE writers adhered to the strict pattern (M1-M2-M3), they also repeated the moves that were used in more than 30% of the sub-corpus, with M2 and M3 being the most frequently used. In contrast, the majority of Algerian RA introductions followed the two-moves or the strict pattern structure, leaving no room for move cyclicity. The move cyclicity, particularly step 1 in move 3, was identified in MD introductions but more in the PhD thesis introductions. This could be explained by the fact that the PhD thesis writers used move cyclicity as a promotional rhetorical strategy.

In the second part of this study, the analysis of academic writing introductions written by Algerian and NE authors revealed that both categories of metadiscourse, interactive and interactional metadiscourse, were used in all sub-corpuses. This illustrates how metadiscourse is significant in academic and professional genres. The analysis showed also that the interactive features outweighed the interactional features in RA introductions authored by NE writers; the Algerian writers focused more on the use of interactional metadiscourse. In other words, the linguistic choices used to organise the introductions were more common than the language used to establish or create relationships with potential readers in the introductions authored by NE writers. This suggests that the NE writers were aware of the readers' needs and knowledge of what had to be made apparent for them to easily understand the message.

Despite their lower usage of interactional metadiscourse in all RA introductions examined in this study, this type of metadiscourse was found to be used slightly more in RA introductions authored by NE. This demonstrates that both groups of writers opted for interaction with the readers to provide a clearer interpretive situation. It demonstrates also the

awareness of both groups of writers about the power of these markers in RA writing. When compared to MD writers, PhD thesis writers appeared to place a greater emphasis on interactive metadiscourse. However, both groups of writers similarly employed interactional metadiscourse, at least in the frequency of use.

Another interesting finding is that although the introductions in PhD theses and MDs tend to be longer, which entails the use of more metadiscourse, than the introductions in RAs, this study revealed that the writers of RA introductions employed more metadiscourse than the PhD thesis and MD did. This finding contradicts previous metadiscourse studies (Hyland, 2004, 2005; Paltridge and Starfield, 2007; Swales, 1990), which revealed that the lengthier the introduction is, the more metadiscourse is needed. This finding, however, is in line with that of Kawase (2015), who revealed that writers of RA introductions tend to use more metadiscourse when compared to PhD thesis writers. In this sense, it can be argued that though the length of the introduction may have some impact on the use of metadiscourse, the writer's awareness of how he wants his text to be might be the main factor in decision-making regarding the use of metadiscourse.

As for the sub-categories of metadiscourse, it was revealed that certain metadiscourse categories were employed similarly by both groups of writers, at least at the frequency of distribution level, while other sub-categories were employed differently. Indeed, there were some differences in the use of individual types of metadiscourse, but the use of evidentials was the most defining characteristic that differentiated between the introductions authored by Algerian and NE writers. In other words, evidentials were found to be heavily used in the introductions authored by NE writers. In contrast, this type of metadiscourse tended to be rare in all the academic writing introductions authored by Algerian writers. In addition to that, endophoric markers were more frequently employed by the PhD thesis and MD writers when compared to RA introductions written by Algerian and NE writers. This could be explained by the fact that the introductions in the PhD thesis and MD are usually long, which entails the use of more endophoric markers.

Based on this analysis, it can be argued that the introductions authored by NE writers tended to be argumentative where attention was given to the interaction between the writer, the text, and the reader. NE writers' introductions were found to be attached to the literature, which was reflected in the wide use of evidentials (references). On the other hand, the

Algerian writers seemed to produce narrative introductions characterized by the absence of self-representation, argument evaluation, reader involvement, and promotional strategies.

In addition, this study revealed that although the CARS model was created for examining the RS of RA introductions authored by expert writers, the flexibility of the model has made it possible for examining the non-expert or novice writers' texts. Indeed, the CARS model helped us to easily demarcate the moves and steps, particularly moves 2 and 3, in three sets of data, including RAs, PhD theses, and MDs. However, there are some notes about move 1. First, the frequency of occurrence of move 1 makes it an obligatory move in applied linguistic academic writing introductions authored by NE and Algerian writers. It is usually to construct a framework of knowledge with research evidence from topic generality to specificity.

As the analysis revealed, move 1 is mostly realized by three main and clear rhetorical steps, *claiming centrality*, *summarising items of the previous research*, and *topic generalization*. These three steps of move 1 were introduced in the Swalesian (1990) model. However, they were condensed into only one step, *topic generalization of increasing specificity*, in the CARS model (Swales, 2004). The findings of this study do not contradict those of Swales (2004), as the interaction of three steps leads the RA introduction to move smoothly from topic generalization to increasing specificity. Nonetheless, based on what is found, we can argue that the condensation of these steps into one step might not be useful, at least in the applied linguistics discipline, as it leads us to overlook crucial rhetorical strategies used by authors of RA introductions. In addition, this study identified new rhetorical steps, particularly in the PhD thesis and MD introductions, which were not included in the CARS model. These include *indicating the gap in the real world*, *storytelling*, *criticizing the academic context*, *justification for method selection*; *limitations*; and the *definition of key terms*. Even though some of these newly identified steps, particularly the first three steps, were already discovered by previous studies and this research is not the first to modify the model, the modification of the CARS model in this study can still be recognized as novel. This is because the current study provides additional empirical evidence to support earlier studies (such as Sheldon, 2011), which called for new CARS model modifications. Importantly, other genre analysis researchers can now examine academic and professional academic writings written by novice and non-expert writers using the newly suggested model, which will add to the body of already present knowledge in the literature.

The move-step structure analysis carried out in this study sheds light on how to categorize the moves based on their communicative purposes. As demonstrated in chapter four, there is no agreed upon criteria for determining the status of moves and steps. The literature revealed that most of the previous studies relied on different ways of move categorization, though most of them were drawn on the typical two-way distinction between obligatory and optional moves, with variation in the frequency of occurrence of moves and steps. The findings of this study revealed that categorizing the moves and steps into only two categories, obligatory and optional, is too limited and not workable. Therefore, it becomes necessary to differentiate between those that are common and those that are uncommon and may be distinctive. We have therefore suggested a three-way distinction following Kanoksilapatham (2015): obligatory, conventional, and optional. Based on this, a move with a percentage that equals or exceeds 90% is considered an obligatory move, while it can be described as conventional if its frequency of occurrences ranges between 60 and 90 %. If a move occurs less than 60% of the time in the corpus, it can be characterized as an optional move.

The examination of the rhetorical differences between Algerian and NE writing products is another contribution of this study. As illustrated in chapters five and six, differences and similarities between Algerian and NE writers were highlighted. To the best of my knowledge, this kind of cross-context analysis of RAs, PhD theses, and MD introductions in the same language (that is, the English language), in the same field (that is, applied linguistics), but written by authors from different linguistic backgrounds and cultures, as well as different professional levels, is rarely conducted.

The incorporation of move-based genre analysis and metadiscourse analysis is an important theoretical and methodological contribution as it has the potential to inform this type of research and practice. The combination of these two unique but complementary theories (genre analysis and metadiscourse) allows us to gain a deeper understanding of how language is used in a certain context or genre, as well as how context drives word selection. The textual analysis in this study, which included inter-coder reliability analysis performed by a university professor and two top master students to code a section of the texts, reinforced the move-based genre analysis processes. Additionally, the analysis of move-step organization with metadiscourse use produces beneficial outcomes that are relevant for pedagogy.

Another valuable contribution to genre analysis theory made in this study is the clarification of some terms used interchangeably in the literature. We traced the uses and the meanings associated with terms such as “generic structure,” “rhetorical structure,” “overall structure,” and “move structure.” These terms were found to be used by most previous genre studies without a clear-cut definition. In this study, we defined each term to highlight how these overlapped concepts differ from one another. In this matter, we argued that the term “schematic structure,” following Swales (1990), is used to mean the prototypical organization of moves in a particular genre. The terms “move structure” and “rhetorical structure”, on the other hand, are used to refer to how the moves in a particular genre (or sub-genre) are organised. Lastly, the term “generic structure” is used to refer to the overall organization of a particular genre (thesis, dissertation, RA, etc.). For instance, the generic structure of an experimental RA usually includes an abstract, introduction, method, result, discussion, and conclusion section.

Having good knowledge about the rhetorical organization of academic genres and the acceptable ways of using metadiscourse devices would provide English learners, native or non-native, with not only a thorough understanding of specific texts but also how these texts are rhetorically organised and linguistically realized (Hyland, 2005; Loi and Evans, 2010; Swales, 2004). Indeed, in the case of beginner EFL writers and graduate EFL learners in Algeria, knowledge of the rhetorical organization of texts, as well as their communicative objectives and knowledge of metadiscourse use gathered from this study, might help them better grasp academic reading and writing. The insights obtained from the comparison of Algerian academic works and NE RAs, particularly those published in leading international journals, might allow them to organise their academic works in a form that meets the expectations of the international academic discourse community.

It can also lower the possibility of rejecting the Algerian learners’ RAs in case of publishing their RAs in international journals. As it is argued by several researchers in the field of applied linguistics and studies in genre analysis (Flowerdew, 2016; Hilary, personal communication, February 20, 2019; Samraj, 2008; Swales, 1999, 2004), most RAs written by non-native English writers, including Algerian learners, are not usually accepted in international journals. The language used by non-native learners in their RAs, according to these studies, is inappropriate in two aspects. On the one hand, their language does not meet the international discourse community's expectations. On the other hand, the language used by these writers is not appropriate to their discipline (Flowerdew, 2016). Therefore, insights from

this study, which employed authentic academic texts to reveal how academic works are structured and how metadiscoursal elements are frequently used, as well as the pragmatic functions they perform in the introduction section of different academic research might help non-native English learners to effectively write their academic works. The current study contributes to a greater understanding of the forms and functions of recurring patterned expressions or metadiscourse use in academic papers, as well as how they can help writers improve their general proficiency in writing academic papers, either for publication or academic papers that meet their international discourse communities.

The findings of this study are significant for advanced academic writing instruction, particularly for authors who wish to have their work published in English. Even though the size of the corpus is limited and the results cannot be generalized to the whole population of academic writers, the findings still advance our understanding of cross-cultural and foreign-language writing. The careful examination of the move-step structure has also revealed textual cultural patterns by relying on metadiscourse theory as an additional approach. The extensive explanation of how metadiscourse devices were employed in this study gives foreign language learners, including Algerian learners of English as a foreign language, helpful insights into how to create acceptable academic research papers. By comparing Algerian academic writings to NE writers' writing as the norm, it is hoped that the findings will help EFL writers better understand the ways of knowledge construction and dissemination. Indeed, writers who are aware of written cultural differences in creating a research space, situating themselves in their texts, and engaging readers through the use of appropriate metadiscourse devices will produce acceptable academic works.

The results of the current study might also be used in the supervision of FL graduate students to help them react more effectively to the discourse community's expectations, providing them with appropriate ways of writing academic genres, particularly the introduction section. Master students in Algeria may benefit from this academic study, giving them a better understanding of how academic works are organised in terms of rhetorical moves and metadiscourse use. Even though master's students are not required to write a RA or a PhD thesis until they graduate, this study would give them practical examples of structural analysis and show them how to address both the text and their intended readers. Reading instructions and manuals is a typical strategy used by master students in Algerian universities to assist with writing their MDs. However, this material offers little more than surface linguistic analysis and a few strategies and suggestions on how to write a master's dissertation

Flowerdew, 2016; Ventola & Mauranen , 1996). Therefore, this study helps them not only to understand the ways academic works are rhetorically organised but also to understand that writing is not a matter of gathering arguments but an interaction between the writer, the text, and the reader. The analysis of metadiscourse assists FL students in learning about discourse markers in a systematic manner, as well as how and when to use these discourse markers, and to pay more attention to the writer-reader interaction.

Furthermore, as demonstrated in this study, focusing on the differences between the introductions in RAs, MDs, and PhD theses, as well as the language gaps between NE and foreign language learners, will enable novice academic writers, particularly foreign language learners, to achieve good knowledge of academic writing. This knowledge might help foreign language learners understand to what extent their academic writing differs from NE academic writing. We do not mean here that foreign language learners should achieve the same level of NE writing, but at least achieve acceptable academic writing.

Although this study provides some useful insights into the frequency of occurrence and status of moves and steps, rhetorical pattern preferences, and the ways writers use language to create coherent texts and establish relationships with readers, it is not without limitations. Firstly, while the texts (introductions) analyzed in this study are authentic (all of the introductions are genuine students' and researchers' works), the corpus is small, with only 15 introductions per genre. Although a small corpus may help researchers, as explained in chapter 4, working in the fields of genre analysis and metadiscourse theory, to provide an in-depth linguistic description of how academic writings are rhetorically organised, a corpus with a large number of texts may provide additional evidence on which to base more general conclusions, allowing the findings to be generalized. Indeed, the larger the corpus is, the more the data represents the writing behaviors of a particular discourse community. Secondly, as the current study examined the introduction sections in academic writings (PhD theses, MDs, and RAs), the researcher was not able to control the audience variable.

As it was mentioned earlier (see chapter 3, section 3.1.3), although there is a relationship between these genres in terms of recontextualization, they are expected to have different audiences. The process of writing a PhD thesis and MD is influenced by the local discourse community (one or two teachers for MD and four or five teachers for the PhD thesis) while writing RAs is influenced by both the reviewers and a large number of potential readers. Thirdly, given that the findings of this study relate to a single academic discipline

(i.e., Applied Linguistics), they may not apply to other disciplines. The literature has revealed that there are some conventional differences between different disciplines. Based on this, we do not know if the writing of Algerian learners in different disciplines (hard and soft) will exhibit the same patterns of diversity as in applied linguistics. As far as I am aware, Aggoun's (2020) study is the only one that has attempted to compare and contrast RAs from hard and soft disciplines. Her research provided in-depth insights into how Algerian writers rhetorically organise their RA introductions. It focused, however, solely on the rhetorical organization of RA introductions. Although English-language theses and dissertations in hard disciplines are uncommon in Algeria, more research can be done to determine the pattern of variation and the use of metadiscourse in soft disciplines like literature and translation.

Another limitation has to do with the subgenre under study. In other words, the analysis of the RS and metadiscourse devices in academic writing introductions was the focus of this study. As we know, the 'introduction section' is one of the sub-genres of an academic writing, which includes other sub-genres such as abstract, method, discussion, and a conclusion section. One of the possible limitations of the current study is that it only focuses on one part of a particular genre. Additionally, this study did not conduct interview surveys with either student writers or supervisors to support the assumptions regarding the thesis writers' intentions and their possible interactions with the supervisors. If we conducted interviews, especially with supervisors, we could gain valuable insight into the rhetorical performances of the Algerian writers and use their supervision experience to interpret the results.

Besides, this study examined metadiscourse devices, which are only a single word or a small chunk, such as "although" or "in chapter 2". This could be another limitation of the second part of this study. Conducting a study on how long word chunks are used to assist foreign language learners may be beneficial as it may lead to acceptable academic production. However, this study did not include this form of metadiscourse. Because Algerian academic research authors write for a diverse readership, having merely a basic understanding of small word sequences would be insufficient and unproductive. If Algerian writers want their research papers to be published in international publications and be accessed by audiences from different backgrounds, they must improve their academic writing skills, relying more on different metadiscourse categories and different word combinations (Hyland, 2008).

Though the current study has a number of limitations, its findings can serve as a trigger for other researchers to conduct further research by examining the RS and metadiscourse use

in a large corpus of academic writing introductions. This might help to cover a large number of Algerian EFL learners, leading to the possibility to generalize the findings. Other contrastive genre analyses of sub-genres, such as the literature review, the method, and the conclusion, are required. Such research would be very helpful to both graduate and undergraduate students as well as their supervisors. Studies of other parts of a given genre would also give us good insights into how academic writers organise their rhetorical arguments in different parts of a given genre. The only study, as far as I know, that examined the abstract, introduction, and acknowledgment of a magister thesis authored by Algerian writers was that of Amara (2006). Her study provided good perspectives on the Algerian writers' rhetorical preferences, revealing the forces that shaped the writing productions in different parts of the magister thesis; however, it had several limitations, including the size of the corpus (12 magister theses), one single discipline (linguistics), and the corpus which was collected from one Algerian university (Algiers). Studies on different sub-genres may also provide us with knowledge on how writers use linguistic elements to organise their discourses and the ways these writers address their potential readers. Not only this, but these studies may also demonstrate the similarities and differences in terms of the RS and metadiscourse use between writers from different linguistic backgrounds and cultures.

Furthermore, other contrastive genre studies might be carried out to investigate and find out the interdisciplinary variation between two or more interrelated disciplines. Master's and doctoral students would benefit from genre studies that investigate interrelated disciplines such as linguistics, literature, and translation to gain a better understanding of standard practices in academic works. Further research may examine the way authors use metadiscourse across each move in a specific genre. Identifying and highlighting the metadiscourse devices used in each move would help us to achieve a better understanding of how writers use different metadiscourse elements in different parts of a particular genre to achieve the overall rhetorical purpose. A further difference between academic writings authored by NE writers and those written by Algerian authors is that move 2, which creates a niche, is generally missing from Algerian sub-corpus. We do not know whether the absence of this important move in academic writing introduction is a weakness or a convention. Therefore, more research is needed to determine the causes of the absence of this crucial move. With regard to metadiscourse devices, the absence of evidentials in most of the academic writing introductions written by Algerian authors requires further research. By

conducting such research, the reasons behind the absence of this important category of metadiscourse can be highlighted.

To effectively write an introduction section of academic writings (be it a RA, a PhD thesis, or a MD), authors need to demonstrate their stance towards their claims and arguments and encourage potential readers to get involved in texts and accept their claims. To achieve this, authors must produce suitable critical comments, judge or make comments concerning empirical evidence and present their findings. The manifestation of position and the projection of authorial identity in academic writing has recently been recognized in many academic discourse communities (Hyland, 2005; Wu and Paltridge, 2021), as opposed to the conventional idea that academic discourse should be limited within the bounds of objectivity. Most studies in the field of genre analysis and metadiscourse studies over the last few decades have concluded that the extent to which writers use linguistic items appropriately and effectively-thereby making the text more interactive and engaging with the readers-is a significant indicator of their writing competence.

The examined academic writing introductions, authored by Algerian writers, cannot be regarded as unacceptable academic writings for many reasons. First, these research papers were peer reviewed by a group of experts in the applied linguistic discipline, including journal reviewers, scientific committees, and university teachers. Second, EFL writers are not required to strictly follow the NE writers' conventions and norms. However, we can argue that the Algerian academic writings are highly localized. This was reflected in the absence of promotional rhetorical strategies at both the macro and micro levels. At the macro level, it has been revealed that these academic writing introductions lack a number of important moves and steps. These include, for instance, the absence of the claiming centrality step, particularly in MDs and RAs, move 2, which was given little attention, *indicating a gap in research* step, which was totally absent in all academic writing introductions. At the micro level, we have also noticed a lack of appropriate metadiscourse devices that aid in the creation of acceptable academic research papers. These include, for instance, the absence and misuse of hedges and boosters; the absence of evidentials in RAs and MDs; the absence of the writers' identity and voice in all academic writing introductions; and finally, the absence of engagement markers, leading to a failure to take readers into consideration. Based on this, we can claim that although Algerian academic writing introductions still operate successfully, the above-mentioned deficiencies and others may lead to failure in both publishing academic writings in reputable international journals and receiving the attention they deserve from the international

discourse community. In addition to that, the Algerian EFL writers need to be aware of the fact that “academic writing has gradually lost its traditional tag as an objective, faceless and impersonal form of discourse and come to be seen as persuasive endeavour involving interaction between writers and readers” (Hyland, 2005, p. 65).



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Appendices

Appendix 1: Distribution of Moves and Steps in RA Introductions Authored by NE Writers

Appendix 2: Distribution of Moves and Steps in the RA Written by Algerian Learners

Appendix 3: The percentages and status of moves and steps in RA introductions authored by Algerian and native English writers

Appendix 4: Distribution of Moves and Steps in the Algerian PhD Thesis Introductions

Appendix 5: Distribution of Moves and Steps in the MD introductions Written by Algerian EFL Learners

Appendix 6: The percentages and status of moves and steps in introductions of PhD these and Master's dissertations

Appendix 7: The Sub-Corpus of Research Articles Authored by Algerian Writers

Appendix 8: The Sub- Corpus of Research Articles Authored by Native English Writers

Appendix 9: The Sub- Corpus of PhD Theses Authored by Algerian Writers

Appendix 10: The Sub-Corpus of Master's Dissertations Authored by Algerian Writers

Appendix 11: Hyland's (2005) list of metadiscourse devices

Appendix 12: Personal E-mail Communications



Appendices:

Appendix-1

Distribution of Moves and Steps in RA Introductions Authored by NE Writers

RAIs	Move-step distribution of the RA introductions written by native English writers														No
NSRAI1	M1S1	M1S2	M1S3	M2S1a	M2S1b	M2S1D	M2S2	M3S1	M3S2	M3S3	M3S4	M3S5	M3S6	M3S7	9
NSRAI2	M1S1	M1S2	M1S3	M2S1a	M2S1b	M2S1D	M2S2	M3S1	M3S2	M3S3	M3S4	M3S5	M3S6	M3S7	5
NSRAI3	M1S1	M1S2	M1S3	M2S1a	M2S1b	M2S1D	M2S2	M3S1	M3S2	M3S3	M3S4	M3S5	M3S6	M3S7	7
NSRAI4	M1S1	M1S2	M1S3	M2S1a	M2S1b	M2S1D	M2S2	M3S1	M3S2	M3S3	M3S4	M3S5	M3S6	M3S7	8
NSRAI5	M1S1	M1S2	M1S3	M2S1a	M2S1b	M2S1D	M2S2	M3S1	M3S2	M3S3	M3S4	M3S5	M3S6	M3S7	6
NSRAI6	M1S1	M1S2	M1S3	M2S1a	M2S1b	M2S1D	M2S2	M3S1	M3S2	M3S3	M3S4	M3S5	M3S6	M3S7	5
NSRAI7	M1S1	M1S2	M1S3	M2S1a	M2S1b	M2S1D	M2S2	M3S1	M3S2	M3S3	M3S4	M3S5	M3S6	M3S7	7
NSRAI8	M1S1	M1S2	M1S3	M2S1a	M2S1b	M2S1D	M2S2	M3S1	M3S2	M3S3	M3S4	M3S5	M3S6	M3S7	6
NSRAI9	M1S1	M1S2	M1S3	M2S1a	M2S1b	M2S1D	M2S2	M3S1	M3S2	M3S3	M3S4	M3S5	M3S6	M3S7	5
NSRAI10	M1S1	M1S2	M1S3	M2S1a	M2S1b	M2S1D	M2S2	M3S1	M3S2	M3S3	M3S4	M3S5	M3S6	M3S7	6
NSRAI11	M1S1	M1S2	M1S3	M2S1a	M2S1b	M2S1D	M2S2	M3S1	M3S2	M3S3	M3S4	M3S5	M3S6	M3S7	6
NSRAI12	M1S1	M1S2	M1S3	M2S1a	M2S1b	M2S1D	M2S2	M3S1	M3S2	M3S3	M3S4	M3S5	M3S6	M3S7	7
NSRAI13	M1S1	M1S2	M1S3	M2S1a	M2S1b	M2S1D	M2S2	M3S1	M3S2	M3S3	M3S4	M3S5	M3S6	M3S7	5
NSRAI14	M1S1	M1S2	M1S3	M2S1a	M2S1b	M2S1D	M2S2	M3S1	M3S2	M3S3	M3S4	M3S5	M3S6	M3S7	7
NSRAI15	M1S1	M1S2	M1S3	M2S1a	M2S1b	M2S1D	M2S2	M3S1	M3S2	M3S3	M3S4	M3S5	M3S6	M3S7	5
Total	14	7	15	14	2	1	7	15	3	2	7	1	2	4	94

Appendix-2

Distribution of Moves and Steps in the RA Written by Algerian Learners

RA's			Move-step distribution of the RA introductions written by Algerian writers												No
ARAI1	M1S1	M1S2	M1S3	M2S1a	M2S1b	M2S1D	M2S2	M3S1	M3S2	M3S3	M3S4	M3S5	M3S6	M3S7	6
ARAI2	M1S1	M1S2	M1S3	M2S1a	M2S1b	M2S1D	M2S2	M3S1	M3S2	M3S3	M3S4	M3S5	M3S6	M3S7	6
ARAI3	M1S1	M1S2	M1S3	M2S1a	M2S1b	M2S1D	M2S2	M3S1	M3S2	M3S3	M3S4	M3S5	M3S6	M3S7	3
ARAI4	M1S1	M1S2	M1S3	M2S1a	M2S1b	M2S1D	M2S2	M3S1	M3S2	M3S3	M3S4	M3S5	M3S6	M3S7	7
ARAI5	M1S1	M1S2	M1S3	M2S1a	M2S1b	M2S1D	M2S2	M3S1	M3S2	M3S3	M3S4	M3S5	M3S6	M3S7	3
ARAI6	M1S1	M1S2	M1S3	M2S1a	M2S1b	M2S1D	M2S2	M3S1	M3S2	M3S3	M3S4	M3S5	M3S6	M3S7	3
ARAI7	M1S1	M1S2	M1S3	M2S1a	M2S1b	M2S1D	M2S2	M3S1	M3S2	M3S3	M3S4	M3S5	M3S6	M3S7	9
ARAI8	M1S1	M1S2	M1S3	M2S1a	M2S1b	M2S1D	M2S2	M3S1	M3S2	M3S3	M3S4	M3S5	M3S6	M3S7	2
ARAI9	M1S1	M1S2	M1S3	M2S1a	M2S1b	M2S1D	M2S2	M3S1	M3S2	M3S3	M3S4	M3S5	M3S6	M3S7	2
ARAI10	M1S1	M1S2	M1S3	M2S1a	M2S1b	M2S1D	M2S2	M3S1	M3S2	M3S3	M3S4	M3S5	M3S6	M3S7	4
ARAI11	M1S1	M1S2	M1S3	M2S1a	M2S1b	M2S1D	M2S2	M3S1	M3S2	M3S3	M3S4	M3S5	M3S6	M3S7	4
ARAI12	M1S1	M1S2	M1S3	M2S1a	M2S1b	M2S1D	M2S2	M3S1	M3S2	M3S3	M3S4	M3S5	M3S6	M3S7	5
ARAI13	M1S1	M1S2	M1S3	M2S1a	M2S1b	M2S1D	M2S2	M3S1	M3S2	M3S3	M3S4	M3S5	M3S6	M3S7	3
ARAI14	M1S1	M1S2	M1S3	M2S1a	M2S1b	M2S1D	M2S2	M3S1	M3S2	M3S3	M3S4	M3S5	M3S6	M3S7	4
ARAI15	M1S1	M1S2	M1S3	M2S1a	M2S1b	M2S1D	M2S2	M3S1	M3S2	M3S3	M3S4	M3S5	M3S6	M3S7	4
Total	7	6	4	4	1	7	2	14	6	4	3	2	3	2	65

Appendix-3

The percentages and status of moves and steps in RA introductions authored by
Algerian and native English writers

Moves and steps/ percentages and categories	ARAI			NSRAI		
	Obligatory	Conventional	Optional	Obligatory	Conventional	Optional
Move 1 : Establishing a territory		87%		100%		
Step 1: Claiming centrality			47%	93,33		
STep2: Making topic generalization			40%			47%
Step 3: Reviewing items of previous research			27%	100%		
Move 2: Establishing a niche		73%		100%		
Step 1A: Indicating a gap			26,67%	93%		
Step 1B: Adding to what is known			7%			13%
***Step 1D: Indicating a gap in the real world			46,67			6,66%
Step 2: Presenting positie justification			13%			47%
Move 3 :Presenting the present work	100%			100%		
Step 1: Announcing present research (descriptively and/or purposefully)	93%			100%		
Step 2: Presenting RQs or hypothesis			40%			20%
Step 3: Definitional clarifications			26,67%			13,33%
Step 4: Summarizing methods			20%			46,67%
Step 5: Announcing principle outcomes			13%			7%
Step 6: Stating the values of the present research			20%			13,33%
Step 7: Outlining the structure of the paper			13,33%			26,67%

Appendix-4

Distribution of Moves and Steps in the Algerian PhD Thesis Introductions

PhDTIs	Move-step distribution of the PhD thesis introductions written by Algerian writers														No
APhDTI1	M1S1	M1S2	M1S3	M2S1a	M2S1b	M2S1C	M2S2	M3S1	M3S2	M3S3	M3S4	M3S5	M3S6	M3S7	10
APhDTI2	M1S1	M1S2	M1S3	M2S1a	M2S1b	M2S1C	M2S2	M3S1	M3S2	M3S3	M3S4	M3S5	M3S6	M3S7	6
APhDTI3	M1S1	M1S2	M1S3	M2S1a	M2S1b	M2S1C	M2S2	M3S1	M3S2	M3S3	M3S4	M3S5	M3S6	M3S7	5
APhDTI4	M1S1	M1S2	M1S3	M2S1a	M2S1b	M2S1C	M2S2	M3S1	M3S2	M3S3	M3S4	M3S5	M3S6	M3S7	7
APhDTI5	M1S1	M1S2	M1S3	M2S1a	M2S1b	M2S1C	M2S2	M3S1	M3S2	M3S3	M3S4	M3S5	M3S6	M3S7	10
APhDTI6	M1S1	M1S2	M1S3	M2S1a	M2S1b	M2S1C	M2S2	M3S1	M3S2	M3S3	M3S4	M3S5	M3S6	M3S7	9
APhDTI7	M1S1	M1S2	M1S3	M2S1a	M2S1b	M2S1C	M2S2	M3S1	M3S2	M3S3	M3S4	M3S5	M3S6	M3S7	10
APhDTI8	M1S1	M1S2	M1S3	M2S1a	M2S1b	M2S1C	M2S2	M3S1	M3S2	M3S3	M3S4	M3S5	M3S6	M3S7	10
APhDTI9	M1S1	M1S2	M1S3	M2S1a	M2S1b	M2S1C	M2S2	M3S1	M3S2	M3S3	M3S4	M3S5	M3S6	M3S7	10
APhDTI10	M1S1	M1S2	M1S3	M2S1a	M2S1b	M2S1C	M2S2	M3S1	M3S2	M3S3	M3S4	M3S5	M3S6	M3S7	8
APhDTI11	M1S1	M1S2	M1S3	M2S1a	M2S1b	M2S1C	M2S2	M3S1	M3S2	M3S3	M3S4	M3S5	M3S6	M3S7	7
APhDTI12	M1S1	M1S2	M1S3	M2S1a	M2S1b	M2S1C	M2S2	M3S1	M3S2	M3S3	M3S4	M3S5	M3S6	M3S7	8
APhDTI13	M1S1	M1S2	M1S3	M2S1a	M2S1b	M2S1C	M2S2	M3S1	M3S2	M3S3	M3S4	M3S5	M3S6	M3S7	8
APhDTI14	M1S1	M1S2	M1S3	M2S1a	M2S1b	M2S1C	M2S2	M3S1	M3S2	M3S3	M3S4	M3S5	M3S6	M3S7	6
APhDTI15	M1S1	M1S2	M1S3	M2S1a	M2S1b	M2S1C	M2S2	M3S1	M3S2	M3S3	M3S4	M3S5	M3S6	M3S7	5
Total	13	2	9	5	1	12	9	15	14	4	13	1	6	15	119

Appendix 5

Distribution of Moves and Steps in the MD introductions Written by Algerian EFL Learners

MDIs	Move-step distribution of the MD introductions written by Algerian writers														No
AMD11	M1S1	M1S2	M1S3	M2S1a	M2S1b	M2S1D	M2S2	M3S1	M3S2	M3S3	M3S4	M3S5	M3S6	M3S7	6
AMD12	M1S1	M1S2	M1S3	M2S1a	M2S1b	M2S1D	M2S2	M3S1	M3S2	M3S3	M3S4	M3S5	M3S6	M3S7	5
AMD13	M1S1	M1S2	M1S3	M2S1a	M2S1b	M2S1D	M2S2	M3S1	M3S2	M3S3	M3S4	M3S5	M3S6	M3S7	9
AMD14	M1S1	M1S2	M1S3	M2S1a	M2S1b	M2S1D	M2S2	M3S1	M3S2	M3S3	M3S4	M3S5	M3S6	M3S7	4
AMD15	M1S1	M1S2	M1S3	M2S1a	M2S1b	M2S1D	M2S2	M3S1	M3S2	M3S3	M3S4	M3S5	M3S6	M3S7	6
AMD16	M1S1	M1S2	M1S3	M2S1a	M2S1b	M2S1D	M2S2	M3S1	M3S2	M3S3	M3S4	M3S5	M3S6	M3S7	6
AMD17	M1S1	M1S2	M1S3	M2S1a	M2S1b	M2S1D	M2S2	M3S1	M3S2	M3S3	M3S4	M3S5	M3S6	M3S7	7
AMD18	M1S1	M1S2	M1S3	M2S1a	M2S1b	M2S1D	M2S2	M3S1	M3S2	M3S3	M3S4	M3S5	M3S6	M3S7	8
AMD19	M1S1	M1S2	M1S3	M2S1a	M2S1b	M2S1D	M2S2	M3S1	M3S2	M3S3	M3S4	M3S5	M3S6	M3S7	6
AMD110	M1S1	M1S2	M1S3	M2S1a	M2S1b	M2S1D	M2S2	M3S1	M3S2	M3S3	M3S4	M3S5	M3S6	M3S7	9
AMD111	M1S1	M1S2	M1S3	M2S1a	M2S1b	M2S1D	M2S2	M3S1	M3S2	M3S3	M3S4	M3S5	M3S6	M3S7	7
AMD112	M1S1	M1S2	M1S3	M2S1a	M2S1b	M2S1D	M2S2	M3S1	M3S2	M3S3	M3S4	M3S5	M3S6	M3S7	5
AMD113	M1S1	M1S2	M1S3	M2S1a	M2S1b	M2S1D	M2S2	M3S1	M3S2	M3S3	M3S4	M3S5	M3S6	M3S7	6
AMD114	M1S1	M1S2	M1S3	M2S1a	M2S1b	M2S1D	M2S2	M3S1	M3S2	M3S3	M3S4	M3S5	M3S6	M3S7	5
AMD115	M1S1	M1S2	M1S3	M2S1a	M2S1b	M2S1D	M2S2	M3S1	M3S2	M3S3	M3S4	M3S5	M3S6	M3S7	5
Total	10	1	2	2	0	12	1	13	15	4	13	0	4	14	91

Appendix 6

The percentages and status of moves and steps in introductions of PhD these and Master's dissertations

Moves and steps/ percentages and categories	APhDTIs			AMDIs		
	Obligatory	Conventional	Optional	Obligatory	Conventional	Optional
Move 1 : Establishing a territory	93%				73%	
Step 1: Claiming centrality		86%			66,66%	
STep2: Making topic generalization			13%			6%
Step 3: Reviewing items of previous research		60%				13%
Move 2: Establishing a niche	93%				86%	
Step 1A: Indicating a gap in the research world			33,33%			13%
Step 1B: Adding to what is known			6%			0%
***Step 1D: Indicating a gap in the real world		80%			80%	
*** Story telling			40%			0%
*** Criticising the academic context			20%			0%
Step 2: Presenting positive justification		60%			6%	
Move 3 :Presenting the present work	100%			100%		
Step 1: Announcing present research (descriptively and/or purposefully)	100%			93%		
Step 2: Presenting RQs or hypothesis	93%			100%		
Step 3: Definitional clarifications			26,66%			26,66%
Step 4: Summarizing methods		86%			86,66%	
*** Justification for method selection			33,33%			0%
Step 5: Announcing principle outcomes			6%			0%
Step 6: Stating the values of the present research			40%			26,66%
*** Limitations			40%			6%
*** Definition of key terms			20%			26,66%
Step 7: Outlining the structure of the paper	100%			93%		

Appendix-7

The sub-corpus of research articles written by Algerian writers

Title	Date of Publication	
A Comparative Genre Analysis of Introduction Between National and International Journals. Case of Applied Linguistics Research Articles	2018	Human and Social Sciences Journal Batna 2 University
A Word-frequency Based Assessment of English as a Foreign Language Master One Students' Written Receptive and Productive Lexical Knowledge	2017	University of Mentouri ,Constantine
The Role of Written Corrective Feedback in Enhancing Students' Proficiency in Writing: Case of Second Year Students,University of Constantine 1	2018	University of Mentouri ,Constantine
An Investigation into First Year Students' Learning Strategies in Writing at the Department of English in Batna 2 University: Present Issues and Future Implications	2016	Human and Social Sciences Journal Batna 2 University
Developing the Composition Skills of English as a Foreign Language Learners through Blended Learning	2018	University of Mentouri ,Constantine
Difficulties Facing EFL Students in Narrative Paragraph Writing: The Case of First Year Students at Batna 2 University.	2020	Human and Social Sciences Journal Batna 2 University.
Effects of Learning Styles on Writing Skills of First Year LMD Students of English as a Foreign Language in Mohamed Lamine Debaghine Setif 2 University	2017	Revue des sciences sociales http://revues.univ-setif2.dz/
Form-based Feedback Versus Content-based Feedback for EFL Learners' Academic Writing Development: Learners' Perspectives and Preferences	2017	Human and Social Sciences Journal Batna 2 University
The Effect of Learning Styles and Motivation on Students'Vocabulary Acquisition: The Case of Second Year LMD Students of English at the University of Constantine1	2014	University of Mentouri ,Constantine
Investigating Algerian Use of English Modals: The Case of Second Year Master Students of English at the University "Frères Mentouri",Constantine 1	2018	University of Mentouri ,Constantine
Logical Connectors' Use and Writing Quality in EFL Learners and NativeSpeakers' Essay Writing	2016	University of Mentouri ,Constantine
Raising Teachers' Awareness of the Significance of Formulaic Sequences in Writing Proficiency	2017	University of Mentouri ,Constantine
The Correlation between Language Proficiency and the Use of Lexical Collocations by Algerian EFL Undergraduate Students in Essay Writings: a Case Study of Verb+ Noun Collocations	2017	University of Mentouri ,Constantine
Enhancing Problem-Solving Skills and Motivation through Cooperative	2018	University of Mentouri ,Constantine
Using Self-assessment as an Innovative Practice to Promote Self directed Language Learning in Higher Education	2015	Human and Social Sciences Journal Batna 2 University.

Appendix-8

The sub- corpus of research article authored by native English writers

Title	Date of Publication	University
The benefits of explicit teaching of language for curriculum learning in the physical education classroom	2019	Journal of English for Specific Purposes
Incidental vocabulary acquisition through L2 listening: A dimensions approach	2013	System
Integrating Appraisal Theory with possible selves in understanding university EFL writing	2018	System
Investigating the learning transfer of genre features and conceptual knowledge from an academic literacy course to business studies: Exploring the potential of dynamic assessment	2017	Journal of English for Academic Purposes
L2 development in an intensive Study Abroad EAP context	2018	System
Learning technical words through L1 and L2: Completeness and accuracy of word meanings	2015	English for Specific Purposes
Manipulating texture and cohesion in academic writing: A keystroke logging study	2020	Journal of English for Academic Purposes
Out-of-class language contact and vocabulary gain in a study abroad context	2015	System
Peer feedback in second language writing: Investigating junior secondary students' perspectives on inter-feedback and intra-feedback	2015	System
Phrases in EAP academic writing pedagogy: Illuminating Halliday's influence on research and practice	2020	Journal of English for Academic Purposes
Semantic patterning of grammatical keywords in undergraduate academic writing from two close disciplines	2019	Journal of English for Academic Purposes
Syntactic and lexical development in an intensive English for Academic Purposes programme	2015	Journal of English for Academic Purposes
The Differential Effects of Explicit and Implicit Instruction on EFL Learners' Use of Epistemic Stance	2013	Applied linguistics
The role of socio-economic factors in motivation to learn English as a foreign language: The case of Chile	2013	System
The short-term effects of individual corrective feedback on L2 pronunciation	2013	System

Appendix-9

The sub- corpus of PhD theses written by Algerian doctoral students

Title	Date	University
Investigating the Effect of Formative Assessment on Algerian Third Year Secondary School Pupils' Text Comprehension	2018	University of Tlemcen
The Effects of Reading Skills on the Development of Language Proficiency: Case of 1 St Year EFL Students. University of Tlemcen.	2016	University of Tlemcen
Vocabulary Attrition in the Discourse Comprehension Module: The Case of Second-Year EFL Students at The University of Tlemcen	2016	University of Tlemcen
Implementing a Competency Based Instructional Framework to Develop ESP Students' Reading Comprehension: Case of Master's Students of Political Sciences at Mohamed Boudiaf University-M'sila	2019	University of Tlemcen
Using Language Learning Strategies in Enhancing the Writing Skill The Case of EFL Learners at the Intensive Language Teaching Centre of Mostaganem University	2020	University of Tlemcen
Developing EST Learners' Pragmatic Competence in Writing Research Abstract: The case of 3 rd year Students of Agriculture at UKMO	2016	University of Ouargla
The Impact of Text Structure Awareness on ESP Learners' Reading Comprehension Case Study: Accounting and Finance at the University of Ghardaia	2017	University of Ouargla
Developing the Writing Skill through Written Discourse Analysis The Case of Second Year students of English at El-Oued University	2018	University of Ouargla
Developing EOP Learners' Reading Skills through discourse analysis :The case study of Third year Professional Licence-Drilling-KMUO	2018	University of Ouargla
Overcoming EFL Learners' Ethnocentric Discourse Through Developing Intercultural Communication Sensitivity The Case of 2nd Year Scientific Stream Students at Saaadaoui Rachid Secondary School in Zoui, Khenchela, Algeria	2018	University of Ouargla
Modelling Strategy Use for Enhancing Coherence in Foreign Language Writing The Case of Second-year Students of English at Laghouat University	2018	University of Constantine
The Impact of Corrective Feedback on Learners' Written Productions	2017	University of Constantine
The Effect of Using Monolingual English Learners'Dictionaries on EFL Students' In-depth Vocabulary knowledge The Case of 2 nd Year Students OF English at the University of Frères Mentouri, Constantine 1	2017	University of Constantine
The Effect of LT Cooperative Learning Model and Teacher's Feedback on EFL Students' Writing: The Case of Second Year Students of English at the Mentouri Brothers University, Constantine.	2016	University of Constantine
The Role of Explicit Teaching in Developing Grammatical and Lexical Cohesion in Second Year Students' Essays, University of Constantine 1	2018	University of Constantine

Appendix-10

The sub-corpus of Master's dissertations written by Algerian Master's students

Title	Date	University
The effects of watching English movies subtitled in mother tongue on learning vocabulary comprehension of the language: the case of second year EFL students at Tlemcen University	2019	University of Tlemcen
The Impact of Formative and Summative Assessment on EFL Classroom: case of LMD3 students at the department University	2019	University of Tlemcen
The Role of Peer Correction in Reducing Students' Writing Essays Mistakes Case study: Second year LMD English Students(2017/2018)	2018	University of Ouargla
Using Reading to Improve Writing Skills: the Case of First Year EFL Students at Tlemcen University	2019	University of Tlemcen
The Use of Literary Texts as a Teaching Tool to Enhance Skills: Case of 2nd Year EFL Students at Tlemcen University	2019	University of Tlemcen
The Impact of Teachers' Feedback on Students' Writing Competence: The Case of 3 rd Year EFL Students at Tlemcen University	2019	University of Tlemcen
The Use of Games in Teaching Descriptive Text Writing: The Case of 4 th grade pupils at Abu Der El Ghifari middle school, Beni-Tour -Ouargla	2020	University of Ouargla
The Impact of Graded Texts and Assessment Factors on students' Vocabulary Acquisition The Case Study of Third Year Secondary School Students.	2019	University of Ouargla
The Impact of Written Corrective Feedback on Enhancing EFL Writing Accuracy: A Case Study of Second Year License at KMOU	2020	University of Ouargla
The Role of Intensive Reading in Developing EFL Students' Writing Skill .The Case of Second Year LMD students of English at Ouargla University	2020	University of Ouargla
The Influence of Vocabulary Knowledge on the Students' Writing performance The Case of Third Year LMD Students, Department of English University "Frères Mentouri" Constantine 1	2018	University of Constantine
The Effect of Using Monolingual Vs Bilingual Dictionary on Vocabulary Comprehension The Case of Master One Students of English, University of Constantine	2020	University of Constantine
Improving Students' Vocabulary Knowledge through Meaningful Learning Instruction The Case of First Year LMD Students at Mentouri Brothers University	2019	University of Constantine
The case study of second year students of English Types and Causes of Errors in Students' Writings at the University of Frères Mentouri-Constantine 1	2019	University of Constantine
The Effect of Reading on Enriching Students Vocabulary Stock and Improving Pronunciation: Case Study Second Year Students, department of English, university of Mentouri Brothers, Constantine 1	2019	University of Constantine

Appendix-11

Hyland (2005) list of metadiscourse devices

Note: Some new identified metadiscourse devices are added in italic at the end of each category.

a/ The interactional metadiscourse

Attitude Markers	Boosters	Hedges		Engagement Markers		Self- mentions
!	actually	about	postulates	(	select	I
admittedly	always	almost	presumable	/	set	we
agree	believe	apparent	presumably	(the) reader's	should	me
agrees	believed	apparently	probable	add	show	my
agreed	believes	appear	probably	allow	suppose	our
amazed	beyond doubt	appeared	quite	analyse	state	mine
amazing	certain	appears	rather x	apply	take (a look/as	us
amazingly	certainly	approximately	relatively	arrange	think about	the author
appropriate	clear	argue	roughly	assess	think of	the author's
appropriately	clearly	argued	seems	assume	turn	the writer
astonished	conclusively	argues	should	by the way	us (<i>inclusive</i>)	the writer's
Additional Self-Mentions						
astonishing	decidedly	around	sometimes	calculate	use	<i>The researcher</i>
astonishingly	definite	assume	somewhat	choose	we (<i>inclusive</i>)	
correctly	definitely	assumed	suggest	classify	you	
curious	demonstrate	broadly	suggested	compare	your	
curiously	demonstrated	certain amount	suggests	connect		
desirable	demonstrates	certain extent	suppose	consider		
desirably	doubtless	certain level	supposed	consult		
disappointed	establish	claim	supposes	contrast		
disappointing	established	claimed	suspect	define		
disappointingly	evident	claims	suspects	demonstrate		
disagree	evidently	could	tend to	determine		
disagreed	find	couldn't	tended to	do not		
disagrees	finds	doubt	tends to	develop		
dramatic	found	doubtful	to my knowledge	employ		
dramatically	in fact	essentially	typical	ensure		
essential	incontestable	estimate	typically	estimate		
essentially	incontestably	estimated	uncertain	evaluate		
even x	incontrovertible	fairly	uncertainly	find		
expected	incontrovertibly	feel	unclear	follow		
expectedly	indeed	feels	unclearly	go		
fortunate	indisputable	felt	unlikely	have to		
fortunately	indisputably	frequently	usually	imagine		
hopeful	know	from my perspe	would	incidentally		
hopefully	known	from our perspe	wouldn't	increase		
important	must (possibilit	from this perspective		input		
importantly	never	generally	Additional Hedges	insert		
inappropriate	no doubt	guess	<i>Potentially</i>	integrate		
inappropriately	obvious	indicate	<i>Can</i>	key		
interesting	obviously	indicated	<i>Imply</i>	let x = y		
interestingly	of course	indicates	<i>Normally</i>	let us		
prefer	prove	in general	<i>Basically</i>	let's		
preferable	proved	in most cases		look at		
preferably	proves	in most instances		mark		
preferred	realize	in my opinon		measure		
remarkable	realized	in my view		mount		
remarkably	realizes	in this view		must		
shocked	really	in our opinion		need to		
shocking	show	in our view		note		
shockingly	showed	largely		notice		
striking	shown	likely		observe		
strikingly	shows	mainly		one's		
surprised	sure	may		order		
surprising	surely	maybe		ought		
surprisingly	think	might		our (<i>inclusive</i>)		
unbelievable	thinks	mostly		pay		
unbelievably	thought	often		picture		
understandable	truly	on the whole		prepare		
understandably	true	ought		recall		
unexpected	undeniable	perhaps		recover		
unexpectedly	undeniably	plausible		refer		
unfortunate	undisputedly	plausibly		regard		
unfortunately	undoubtedly	possible		remember		
unusual	without doubt	possibly		remove		
unusually		postulate		review		
usual		postulated		see		
Additional Attitude Markers		Additional Boosters				
<i>Significant</i>		<i>The fact is</i>				
<i>central</i>		<i>Considerable</i>				
<i>Valuable</i>						
<i>Salient</i>						
<i>Necessarily</i>						
<i>Ideal</i>						
<i>Unique</i>						
<i>Odd</i>						

b/ The interactive metadiscourse

Transition Markers	Code Glosses	Endophoric	Frame Markers	Evidentials
accordingly	-	(In) Chapter X	a) Sequencing aim	(date)/(name)
additionally	()	(In) Part X	(in) chapter X	desire to
again	as a matter of	(In) Section X	(in) part X	focus
also	called	(In) the X cha	(in) section X	goal
alternatively	defined as	(In) the X part	(in) the X cha	intend to
although	e.g.	(In) the X sect	(in) the X part	intention
as a consequence	for example	(In) This chap	(in) the X sect	objective
as a result	for instance	(In) This part	(in) this chapter	
at the same time	I mean	(In) This secti	(in) this part	purpose
because	i.e.	Example X	(in) this section	seek to
besides	in fact	Fig. X	finally	want to
but	in other words	Figure X	first	wish to
by contrast	indeed	P. X	first of all	would like to
by the same token	known as	Page X	firstly	d) shift topic
consequently	namely	Table X	last	back to
conversely	or X	X above	lastly	digress
equally	put another w	X before	listing (a, b, c, in	regard to
even though	say	X below	next	move on
further	specifically	X earlier	numbering (1, now	
furthermore	such as	X later	second	resume
Additional Endophoric Markers				
hence	that is		secondly	return to
however	that is to say	<i>As I mentioned</i>	subsequently	revisit
in addition	that means	<i>As I noted in</i>	then	shift to
in contrast	this means		third	so
in the same way	viz		thirdly	to look more closely
leads to	which means		to begin	turn to
Additional Code Glosses				
likewise			to start with	well
moreover	<i>To put it in another way</i>		b) label stage	with regard to
Additional Frame Markers				
nevertheless	<i>To make things more clear</i>		all in all	
nonetheless	<i>To clarify</i>		at this point	<i>Concerning</i>
on the contrary	<i>To be more clear</i>		at this stage	<i>Regarding</i>
on the other hand	<i>What I mean to say is</i>		by far	<i>With regard to</i>
rather	<i>More clearly</i>		for the moment	<i>Last but not least</i>
result in	<i>Say it differently</i>		in brief	
similarly	<i>This also means that</i>		in conclusion	
since	<i>In short</i>		in short	
so			in sum	
so as to			in summary	
still			now	
the result is			on the whole	
thereby			overall	
therefore			so far	
though			thus far	
thus			to conclude	
whereas			to repeat	
while			to sum up	
yet			to summarize	
Additional Transitions				
<i>At the same time</i>			c) announce goals	
			(in) this chapter	
			(in) this part	
			(in) this section	

Appendix-12

Personal E-mail Communications

Asking for clarification

Boîte de réception

djamelmezrag <abdrrahman2014af@gmail.com>

jeu. 10 janv. 2019
08:41

À enbkwan

Hi, Pro Kwan

I am an Algerian university student; I am writing a PhD thesis entitled 'A Contrastive Genre Analysis of introductions in Academic writings Written by English Native Speakers and Algerian Learners of English as a Foreign Language. Academic writings consist of PhD theses, Master's dissertations, and research articles.

When I read your article entitled 'The schematic structure of literature reviews in doctoral theses of applied linguistics' (Kwan, 2006). I found a number of terms were used interchangeably including move structure, rhetorical structure, rhetorical move structure and schematic structure.

So, please could you clarify the meaning of these terms?

I would be very grateful to you if you could help

Best,
Mezrag

Dr. Becky KWAN <enbkwan@cityu.edu.hk>

jeu. 10 janv.

Dear Mezrag,

The terms are indeed used interchangeably often to mean how the moves in a genre are configured. For example, the CARS model, which is sometimes referred to as a move structure means the moves we can find in Introductions and the predictable order in which the moves appear. It is also sometimes called the rhetorical structure though rhetorical structure was originally used to mean how different parts of a text relate to each other to achieve a particular social action. In that sense, rhetorical structure may also suggest what Swales refers to move structure -- only that in Swales' terminology, the notion "move" is used to mean different parts of a text that have strategic purpose. In the terminology, "moves" is replaced by the notion "segment", and text segments are related in some universal ways, e.g., one segment serves as the justification for another segment. In other words, the relations in rhetorical structure terminology are more universal than the relations we have between two moves, which are determined by the overall, specific goal of a genre (e.g., creating a research space gives rise the relationship between Move 1 and Move 2 as Staking the territory and Establishing a niche (within this territory) respectively). Schematic structure is sometimes used to mean move structure as well. But, the notion, I believe, came from cognitive psychology, i.e., the notion of schema, our mental representation of the connections among different concepts, actions, etc. So, one common attribute of the four notions of structure is the connectedness among the different parts of a genre.

I hope this explanation helps.

Becky .
Asking for clarification

Boîte de réception

djamelmezrag <abdr Rahman2014af@gmail.com>

ven. 2 févr. 2018
08:56

À K.Hyland

Dear Hyland,
I am an Algerian student, I am working on ' metadiscourse in academic writings' abstracts (PhD these, Master's dissertations and research articles), I am using your model (Hyland,2005).

I am writing to you to help shed some light on how to differentiate between "and" that adds activities and "and " that adds arguments, I am really confused about this matter.

I read Martin and Rose (2003) book that you mentioned in your book (Hyland,2005), but unfortunately, I couldn't grasp the idea.

Could you, if it is possible, provide us with some examples, illustrations that can help.

I have here some examples from my corpus:

Ex.1 first one is composed of nineteen questions and administered to one hundred-sixteen 2nd year subcorpus 1.txt 0 9

Ex.2 designing the test that took place before and after the learners were taught different strat.... subcorpus 1.txt 0 17

Ex.3 us to reveal the importance of cohesion and cohesive markers in translations, and to draw subcorpus 1.txt 0 57

Ex.4 take place in the classroom became more and more popular especially in second or foreign subcorpus 1.txt 0 22

It would very grateful to you if you could help me on this.

Regards
Djamel

Ken Hyland (EDU - Staff) <K.Hyland@uea.ac.uk>

sam. 3 févr. 2018
15:19

À moi

Dear Djamel

Thanks for your interest in my work, I'm glad you find MD a productive concept.

Yes, I agree that it is often very difficult to determine whether AND is acting internally or externally. In most cases it is external and not MD. In fact in recent work on MD I have abandoned and altogether. We omitted both *and* and *or* from the counts. These *transitions* represent the default options for marking conjunctive relations of addition and alternation rather than conscious rhetorical strategies for signalling particular writer intentions. They therefore seem to carry reduced pragmatic meanings and produce thousands of examples in academic texts. Biber et al (1999: 79), for example, note that *and* and *or* are far more frequent in academic prose than in conversation, while *but*, a common marker of contrast in conversation, is least frequent in academic prose (1999, p. 81). Therefore we retained *but* as it is available for authors in free opposition to other contrast markers such as *although*, *however*, *nevertheless* and *on the other hand*. Our manual scan of a 10% sample of these three items agreed with Biber et al's observations so we omitted *and* and *or* but not *but*.

I hope this is helpful - and that it saves you a lot of analysis time.

Best, Ken

Ken Hyland, Prof of Applied Linguistics in Education

School of Education and Lifelong Learning
University of East Anglia
Norwich NR4 7TJ
England

From: djamelmezrag<abdr Rahman2014af@gmail.com>

Sent: 02 February 2018 07:56

To: Ken Hyland (EDU - Staff)

Subject: Asking for clarification

Asking for clarification

Boîte de réception

djamelmezrag <abdr Rahman2014af@gmail.com>

sam. 28 juil. 2018
12:56

À jmswales

Hi, Pro Swales

I am an Algerian university student, I am writing a PhD thesis entitled 'A Contrastive Genre Analysis of introductions in Academic writings Written by English Native Speakers and Algerian Learners of English as a Foreign Language. Academic writings consist of PhD theses, Master's dissertations, and research articles. When I read your article entitled 'Reflections on the concept of discourse community' (Swales, 2016). I found the last criterion of discourse communities 'A DC develops horizons of expectation' somehow vague. So, please could you possibly clarify this point?

Another thing, as I strongly believe that you are the right person to ask, is that I am using your model (Swales, 2004) in analyzing the academic writings'(PhD thesis, Master's dissertations, and research articles) introductions. Analyzing this kind of texts, as you know, is not an easy task for novice writers. So could you orient me where I can find models of applied linguistic introductions analyzed using your model?

I would be very grateful to you if you could help

Best,
Djamel

John Swales <jmswales@umich.edu>

28 juil. 2018
18:12

a) Horizons of expectation; the expected timelines. In some academic fields, it could be 20 years to write an important book; in others, it could be five articles a year. In some restaurants, you expect your food in a few minutes; in others, it is okay to wait 30 minutes or longer.

I hope to attach Chapter 4 of my "Research Genres: Explorations and Applications" that deals with dissertations. A word of warning though, this submitted text may not be exactly the same as the published version.

John Swales

Zone contenant les pièces jointes

Asking for clarification

Boîte de réception

Djamel
Mezrag <abdr Rahman2014af@gmail.com>

ven. 3 juin 07:41

À Ken

Hi Pro. Hyland

I am an Algerian student, I am working on ' metadiscourse in academic writing introductions (PhD these, Master's dissertations, and research articles) using your metadiscourse model (Hyland, 2005).

I have a question about the function of the highlighted linguistic choices in the text below. Do these linguistic choices function as endophoric markers or frame markers?

When I read this text, I feel that the writer used these linguistic choices to sequence the propositions and orient the readers to other parts of the text at the same time.

Could you, if it is possible, provide us with some examples, and illustrations that can help.

Example: ***The first chapter** is divided into three sections; **the first section** is devoted to vocabulary knowledge. After giving some definition about vocabulary knowledge, the focus will be on its importance. **Then**, it will move to types of vocabulary and techniques of teaching it. **Finally**, the focus will shift to study some difficulties in learning vocabulary. **The second section** is about the writing skill; here also some definitions will be given before discussing the stages and the characteristics of writing. **Then**, this section will show the different types of writing and approaches to writing. **The third section**; will give a review on vocabulary, the importance of writing, learners' writing problems and will shed some light on the influence of vocabulary knowledge on writing. **The second chapter** is devoted to the practical part of the research in which the means are analyzed and their results interpreted in relation to the hypothesis put forward*

Best,

Mezrag

Ken Hyland (EDU - Staff) <K.Hyland@uea.ac.uk>

3 juin 2022 09:25

À moi

Dear Mezrag

Thanks for your email. These are all frame markers - they help structure the argument for readers. Endophorics point to other texts or parts of the same text so that readers can retrieve information relevant at that point (e.g. pointing to tables, footnotes, references, etc.)

I hope this is clear.

Best of luck,

Ken

Ken Hyland, Honorary Professor
School of Education and Lifelong Learning

Résumé

Les articles de recherche académique ont longtemps été au centre des analyses de genre et des études de métadiscours au cours des quatre dernières décennies. Beaucoup a été dit à propos des choix structuraux et linguistiques dans les articles académiques en général ou en partie dans différentes sections du travail. Depuis l'avènement des études de genre, la section d'introduction aux travaux universitaires de recherche, davantage axée sur les articles de recherche, a attiré beaucoup d'attention, l'accent étant mis sur les différences interdisciplinaires. Malgré l'accent mis sur ces travaux de recherche, l'écriture des étudiants en anglais, langue étrangère, a été négligée. De plus, les analyses de genre contrastées des introductions de thèses de doctorat et de mémoires de maîtrise ont été incroyablement rares, avec presque toute l'attention portée à la rédaction d'introductions de travaux de recherche produites par des locuteurs natifs ou non natifs de l'anglais. Réunissant les deux cadres bien cités et complets de l'analyse des mouvements (le modèle CARS, Swales, 2004) et la théorie des métadiscours de la taxonomie des métadiscours de Hyland (2005), cette analyse de genre contrastée étudie la structure des étapes de mouvement et l'utilisation des métadiscours dans un corpus des introductions d'articles de recherche rédigés par des auteurs anglophones et dans un corpus d'articles de recherche, de thèses de doctorat et de mémoires rédigés par des apprenants algériens de l'anglais comme langue étrangère. Celles-ci visent à identifier les similitudes et les différences en termes de préférences rhétoriques entre ces groupes d'auteurs. Les résultats ont montré que les trois mouvements étaient utilisés dans les introductions de travaux de recherche. Ces mêmes résultats étaient également conformes aux conclusions de Swales (2004) en ce sens que la plupart des introductions rédigées par des écrivains anglais natifs se conformaient au modèle M1-M2-M3 et que les trois mouvements apparaissaient de manière cyclique. Alors que les introductions des mémoires de maîtrise et des articles de recherche se sont avérées similaires, montrant une légère déviation par rapport au modèle CARS, les introductions des thèses de doctorat ont montré des façons plus libérales d'organisation des textes caractérisées par des modèles non linéaires discursifs mixtes. Cependant, les introductions de travaux de recherche rédigées par des auteurs anglophones et algériens différaient à la fois dans la fréquence d'occurrence et dans la réalisation linguistique de Move 2. Les introductions des auteurs Algériens n'incluaient généralement pas les trois mouvements, en particulier le mouvement 2, contrairement à celles des auteurs anglais natifs qui utilisaient fréquemment les trois mouvements comme obligatoires. La réalisation du

mouvement 2 était aussi une marque de différence entre les auteurs (Natifs Anglais) NA et Algériens. L'analyse a révélé que, tandis que les auteurs Algériens dans toutes les introductions de travaux de recherche orientaient leur attention vers les problèmes académiques locaux, les auteurs NA se concentraient davantage sur les problèmes liés à la recherche. De plus, même si le modèle CARS (Swales, 2004) a défini de manière adéquate la structure par étapes des introductions des articles de recherche (RA), il ne pouvait pas tenir compte de la structure par étapes des introductions dans la thèse de doctorat et la thèse de maîtrise. Cela tient à la structure rhétorique complexe et hybride de ces introductions de travaux de recherche. Cela est dû à la structure rhétorique complexe et hybride de ces introductions de travaux de recherche.

Les résultats ont également révélé des similitudes et des différences en termes d'utilisation du métadiscours entre tous les groupes d'écrivains. En comparant l'utilisation du métadiscours, il a été révélé que les auteurs anglophones d'articles de recherche étaient plus enclins à utiliser des métadiscours plus interactifs que les auteurs d'articles de recherche Algériens. Les auteurs de thèses de doctorat ont utilisé un métadiscours plus interactif que les auteurs de thèses de master. La comparaison entre nativeness (NA) et non-nativeness a révélé que si les écrivains anglophones étaient plus soucieux de créer un espace international pour leurs recherches, les auteurs Algériens, par contre, se concentraient davantage sur l'organisation de leurs textes. Sur la base de ces données, on peut affirmer que, tandis que les écrivains anglophones ont produit des introductions argumentatives où leurs positions vis-à-vis du contenu et de leurs lecteurs potentiels étaient fortement signalées, les écrivains algériens semblaient produire des introductions narratives caractérisées par l'absence d'auto-représentation, d'évaluation des arguments, implication des lecteurs et stratégies promotionnelles. D'une manière générale, les résultats démontrent que les éléments culturels, en particulier les normes et pratiques de la communauté discursive, ont une influence significative sur la façon dont les auteurs académiques structurent leurs arguments et interagissent avec leurs textes et leur public. Par conséquent, il est fortement recommandé d'amener les auteurs Algériens à mieux comprendre les contrastes et les similitudes interculturels. De plus, il est conseillé aux spécialistes en linguistique d'introduire des méthodes d'utilisation du métadiscours dans les cours d'enseignement de l'écriture au niveau universitaire.

Mots-clés: travaux de recherche académique, genre, métadiscours, rhétorique contrastive, introductions.

ملخص

لطالما كانت الأوراق البحثية الأكاديمية محورًا لتحليل النوع ودراسات ما وراء الخطاب. ومع ذلك، فإن تحليلات الأنواع المتناقضة لأطروحات الدكتوراه ومذكرات الماجستير لطلاب اللغة، سواء كانوا من ذوي اللسان الإنجليزي أو غير الناطقين به، لم تحظ باهتمام كبير خاصة لمقدمات أعمالهم البحثية الكتابية. من خلال الجمع بين إطارين شاملين مشهورين لتحليل الحركة (نموذج كارس Swales ، 2004 ، ونظرية ما وراء الخطاب التي تبناها هايلاند (Hyland (2005) تصنيف ما وراء الخطاب، تبحث هذه الدراسة في بنية الخطوة واستخدامها وراء الخطاب في مجموعة من مقدمات كتابات أكاديمية (مقالات بحثية، أطروحات دكتوراه ومذكرات الماجستير) من تأليف كتاب انجليز وكتاب جزائريين. الهدف من وراء ذلك هو تحديد أوجه التشابه والاختلاف في التفضيلات البلاغية بين هؤلاء المؤلفين. أظهرت النتائج أن جميع الحركات الثلاثة التي تم تقديمها في نموذج CARS قد تم استخدامها في مقدمات العمل البحثي. كانت النتائج أيضًا متوافقة مع تلك التي توصل إليها سوايلز (2004) Swales الذي اعترف بأن معظم المقدمات التي كتبها الكتاب الإنجليز كانت متوافقة مع نمط M1-M2-M3 وحيث ظهرت الحركات الثلاث بطريقة دورية. من ناحية أخرى، بينما تبين أن مذكرات الماجستير ومقدمات المقالات البحثية متشابهة، وهو ما يدل على انحراف طفيف عن نموذج CARS، أظهرت مقدمات أطروحات الدكتوراه طرقًا أكثر ليبرالية لتنظيم النص تميزت بأنماط استطرادية غير خطية مختلطة. أظهر تحليل مقدمات العمل البحثي المنجز من قبل الكتاب الإنجليز والجزائريين أن الكتاب الإنجليز كانوا أكثر عرضة لتضمين جميع الحركات الثلاث في مقدماتهم ، وبالأخص الحركة 2. وكان تحقيقها أيضًا علامة على الاختلاف الكائن بين مجموعتي الكتاب. علاوة على ذلك، كشف التحليل أنه في حين أن الكتاب الجزائريين في جميع مقدمات الأعمال البحثية وجهوا انتباههم نحو المشكلات الأكاديمية المحلية، ركز الكتاب الإنجليز أكثر على المشكلات المتعلقة بالأبحاث. من خلال مقارنة استخدام ما وراء الخطاب أظهرت المقالات البحثية الخاصة بالكتاب الانجليز ميلا الى استعمال طرق ما وراء الخطاب أكثر تفاعلية من المقالات البحثية للمؤلفين الجزائريين. استخدم كتاب أطروحات الدكتوراه الخطاب الفوقي التفاعلي أكثر مما استخدمه كتاب مذكرات الماجستير. كما أشارت المقارنة إلى حقيقة أنه بينما كان الكتاب الإنجليز أكثر اهتمامًا بإنشاء مساحة دولية لأبحاثهم، ركز الجزائريون أكثر على تنظيم نصوصهم. قد تساعدنا هذه النتائج على استنتاج أنه بينما قدم الكتاب الإنجليز مقدمات جدلية حيث تم الإشارة إلى موقفهم تجاه المحتوى وقراءهم المحتملين بشكل كبير، بدا أن الكتاب الجزائريين ينتجون مقدمات سردية تتميز بغياب التمثيل الذاتي وتقييم الحجج ومشاركة القارئ واستراتيجيات الترويج. بشكل عام ، تشير هذه النتائج إلى أن العناصر الثقافية ، ولا سيما معايير وممارسات مجتمع الخطاب ، لها تأثير كبير على كيفية بناء المؤلفين الأكاديميين لحججهم والتفاعل مع نصهم وجمهورهم. لذلك، توضح النتائج الحاجة المتزايدة لفهم الكتاب الجزائريين للتناقضات والتشابهات بين الثقافات. إلى جانب ذلك، يتعين حث اللغويين التطبيقيين أيضًا على إدخال طرق لدمج ما وراء الخطاب في المناهج والدروس لتدريس التعبير الكتابي في الجامعة.

الكلمات المفتاحية: الكتابات الأكاديمية، النوع، ما وراء الخطاب، البلاغة التقابلية ، المقدمات.