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Lexical Bundles in Rhetorical Moves of Introductions in High-Impact Chinese and International English Linguistic Journals

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Abstract

The research article introduction (RAI) is a critical section that establishes the scope, contextual background, and scholarly significance of a study. As the first encounter between the writer and the reader, the RAI should be strategically constructed to leave a positive first impression on readers and guide them into the research space. Its effectiveness largely depends on two essential discourse elements: rhetorical moves, which provide the organizational framework, and lexical bundles, which serve as recurrent multi-word expressions that help realize those moves. Although rhetorical moves in RAIs have been extensively studied, far less attention has been paid to how lexical bundles shape rhetorical structure, especially in high-impact English-language journals. This study fills the gap by examining RAIs from Scopus-indexed Chinese and international journals, focusing on how lexical bundles signal moves and on the structural patterns of bundles associated with different moves and steps. Drawing on the adapted Swales' (1990) CARS model and Biber et al.'s (1999) classification of lexical bundles, a corpus of 20 introductions was analyzed using a combination of quantitative and qualitative methods. The bundles were extracted using AntConc. The findings reveal that verb phrase bundles constitute the most frequent structural type across both corpora, whereas the auxiliary verb + noun phrase pattern occurs only once in the Chinese corpus and is absent in the international corpus. All three major moves (M1, M2, M3) are present in both datasets, with Move 1 Step 3 emerging as the most prevalent. However, differences in sequencing are evident: Chinese RAIs generally follow an M1–M2–M3 progression, while international RAIs tend toward an M1–M3 pattern. The findings of this study provide a practical list that fits for choosing lexical bundles to realize

each move and step, and have pedagogical implications for academic writers to properly construct the RAIs by considering the rhetorical conventions.

Keywords: Lexical bundles; rhetorical structure; research article introductions; corpus-based analysis; Scopus-indexed linguistic journals

1. Introduction

In academia, publishing in high-impact journals is regarded as a key marker of success. Scholars at different levels—ranging from established experts and lecturers to postgraduate students—strive to disseminate their findings in prestigious Scopus-indexed journals that carry both scholarly credibility and social recognition. Such publications not only showcase original contributions to knowledge but also open up greater opportunities for professional growth and career advancement (Burn, 2024). Consequently, the ability to construct a well-organized and persuasive research article (RA) has become increasingly vital. Research articles generally follow a codified rhetorical structure that organizes content in predictable ways (Hess & Pagel, 1999). Within this framework, the IMRD (Introduction, Method, Results, Discussion) model has become the dominant structure, with the introduction playing a decisive role in whether readers remain engaged (Grant & Pollack, 2011).

As the gateway of the article, the introduction provides editors, reviewers, and readers with a clear orientation to the study's scope and significance. Importantly, this section must also motivate the research and explicitly state its contribution (Ahlstrom, 2017). Recent scholarship continues to emphasize that the introduction is critical for situating a study within the broader disciplinary conversation and for signaling its relevance (Pangesti et al., 2023). When writing an introduction, authors face numerous choices and must carefully determine how much background information to include. In this regard, the strategic use of rhetorical moves is particularly important. To the point, comparative studies on linguistic RAIs report systematic cross-journal patterns in move essentiality, frequency, and sequencing, providing empirical baselines for the present comparison (Geng et al., 2023a, 2023b).

Rhetorical moves are viewed as schematic and discursive units that fulfill communicative and social functions within a given genre (Bhatia, 2014; Swales & Feak, 2004). To indicate a move, certain lexical bundles can be taken into consideration as they are the "most frequently occurring sequence of words" and they serve as lexico-grammatical blocks to combine texts in a language or register (Biber, 2006, p.134). As a type of formulaic language, lexical bundles are ubiquitous in technically fulfilling the rhetorical and discourse-related functions. Therefore,

by using a set of lexical bundles, the rhetorical moves can be realized, and by using an appropriate series of rhetorical moves, the RAIs can be more structured and organized. The bundle-driven move approach will thus assist writers in forming their ideas in a coherent written manner. Subsequently, recent work has tested whether large language models can assist or benchmark move identification in adjacent genres (creative short stories) and in RA abstracts; we treat these as complementary references to human-coded analyses rather than a method for this study (Geng & Wei, 2024; Geng et al., 2024).

Since RAIs are drawn from diverse sources, little research has examined whether their move structures conform to common standards or align with the expectations of high-impact international journals, particularly within linguistics and language studies. To address this gap, the present study explores how lexical bundles with specific structural features function to signal individual moves and steps in RAIs from Scopus-indexed Chinese journals and Scopus-indexed international journals. It also investigates the extent to which rhetorical move and step patterns differ across these two journal contexts. The findings are expected to assist academic writers in selecting appropriate lexical bundles to realize rhetorical moves and in producing well-structured linguistic RAIs that meet the conventions of top-tier international publications.

2. Literature Review

As one of the most prominent genres in academia, the research article (RA) is a written text that incorporates non-verbal elements. Typically spanning only a few thousand words, it presents the findings of investigations carried out by the author(s) and is commonly published in research journals or edited collections (Swales, 2014). RAs are defined by their communicative purpose and are commonly distinguished from other genres through recognizable structures such as the hourglass IMRD model (Hill et al., 1982; Swales, 1990). While this model has become standard, it is more of a prototype shaped by studies in the natural and social sciences (Varttala, 2001). Disciplinary variation, however, has received less attention, even though conventions across fields strongly influence how RAs are constructed (Hyland, 2004). More recent perspectives view the RA as a genre rooted in the sciences but now widely adopted across disciplines, encompassing both empirical and conceptual work (Van Enk & Power, 2017).

The introduction is often the most challenging part of a research article to write. Despite its brevity, it must highlight the novelty of the study and clearly position it within the field. Many researchers, even those well-trained in methods and analysis, struggle with framing and organization, which can reduce readability and increase the risk of rejection. Recent studies

also confirm that difficulties in constructing introductions stem from both rhetorical complexity and disciplinary variation, making move- and bundle-based analysis especially valuable (Farhang-Ju et al., 2024; Asano et al., 2024). Alongside human-coded research, early GPT-assisted studies report encouraging alignment with expert judgments; in this paper, we reference these as background only (Geng & Wei, 2024; Geng et al., 2024). This underscores the need to examine introductions more closely, particularly through the lens of rhetorical moves and lexical bundles.

Lexical bundles, defined as recurrent word combinations identified through frequency rather than linguistic categories (Ädel & Erman, 2012), represent a distinct type of formulaic language that differs from collocations, idioms, and phrasal verbs. They are the most frequent of these categories, accounting for the largest proportion of formulaic sequences across registers such as academic prose, fiction, newspapers, and conversation (Vilkaitė, 2016). Because of this high frequency, lexical bundles play a central role in shaping discourse, especially in academic writing, where they contribute to cohesion, disciplinary identity, and the expression of stance. Earlier corpus-based work showed clear register differences, with bundles in conversation tending to be clausal while those in academic prose are predominantly phrasal (Biber & Conrad, 1999). Related metadiscourse research on RA abstracts shows how recurrent formulaic resources structure stance and cohesion, reinforcing the rationale for a bundle-driven account in RAIs (Geng & Wei, 2023).

Alongside lexical bundles, rhetorical moves form another essential building block of discourse. Moves are schematic units that organize the rhetorical flow of a text and perform communicative functions such as establishing a research territory or presenting findings. They may vary in length from a single clause to several paragraphs and are often further divided into steps or strategies (Swales, 1990; Bhatia, 1993). Together, moves and lexical bundles provide complementary perspectives for analyzing how academic texts are constructed and how writers achieve their communicative goals. For linguistic RAIs in particular, comparative evidence across Scopus vs. non-Scopus outlets documents distinct move profiles and essentiality, informing our cross-corpus design and expectations (Geng et al., 2023a, 2023b).

Cortés (2013) was among the first to link lexical bundles with rhetorical moves, showing how bundles can trigger moves in RAIs. Later studies expanded this perspective, demonstrating that a single bundle may serve different rhetorical functions across RA sections (Mizumoto, 2016; Mizumoto et al., 2017). Comparative work has also highlighted cross-cultural and proficiency-based variation in bundle–move use (Alamri, 2017; Hong, 2019). More recently, researchers

have examined how lexical bundles map onto rhetorical moves in disciplines such as nursing and applied linguistics, reaffirming the importance of a bundle-driven move approach (Farhang-Ju et al., 2024). However, studies focusing specifically on the structural types of 3-6-word bundles in RAIs remain limited, particularly in Scopus-indexed journals. To fill this gap, the present study investigates how such bundles signal rhetorical moves in introductions of linguistic RAs from Chinese and international journals and seeks to develop a practical inventory of multi-word units for cross-corpus comparison.

The objectives of this study are twofold. First, it aims to investigate lexical bundles in research article introductions (RAIs) by identifying the bundles associated with rhetorical moves and analyzing their structural features across Scopus-indexed Chinese and international journals. Second, it seeks to explore rhetorical move patterns in RAIs by comparing the similarities and differences in their realization between the two corpora, and by describing their distribution and sequences.

3. Method

3.1 Corpus Construction

This study built two corpora consisting of 20 linguistic RAIs written in English. Ten introductions were drawn from the Scopus-indexed *Chinese Journal of Applied Linguistics (CJAL)* and ten from international journals, namely *3L: Language, Linguistics, Literature* and *Language Learning and Technology (LLT)*. The journals were selected to represent both Chinese and international contexts, with CJAL chosen as the only English-language linguistic journal published on China's mainland, 3L representing a Southeast Asian perspective, and LLT focusing on language and technology, originating from the U.S. For comparability, only introductions between 250 and 600 words and no more than six paragraphs were included. After removing titles, author details, and keywords, the introductions were compiled into Word files for manual text analysis.

3.2 Analytical Frameworks

For analyzing the structural features of lexical bundles, Biber et al.'s (1999) structural classification of lexical bundles was adapted due to its appropriateness in the academic context. According to Biber and Conrad (1999), most lexical bundles are clausal in conversation, while typically phrasal in academic prose. As an evident tendency showed that most lexical bundles embedded in rhetorical moves were verb phrases in this study, Biber et al.'s (1999) structural

classification of lexical bundles was adapted with two new structural types - verb phrase and auxiliary verb + noun phrase. Table 1 demonstrates the adapted framework.

Table 1: The Adapted Framework of Biber et al.'s (1999) Structural Classification of Lexical Bundles in Academic Prose

Structure Classifications (SC)	Examples
SC1: Noun Phrase with *of*-phrase fragment	*the end of the, the beginning of the, the base of the, the point of view of*
SC2: Noun Phrase with other post-modifier fragments	*the way in which, the relationship between the, such a way as to*
SC3: Prepositional phrase with embedded *of*-phrase fragment	*about the nature of, as a function of, as a result of the, from the point of view of*
SC4: Other prepositional phrase (fragment)	*as in the case, at the same time as, in such a way as to*
SC5: Anticipatory *it* + verb phrase / adjective phrase	*it is possible to, it may be necessary to, it can be seen, it should be noted that, it is interesting to note that*
SC6: Passive verb + prepositional phrase fragment	*is shown in figure/fig., is based on the, is to be found in*
SC7: Copula *be* + noun phrase / adjective phrase	*is one of the, may be due to, is one of the most*
SC8: (Verb phrase +) *that*-clause fragment	*has been shown that, that there is a, studies have shown that*
SC9: (Verb / adjective +) *to*-clause fragment	*are likely to be, has been shown to, to be able to*
SC10: Adverbial clause fragment	*as shown in figure/fig., as we have seen*
SC11: Pronoun / noun phrase + *be* (+...)	*this is not the, there was no significant, this did not mean that, this is not to say that*
SC12: Other expressions	*as well as the, may or may not, the presence or absence*
SC13: Verb phrase	*researchers have shifted their attention from, have barely been studied*
SC14: Auxiliary verb + noun phrase	*will the findings of studies*

For analyzing the 3-6-word lexical bundles found in rhetorical moves and for identifying the patterns of rhetorical moves in the introductions, Swales' (1990) Create a Research Space (CARS) model was adapted as it had an immense impact on genre analysis and move-based approach across a variety of applications, especially on academic papers within social science. Since the primary results of the pilot study showed that there was a new rhetorical move called Move 3 Step 5 (occupying the niche - expectations from findings) in both corpora, and this novel signal was considered as conveying the expected contribution from findings to occupy the niche, Swales' (1990) CARS model would be adapted with a new move - Move 3 Step 5. Table 2 shows the adapted Swales' (1990) CARS model.

Table 2: The Adapted Swales' (1990) Create A Research Space (CARS) Model

Moves	Steps	Examples
Move 1 Establishing a territory	Step 1 Claiming centrality and/or	*a large body of data, important aspect of, a central issue, wide interest in*
	Step 2 Making topic generalization(s) and/or	*is known to, are believed to be, tend to consist of, are often criticized for*
	Step 3 Reviewing items of previous research	*Smith found that, in the literature, Peterson argued that*
Move 2 Establishing a niche	Step 1A Counter-claiming or	*is challenged by, become increasingly unreliable*
	Step 1B Indicating a gap or	*but little research, a limited range of, were restricted to*
	Step 1C Question-raising or	*it is not clear whether, the question remains, has remained unclear*
	Step 1D Continuing a tradition	*need to be analyzed, it is of interest to, it is desirable to*
Move 3 Occupying the niche	Step 1A Outlining purposes or	*the aim of this paper is, our purposes was*
	Step 1B Announcing present research	*this paper evaluates the effect on, this research presents, this study focuses on*

	Step 2 Announcing principal findings	*this approach provides, our results indicate*
	Step 3 Indicating research article structure	*we have organized, this paper is structured as follows*
	Step 4 Evaluation of findings	*close to the optimum achievable bound*
	Step 5 Expectation from findings	*it is hoped that*

To ensure inter-rater reliability for the two adapted frameworks, coding was conducted by two independent raters. Their annotations, compared with those of the researcher, achieved substantial agreement (Cohen's Kappa = 0.814) in identifying rhetorical moves and the structural types of lexical bundles across both corpora.

3.3 Procedures for Data Analysis

3.3.1 Procedures for Analysing Lexical Bundles

To identify the lexical bundles found in rhetorical moves in linguistic RAIs from Scopus-indexed Chinese and international journals, all 3- to 6-word bundles indicating each move and step were first categorized and compiled into a list based on the three-move structure of the adapted Swales' (1990) CARS model. The frequency cut-off point (minimum N-gram frequency) was then set, and the bundles were extracted using AntConc. The software generated an automatic report detailing the types and tokens of all extracted bundles. Before applying the exclusion criteria, over 100 and approximately 90 candidate bundles were identified in the Scopus-indexed Chinese corpus and the Scopus-indexed international corpus, respectively, as listed in Tables 3 and 4; after a pilot check and data refinement, 97 and 79 bundles were retained for further analysis.

Table 3: The 3-6-Word Lexical Bundles that Indicate the Rhetorical Moves in 10 Linguistic RAIs from Scopus-Indexed Chinese Journals

Moves/Steps	**The 3-6-Word Lexical Bundles**
Move 1 Step 1	**3-word:** the development of, a reflection of, enjoys unprecedented popularity, is crucial to, the importance of, the number of, unprecedented increase in, we assume that

	4-word: an established belief that, an increasing awareness of, has been closely studied, has attracted much attention, is viewed as fundamental, is closely related to, showed high enthusiasm for **5-word:** increase in the number of, a rapid growing demand for, has received increasing attention in, is of primary importance for, it is also plausible to, with an increasing awareness of **6-word:** much research has been done to, has become an increasingly important issue, with the increased importance being attached
Move 1 Step 2	**3-word:** a majority of, has called for, one feature of, the majority of **4-word:** a large part of, by the number of, have been approved to, have been required to, has traditionally been considered, the primary challenge for, it is natural that, was quickly adopted to, remains a fundamental tenet, the ever-growing number of **5-word:** it is widely recognized as **6-word:** began to be strongly steered by, has brought opportunities and challenges for
Move 1 Step 3	**3-word:** the development of, he reports that, in view of, scholars have studied, some scholars view **4-word:** emerging studies show that, in the theoretical literature **5-word:** research on the role of, from the traditional focus on, McGrath (2000) highlights the importance of, it has been proposed that **6-word:** have so far predominantly focused on, have produced rich and important insights, researchers have shifted their attention from, many scholars have carried out research
Move 2 Step 1A	**5-word:** differentiated from the above studies **6-word:** has been the subject of controversy
Move 2 Step 1B	**4-word:** has barely been studied, has received little attention **5-word:** due to the lack of, has not received the attention, with a few exceptions in **6-word:** few initiatives have been made to, has not gained as much attention, not much research has been done

Move 2 Step 1C	**4-word:** considering the fact that **5-word:** will the findings of studies
Move 2 Step 1D	**4-word:** informed by research on **5-word:** there is a need to **6-word:** there is a need for research
Move 3 Step 1A	**3-word:** an attempt to, aiming to explore **4-word:** sets out to address **5-word:** the present study attempts to **6-word:** aim to address the following question, attempts to fill this research gap, attempts to bridge the gap between, the present study attempts to explore
Move 3 Step 1B	**3-word:** this research explores, this study investigated, this study examines, throughout the paper, we firstly employed **4-word:** data were collected from, the present study adopts **5-word:** this study sets out to, the article constructs the frameworks, we adopted a semi-structured interview, we classified the teachers into **6-word:** we conducted a study to investigate
Move 3 Step 2	**6-word:** one of the main findings was
Move 3 Step 3	**3-word:** to begin with **4-word:** it moves on to, this article ends with, in the following sections **6-word:** the paper is organized as follows, we first present a review of, we then explain the methodology of, lastly we depict the trajectories of
Move 3 Step 4	**6-word:** this finding provides empirical evidence for, the findings have pedagogical implications for
Move 3 Step 5	**4-word:** it is hoped that

Table 4: The 3-6-Word Lexical Bundles that Indicate the Rhetorical Moves in 10 Linguistic RAIs from Scopus-Indexed International Journals

Moves/Steps	**The 3-6-Word Lexical Bundles**
Move 1 Step 1	**4-word:** an important means of, has become enormously popular, is commonly referred as, is commonly seen as, the unprecedented acceptance of

	5-word: has drawn growing interest in **6-word:** is the activity most widely reported, has increased and become more urgent, with writing being an important skill
Move 1 Step 2	**3-word:** by virtue of, the importance of, the unfamiliarity of, paying attention to, making sense of **4-word:** at the forefront of, are most likely to, it is common for, in the course of, the main idea of, with the help of, are popular predominantly in, is always accompanied with **5-word:** are not well known to, is also closely related to **6-word:** has become a significant concern in, one of the most important aspects
Move 1 Step 3	**3-word:** Austin (1984) posited that, Kridalaksana (2005) asserted that, Rahyono (2015) asserted that, Suseno (1991) posited that, Wierzbicka (1992, p. 3) asserted that, researchers have studied **4-word:** Ariew and Erçetin (2004) identified, in our previous work, it is found that, these studies suggest that, most previous investigations into, this is based upon, research has focused on **5-word:** in a series of articles, Maros and Rosli (2017) asserted that, several studies have reported that, in six nation-wide surveys of, a recent survey revealed that, research has been conducted on, research has consistently shown that **6-word:** considerable bodies of scholarship have investigated, many studies have been carried out, researchers and educators have endeavored to
Move 2 Step 1A	**3-word:** found the opposite, reported conflicting findings **6-word:** these advantages are limited in number
Move 2 Step 1B	**3-word:** a lack of, but rarely with, provided insufficient evidence **4-word:** the short duration of, found several methodological shortcomings, may have difficulty in **5-word:** have received little information on, most studies have not examined, although previous studies found that **6-word:** there is a critical need for, the few studies that have examined, unable to produce a durable effect

Move 2 Step 1C	/
Move 2 Step 1D	/
Move 3 Step 1A	**3-word:** we aimed to **4-word:** this study aims to, this study intends to, to address these issues **5-word:** this study aimed to examine **6-word:** goal of this study is to
Move 3 Step 1B	**3-word:** in this article, this study investigates, our study examined, our study adopted **4-word:** the current study examined, this paper looks at, the article also identifies **5-word:** the paper also looks into, the present study expands on, we extend our earlier work, our main concern is with, we compared our findings with **6-word:** our study offered further insight on, we explore the intelligibility and comprehensibility, do this through an investigation of
Move 3 Step 2	/
Move 3 Step 3	**3-word:** in this paper **5-word:** followed by a description of
Move 3 Step 4	/
Move 3 Step 5	**3-word:** they could be **4-word:** are also advised to **6-word:** it would therefore be helpful to

The data refinement procedure is summarized in Table 5, which outlines the exclusion criteria applied during bundle extraction. In cases where shorter bundles overlapped with longer ones—for instance, *provides a direction* (3-word) and *provides a direction for* (4-word)—the longer bundle was retained if it conveyed meaning more precisely in relation to the rhetorical move.

Table 5: Exclusion Criteria for Extracting Lexical Bundles

Bundles ending in articles	e.g.: consistent with the, result in a, indicated by an
Time bundles	e.g.: for 20 min, for 1 h, 15 min at
Temperature, volume, and length bundles	e.g.: min at 30.8°C, 1 L, in 60 cm
Random section bundles	e.g.: figure 5, table 2 in

Topic-Specific bundles	e.g.: autonomy Huang Benson, the ELT profession
Meaningless bundles	...

Applying these criteria to the pre-exclusion lists (Tables 3–4) yielded 97 retained bundles for the Scopus-indexed Chinese corpus and 79 for the Scopus-indexed international corpus. The retained 3- to 6-word bundles associated with each move and step were then compiled (corpus-specific), and their distribution, frequency, and percentage relative to rhetorical moves were reported for both corpora. To examine structural features, all retained bundles were further classified according to the adapted framework of Biber et al. (1999). Based on this classification, we analyzed and reported the distribution, frequency, and percentage of bundles across structural types for both corpora.

3.3.2 Procedures for Analysing Rhetorical Moves

To explore patterns of rhetorical moves in English linguistic RAIs from both journal types, moves and steps were identified and coded by tagging sentences (and, where appropriate, short text chunks) and underlining the lexical bundles that indicated move/step elements. The coding unit was mainly the sentence, with occasional smaller or larger spans used when needed to capture a complete rhetorical function. Sentences were labeled S1, S2, S3, … following the adapted Swales (1990) CARS model, and the identified moves were recorded in an Excel template. For example:

S	This paper is an attempt to fill this research gap and thus aims to address the following question.	Move 3	Step 1A

Move 3 Step 1A (Occupying the niche- outlining purposes) was used in this sentence. The writer introduces the solution to the problem by stating the main purpose or aim of the study. In this case, the lexical bundles “this paper is an attempt to” and “aims to address” clearly indicate Move 3 Step 1A, leading to the main purpose of the current study.

Moreover, the combinations of moves/steps in both corpora were also examined. Although less frequent, they are informative for understanding how multiple functions may be embedded within complex structures. According to Tankó (2017), the embedded moves express different rhetorical functions within one clause. For example:

Informed by research on student-teacher education and autonomy (Benson & Huang, 2008; Huang & Benson, 2013; Izadinia, 2013; Gu & Benson, 2015), this study investigated nine FSTs' identity construction and autonomy development.	Move 2 Step 1D + Move 1 Step 3 + Move 3 Step 1B

In this case, within a complex sentence containing one independent clause and at least one dependent clause, the rhetorical moves/steps also occurred as a combination. "Informed by research on" was a signal to show Move 2 Step 1D (establishing a niche - continuing a tradition), while "Benson & Huang, 2008; Huang & Benson, 2013; Izadinia, 2013; Gu & Benson, 2015" was the in-text citation featured Move 1 Step 3 (establishing a territory- reviewing items of previous research). Meanwhile, "this study investigated" was a signal showing Move 3 Step 1B (occupying the niche- announcing present research). This illustrates a merged realization of three moves/steps within a single complex sentence.

For data analysis, by using the method of descriptive statistics and the auxiliary software SPSS, the frequency and the distribution (percentage) of each move and step, and the sequence and the structure (combination) of moves were analyzed. Since rhetorical moves were nominal or categorical data, each move should be labeled and put into the value column in SPSS. For example, Move 1 Step 1 was labeled as value "1.00". Then, according to the occurrences of each move, insert its corresponding labeled value in SPSS. For example, when Move 1 Step 1 appeared, insert "1.00", and when it appeared again, insert "1.00" again. Next, by clicking the "Analyze- Descriptive Statistics- Frequencies" button in SPSS, the results were shown automatically. According to the results in SPSS, the distribution, frequency, and percentage of rhetorical moves in both corpora were generated. To investigate the differences in the use of rhetorical moves in introductions of linguistic RAs in English between Scopus-indexed Chinese journals and Scopus-indexed international journals, the comparison of the frequency and the distribution of each move and step was made, and the comparison of the sequence and the structure (combination) of moves was also made.

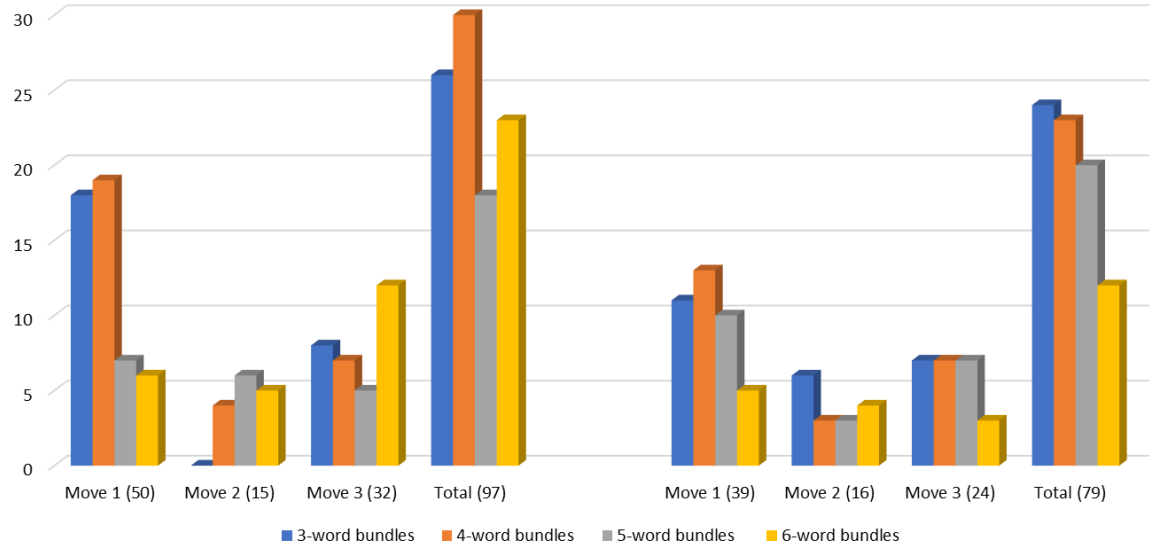
4. Findings and Discussions

4.1 Lexical Bundles in the Rhetorical Moves and Steps

A total of 97 lexical bundles were found in the moves and steps in 10 linguistic RAIs from Scopus-indexed Chinese journals, and a total of 79 were found in the moves and steps in 10 linguistic RAIs from Scopus-indexed international journals. A comparison was also made based

on the distribution of the 3-6-word lexical bundles in the three moves from both corpora (See Figure 1).

Figure 1: A Comparison of the Distribution of 3-6-Word Lexical Bundles in the Rhetorical Moves of Linguistic RAIs Between Scopus-Indexed Chinese and Scopus-Indexed International Journals



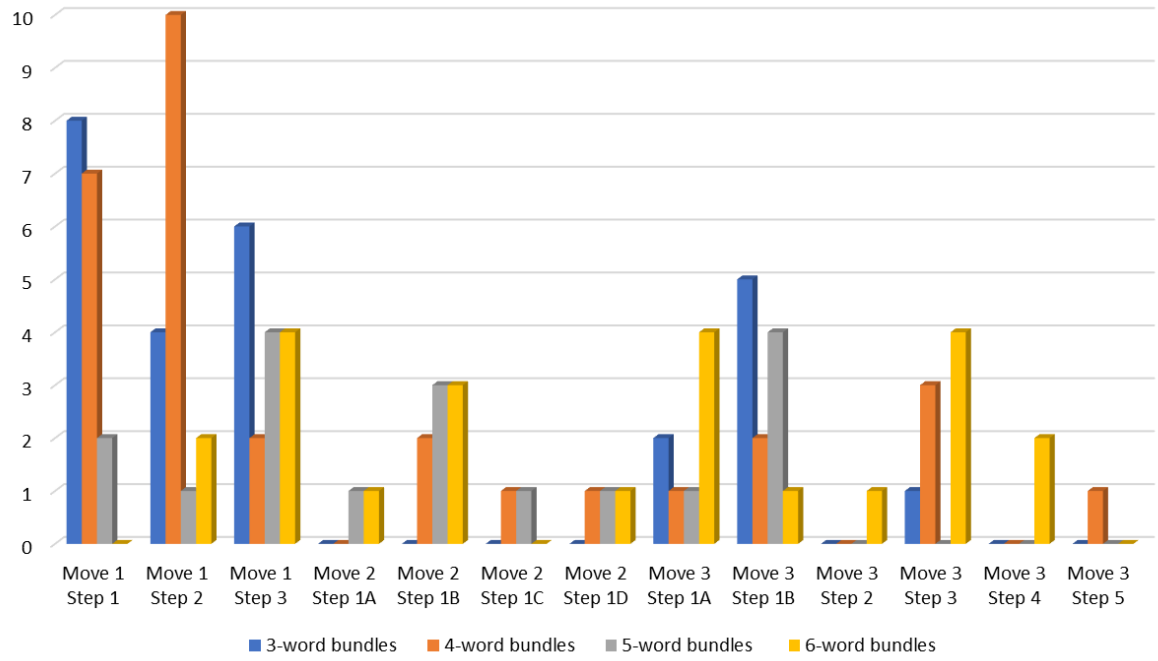
Overall, the 3-6-word lexical bundles were mostly yielded in Move 1, followed by Move 3 and Move 2 in both corpora. In the linguistic RAIs from Scopus-indexed Chinese journals, there were 50 tokens of 3-6-word lexical bundles in Move 1, 32 tokens in Move 3, and 15 tokens in Move 2. While considering its counterpart, there were 39 tokens of 3-6-word lexical bundles in Move 1, 24 tokens in Move 3, and 16 tokens in Move 2 in the RAIs from Scopus-indexed international journals. The number of the 3-6-word lexical bundles generated in Move 1 and Move 3 from the Chinese corpus was higher than that from the international corpus. In Move 2, however, the international corpus had one token more.

From the figure, the 3-4-word bundles played a dominant role in both corpora, especially in Move 1 (Establishing a territory). In the Chinese corpus, the 4-word bundles were the most common type of lexical bundles. According to Hyland (2008b, p. 8), 4-word bundles "are far more common than 5-word strings and offer a clearer range of structures and functions than 3-word bundles". While in the international corpus, the frequency of the occurrences of 3-word bundles was a little bit higher than that of 4-word bundles. This mainly resulted from the higher dispersion of 3-word bundles in Move 2. Besides, there were some differences in the proportion of 5-word and 6-word bundles between these two corpora. The number of 5-word bundles fell behind the number of 6-word bundles in the Chinese corpus, particularly in Move 1

(Establishing the territory) and Move 2 (Establishing a niche). While the number of 5-word bundles exceeded the number of 6-word bundles in the international corpus, particularly in Move 1 (Establishing the territory) and Move 3 (Occupying the niche).

Figure 2 and Figure 3 demonstrate the frequency of 3-6-word lexical bundles in each step of moves in linguistic RAIs from Scopus-indexed Chinese journals and Scopus-indexed international journals.

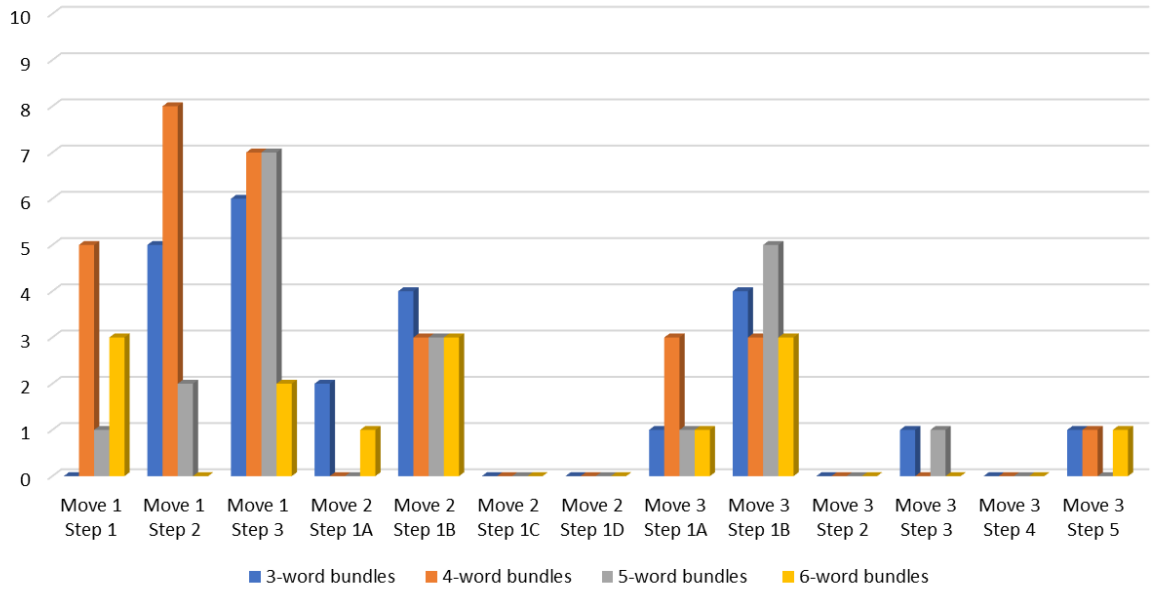
Figure 2: The Frequency of 3-6-Word Lexical Bundles in the Rhetorical Moves and Steps of Linguistic RAIs from Scopus-Indexed Chinese Journals



In the Chinese corpus, the lexical bundles in Move 1 Step 1 (Making a centrality claim) accounted for the dominance, while in the international corpus, the majority of lexical bundles were used to indicate Move 1 Step 3 (Reviewing items of previous research). To initiate Move 1 Step 2 (Making topic generalizations), the 4-word bundles were frequently used in both corpora.

For realizing Move 2 (Establishing a niche), the 3-word bundles were never used in each step of this move in the Chinese corpus. The 5-word and 6-word bundles were frequently applied to initiate Move 2 Step 1B (Indicating a gap). In the international corpus, none of the 3-6-word bundles were shown in Move 2 Step 1C (Raising a question) and Move 2 Step 1D (Continuing the tradition). The 3-6-word bundles centered on triggering Move 2 Step 1B (Indicating a gap).

Figure 3: The Frequency of 3-6-Word Lexical Bundles in the Rhetorical Moves and Steps of Linguistic RAIs from Scopus-Indexed International Journals



For realizing Move 3 (Occupying the niche), the 3-5-word bundles were seldom used to initiate Move 3 Step 2 (Announcing main findings) and Move 3 Step 4 (Evaluation of findings) in the Chinese corpus. In the international corpus, most of the 3-6-word bundles centered on Move 3 Step 1B (Announcing present research), followed by Move 3 Step 1A (Outlining purposes).

4.2 Structural Types of Lexical Bundles

Adapting the structural classification of lexical bundles proposed by Biber et al. (1999), the 3-6-word bundles in the two corpora were categorized. Figures 4 and 5 illustrate the distributions of the different grammatical structural features of lexical bundles in the Chinese corpus and international corpus.

It can be found that the primarily used structural type of lexical bundles in these two corpora is the *verb phrase* (SC13), accounting for nearly half the proportion of the total bundle types. This result is consistent with a previous study that shows the VP-based clausal bundles are heavily relied on by Chinese writers in writing articles in telecommunication journals (Pan et al., 2016). Meanwhile, a strong preference for using the *noun phrase with of-phrase fragment* (SC1) and *(verb/adjective +) to-clause fragment* (SC9) is also exhibited in both corpora. However, a sharp contrast between the Chinese corpus and international corpus lies in the percentage of the use of the *noun phrase with other post-modifier fragments* (SC2), *prepositional phrase with embedded of-phrase fragment* (SC3), and *(verb phrase +) that-clause fragment* (SC8).

Figure 4: The Structural Types of 3-6-Word Lexical Bundles in the Rhetorical Moves of Linguistic RAIs from Scopus-Indexed Chinese Journals

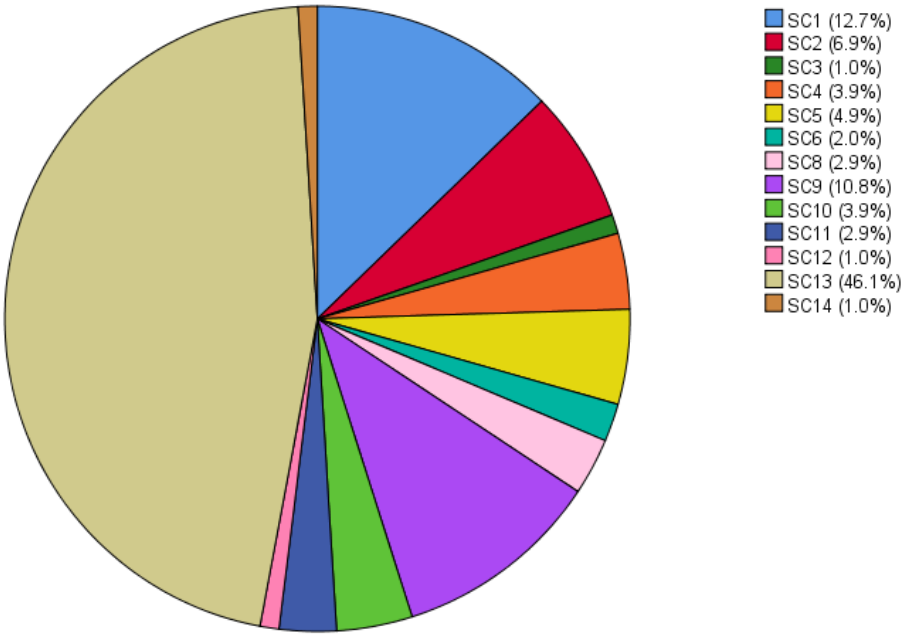
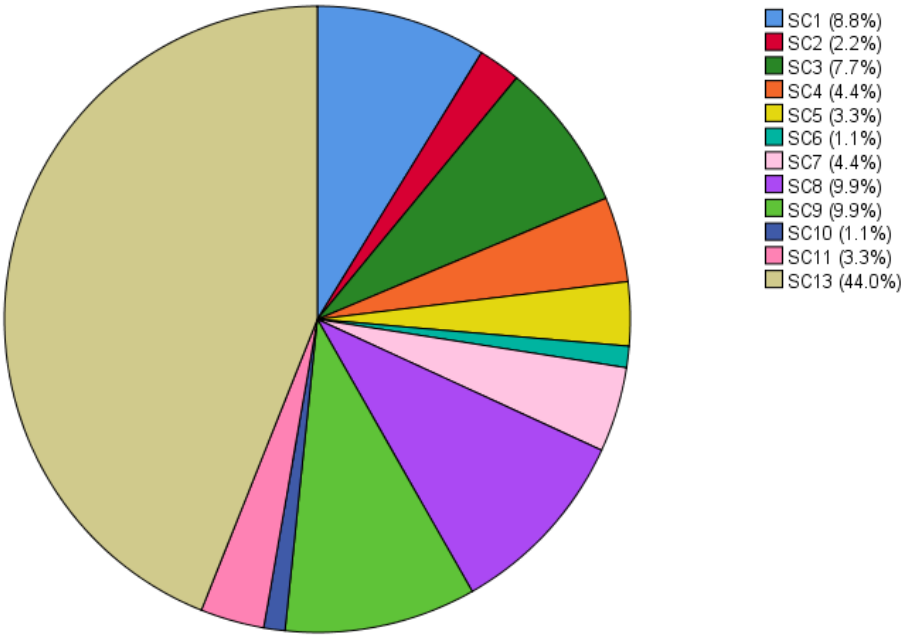


Figure 5: The Structural Types of 3-6-Word Lexical Bundles in the Rhetorical Moves of Linguistic RAIs from Scopus-Indexed International Journals



In the Chinese corpus, SC2 makes up 6.9% of all the bundle types. While in the international corpus, much lower use of SC2 - only 2.2% is shown. On the other hand, SC3 and SC8 in the Chinese corpus account for only 1.0% and 2.9%, respectively, whereas in the international corpus, their occurrences are nearly 7 times (SC3) and 3 times (SC8) higher, accounting for

7.7% and 9.9%, respectively. Besides, the use of *other expressions* (SC12) and *auxiliary verb + noun phrase* (SC14) has not appeared in the international corpus.

4.3 Patterns of Rhetorical Moves

Based on the extracted lexical bundles that convey the communicative functions of rhetorical moves and steps, the patterns of moves in both corpora were investigated as well. Table 6 shows a comparison of the frequency and distribution of moves between the Chinese corpus and the international corpus.

Table 6: A Comparison of the Distribution of Moves/Steps in 20 Linguistic RAIs from Scopus-Indexed Chinese Journals and Scopus-Indexed International Journals

Moves	Steps	F (CJ)	%	F (IJ)	%
Move 1 Establishing a territory	**Overall**	**93**	**62**	**115**	**68.9**
	Step 1: Claiming centrality	13	8.7	10	6.0
	Step 2: Making topic generalization	35	23.3	39	23.4
	Step 3: Reviewing items of previous research	45	30.0	66	39.5
Move 2 Establishing a niche	**Overall**	**16**	**10.7**	**21**	**12.6**
	Step 1A: Counter-claiming	2	1.3	4	2.4
	Step 1B: Indicating a gap	9	6.0	17	10.2
	Step 1C: Raising a question	1	0.7	0	0
	Step 1D: Continuing a tradition	4	2.7	0	0
Move 3 Occupying a niche	**Overall**	**41**	**27.4**	**31**	**18.6**
	Step 1A: Outlining purposes	7	4.7	6	3.6
	Step 1B: Announcing present research	17	11.3	19	11.4
	Step 2: Announcing main findings	1	0.7	0	0
	Step 3: Indicating structure of the paper	13	8.7	3	1.8
	Step 4: Evaluation of findings	2	1.3	0	0
	Step 5: Expectation from findings	1	0.7	3	1.8
Total		**150**	**100**	**167**	**100**

Comparing the results, although introductions from both corpora contain all three moves, a larger percentage of moves has been used in the Scopus-indexed international journals. In the Chinese corpus, the total occurrences of rhetorical moves are 150. The most common pattern of use for the rhetorical move is Move 1 (62%), followed by Move 3 (27.4%) and Move 2 (10.7%). In the international corpus, a total of 167 occurrences of rhetorical moves are found. The dominant move used by academic writers is Move 1 (68.9%), followed by Move 3 (18.6%) and Move 2 (12.6%).

Among the three moves in both corpora, the frequency of Move 1 is relatively higher than the other two moves used in the introductions. This finding is aligned with several past studies. In Qian's (2005) study, which investigated 200 introduction sections of English RAs in applied linguistics composed by L2 (Chinese) and L1 (native) writers, the result showed that in L2 writers, the occurrence of Move 1 was 36%, followed by Move 3 (33%) and Move 2 (31%). The reason why Chinese writers use Move 1 quite often is that they are familiar with this rhetorical technique. By establishing a territory, the writer can situate his or her research in a certain research domain to obtain a sense of affiliation, hoping to get accepted by his or her peers (Qian, 2005). Moreover, in the field of applied linguistics, Kobayashi (2003) investigated introductions of English RAs written by Japanese and English writers and stated that all three moves were frequently observed, and no moves were considered optional. English writers assign more importance to Move 1 and Move 3 than to other moves.

In terms of the use of steps in each move, there are some distinctive features. To establish a territory (Move 1), reviewing items of previous research (Move 1 Step 3) is the predominant technique picked by academic writers. The reason why most of the writers prefer to use Move 1 Step 3 is that this step has a closer connection with the work of others and the specific research status of academia (Badib & Sutopo, 2012). For creating a research space, one has to compete for research space, primarily by knowing what others' opinions are, and then can go a step further (Kobayashi, 2003). To establish a niche (Move 2), indicating a gap (Move 2 Step 1B) is the most common move that they employ. This result is consistent with Lim's (2012) study on the corpus of introductions of management RAs. Writers who vastly apply Move 2 Step 1B may, as a result of various alternative ways, do so to indicate a gap. The four ways widely taken by international writers to indicate a gap have been pointed out. They are (i) "highlighting the complete absence of research bearing a specific characteristic", (ii) "stressing insufficient research in a specific aspect", (iii) "revealing a limitation in previous research", and (iv) "contrasting conflicting previous research findings" (Lim, 2012). In addition to this step, Move

2 Step 1D (Continuing a tradition) is frequently used in the Chinese corpus, while Move 2 Step 1A (Counter-claiming) is more preferred by writers in the international corpus. As for Move 2 Step 1C (raising a question), it seems that the writers are not so inclined to pose a question mark in a sentence or use a question tone about previous research to establish a niche. Futász (2006) also found that this move was used much more rarely and constituted only about 1.5% of the corpus. To occupy a niche (Move 3), the rhetorical instrument that is mostly used in both corpora is announcing present research (Move 3 Step 1B), while the one that is hardly used in both corpora is announcing the main findings (Move 3 Step 2). This is mainly because this step is optional and is not suitable for use in all disciplines. In a result-oriented discipline such as computer science, the introduction points out to the reader in various ways the writer's contribution. Principal findings are very often explicitly described in the elaborate explanations of the nature of the present research. Therefore, the introductions in some particular disciplines address the "boosters" that show the positive assessment of the contributions made by the authors (Shehzad, 2010), but in the language and linguistic discipline, announcing the main findings has not been highlighted that much.

After exploring the distribution of the move, the sequence and cyclical patterns of moves in both corpora were further investigated. Table 7 shows the sequence and cyclical patterns of moves from both corpora.

Table 7: Move Structure of 20 Linguistic RAIs from Scopus-Indexed Chinese Journal and Scopus-Indexed International Journals

RAIs	Structure of Moves	Number of Move Units
CJAL Script 1	1-2-1-2-1-2-3	7
CJAL Script 2	1-2-3	3
CJAL Script 3	1-2-1-2-3	5
CJAL Script 4	1-3	2
CJAL Script 5	1-2-3	3
CJAL Script 6	1-2	2
CJAL Script 7	1-2-3	3
CJAL Script 8	1-2-1-3	4
CJAL Script 9	1-2-1-3-1-3-1-3-1-3	10
CJAL Script 10	1-2-1-3	4

3L Script 1	1-3	2
3L Script 2	1-2-1-3-1-2-1-3	8
3L Script 3	1	1
3L Script 4	1-2-1-2-1-2-3	7
3L Script 5	1-3	2
LLT Script 1	1-3	2
LLT Script 2	1-2-3	3
LLT Script 3	1-2-3-2-3-1-2-3-2-1-3-2-3	13
LLT Script 4	1-3	2
LLT Script 5	1-2-1-2-1-3	6

The results provided in the table above demonstrate the existence of different patterns of move structure used in 20 linguistic RAIs from Scopus-indexed Chinese journals and Scopus-indexed international journals. Due to the cyclical nature of RAIs (Crookes, 1986), the number of move units in the corpora can range from a minimum of 3 to a maximum of 24. All three moves tend to recur, with Move 1 being most inclined to be engaged in cyclicity as it exhibits recurrences in 80% of the introduction sections of RAs (Joseph et al., 2014). In the CARS model, Swales (1990) suggested the linear structure of Move 1, Move 2, and Move 3, and mentioned that an introduction commonly begins with Move 1 and ends with Move 3. From the table above, it can be seen that in both corpora, nearly all the academic writers follow this schema, that all the move patterns used by them begin with Move 1 and end with Move 3, except for one case where Move 1 was merely utilized. Among the move structures, the conventional M1-M2-M3 is the prominent pattern, accounting for 20% (4 out of 20) in total. In the 10 linguistic RAIs from Scopus-indexed Chinese journals, the regularities of move sequences are subtle. While in the 10 linguistic RAIs from Scopus-indexed international journals, M1-M3 is the pattern (4 out of 10) that is frequently adopted. An absence of Move 2 is shown in these scripts, where the move pattern is M1-M3.

In addition to the linear structure of the move pattern following Swales' model, move cycling is obvious in the current study. It can also be called move recycling, move repetition, move reiteration, or cyclical patterning, defined as "a textual feature characterized by the reiteration of a single move or more to accord with the organization of the accompanying text, to comply with the convention of the corresponding discourse community, or to serve an individual's communicative purposes, or a combination of these" (Rungnaphawet, 2016). Swales (1990)

suggested that the moves in his CARS model do not flow from the first to the last, which means that although M1-M2-M3 is a likely rhetorical organization, it is only one among many other possibilities, such as M1-M2-M1-M2-M3, in which M1 and M2 are recycled, and M1-M2-M3-M2-M3, in which M2 and M3 are cyclical (Rungnaphawet, 2016). The current study indicates that the cyclical pattern M1-M2-M1-M3 is frequently used in the Chinese corpus.

5. Conclusion

This paper investigated the lexical bundles and rhetorical moves of linguistic RAIs in high-impact Chinese and international journals in English. Both similarities and differences were found in the use of lexical bundles, the structural features of lexical bundles, and the distribution, frequency, and cyclical patterns of rhetorical moves in both corpora. The findings obtained in this study are meaningful. A practical list that fits for choosing 3-6-word bundles to realize each move and step has been generated to assist writers in constructing the introduction section. As the multifunctionality of lexical bundles was enhanced by their structural incompleteness, the analysis of the structural types of lexical bundles would raise writers' awareness of the interactions between syntax and lexis as well as the grammatical function of this formulaic language in written discourse. Moreover, unlike most previous studies, the findings of the current research managed to exploit the potential of the connection between lexical bundles and rhetorical moves. By adopting the bundle-driven move approach, the rhetorical and discourse-related functions could be technically fulfilled in the construction of RAIs.

The main limitation of this study was the relatively small corpus size, as only 20 introductions were analyzed for lexical bundles associated with rhetorical moves. Future research could expand the corpus to include a larger number of texts. Moreover, since the present investigation focused solely on RAIs in linguistics, the findings cannot be generalized to other disciplines, sections, or academic genres. To address this, subsequent studies might adopt an interdisciplinary approach to compare rhetorical structures across different sections, fields, and genres, particularly in high-impact journals from both China and the international academic community.

References

Ädel, A., & Erman, B. (2012). Recurrent word combinations in academic writing by native and non-native speakers of English: A lexical bundles approach. *English for Specific Purposes*, *31*(2), 81-92. https://doi.org/10. 1016/j.esp.2011.08.004

Ahlstrom, D. (2017). How to publish in academic journals: Writing a strong and organized introduction section. *Journal of Eastern European and Central Asian Research, 4*(2), 1–7. https://doi.org/10.15549/jeecar.v4i2.180

Alamri, B. M. (2017). *Connecting genre-based and corpus-driven approaches in research articles: A comparative study of moves and lexical bundles in Saudi and international journals* [Doctoral dissertation], The University of New Mexico.

Asano, M., Hirosuna, K., & Fujieda, M. (2024). Exploring lexical bundles in the move structure of English medical research abstracts: A focus on vocabulary levels. *Languages*, *9*(9), 281. https://doi.org/10.3390/languages9090281

Badib, A. A., & Sutopo, J. (2012). Citation and tense for reviewing previous research in the introduction section of English Science journals by non-native speakers. *Journal of Research and Educational Research Evaluation*, *1*(1), 160-163. https://journal.unnes.ac.id/journals/jere.

Bhatia, V. K. (1993). Analysing genre: Language use in professional settings. Longman.

Bhatia, V. K. (2014). *Analysing genre: Language use in professional settings*. Routledge.

Biber, D. (2006). *University language: A corpus-based study of spoken and written registers*. John Benjamins Publishing.

Biber, D., & Conrad, S. (1999). Lexical bundles in conversations and academic prose. In İçinde H. Hasselgard & S. Oksefjell (Eds.), *Out of corpora: Studies in honour of Stig Johansson* (pp. 56-71). Brill.

Biber, D., Johansson, S., Leech, G., Conrad, S., & Finegan, E. (1999). *Longman grammar of spoken and written English*. Longman.

Burn, D. J. (2024). Why it is important to publish. *Movement Disorders Clinical Practice, 11*(Suppl 3), S6. https://doi.org/10.1002/mdc3.14090

Cortes, V. (2013). The purpose of this study is to: Connecting lexical bundles and moves in research article introductions. *Journal of English for Academic Purposes*, *12*(1), 33-43. https://doi.org/10.1016/j.jeap.2012.11.002

Crookes, G. (1986). Towards a validated analysis of scientific text structure. *Applied linguistics*, *7*(1), 57-70. https://scholarspace.manoa.hawaii.edu/server/api/core/bitstreams/5a9f0eee-dc49-443f-a13b-4adeb3bcefca/content

Farhang-Ju, M., Jalilifar, A., & Keshavarz, M. H. (2024). Specificity and generality of lexical bundles in the rhetorical moves of applied linguistics research article

introductions. *Journal of English for Academic Purposes*, *69*, 101387. https://doi.org/10.1016/j.jeap.2024.101387

Futász, R. (2006). Analysis of theoretical research article introductions written by undergraduate students: a genre-based approach. *Acta Linguistica Hungarica*, *53*(2-3), 97-116. https://doi.org/10.1556/aling.53.2006.2-3.1

Geng, H., & Wei, H. (2023). Metadiscourse Markers in Abstracts of Linguistics and Literature Research Articles from Scopus-Indexed Journals. *Journal of Modern Languages*, *33*(1), 29-49. https://doi.org/10.22452/jml.vol33no1.2

Geng, H., & Wei, H. (2024). Exploring ChatGPT's Capabilities in Creative Writing: Can GPT-4o Conduct Rhetorical Move Analysis in Narrative Short Stories? *ASEAN Journal of Applied Linguistics*, *3*, 44-59. https://ejournal.maal.org.my/asjal/article/view/18

Geng, H., Lee, G. I., Jalaluddin, I., & Tan, H. (2023a). Occurrence Frequency of Rhetorical Moves in Introductions of Linguistics Research Articles From Non-Scopus and Scopus Journals. *Journal of Language Teaching and Research*, *14*(5), 1279-1289. https://doi.org/10.17507/jltr.1405.16

Geng, H., Lee, G. I., Jalaluddin, I., & Tan, H. (2023b). Rhetorical Moves of Introduction Sections in English Linguistics Research Articles From Two Non-Scopus and Two Scopus Journals. *Theory and Practice in Language Studies*, *13*(8), 2087-2096. https://doi.org/10.17507/tpls.1308.25

Geng, H., Nimehchisalem, V., Mukundan, J., & Zargar, M. (2024). A Comparison of Rhetorical Move Analysis by GPT-4 and Humans in Abstracts of Scopus-Indexed Tourism Research Articles. *International Linguistics Research*, *7*(2), 1-12. https://doi.org/10.30560/ilr.v7n2p1

Grant, A. M., & Pollock, T. G. (2011). Publishing in AMJ—Part 3: Setting the hook. *Academy of Management Journal, 54*(5), 873–879. https://doi.org/10.5465/amj.2011.4000

Hess, K., & Pagel, W. (1999). *Publishing and presenting clinical research*. Lippincott Williams & Wilkins.

Hill, S. S., Soppelsa, B. F., & West, G. K. (1982). Teaching ESL students to read and write experimental-research papers. *TESOL Quarterly*, *16*(3), 333-347. https://doi.org/10.2307/3586633

Hong, J. Y. (2019). Structural use of lexical bundles in the rhetorical moves of L1 and L2 academic writing. *English Teaching*, *74*(3), 29-54. https://doi.org/10.15858/engtea.74.3.201909.29

Hyland, K. (2004). Disciplinary interactions: Metadiscourse in L2 postgraduate writing. *Journal of Second Language Writing*, *13*(2), 133-151. https://doi.org/10.1016/j.jslw.2004.02.001

Hyland, K. (2008b). As can be seen: Lexical bundles and disciplinary variation. *English for Specific Purposes, 27*, 4–21. https://doi.org/10.1016/j.esp. 2007.06.001

Joseph, R., Lim, J. M. H., & Nor, N. A. M. (2014). Communicative moves in forestry research introductions: Implications for the design of learning materials. *Procedia-Social and Behavioral Sciences*, *134*, 53-69. https://doi.org/10.1016/j.sbspro.2014.04.224

Kobayashi, K. (2003). *A genre analysis of English and Japanese research articles in the field of applied linguistics: A contrastive study* [Doctoral dissertation], University of Malaya.

Lim, J. M. H. (2012). How do writers establish research niches? A genre-based investigation into management researchers' rhetorical steps and linguistic mechanisms. *Journal of English for Academic Purposes*, *11*(3), 229-245. https://doi.org/10.1016/j.jeap.2012.05.002

Mizumoto, A. (2016). Developing a writing support tool "AWSuM": Challenges and pedagogical applications. *Paper presented at the American Association for Corpus Linguistics*. Iowa State University.

Mizumoto, A., Hamatani, S., & Imao, Y. (2017). Applying the bundle–move connection approach to the development of an online writing support tool for research articles. *Language Learning*, *67*(4), 885-921. https://doi.org/10.1111/ lang.12250

Pan, F., Reppen, R., & Biber, D. (2016). Comparing patterns of L1 versus L2 English academic professionals: Lexical bundles in Telecommunications research journals. *Journal of English for Academic Purposes*, *21*, 60-71. https://doi.org/10.1016/j.jeap.2015.11.003

Pangesti, A., Ulfah, B., & Hartono, R. (2023). Investigating the implementation of IMRaD structure in abstracts of undergraduate students' theses. *Pedagogy: Journal of English Language Teaching, 11*(2), 109–123. https://doi.org/10.32332/pedagogy.v11i2.7384

Qian, D. F. (2015). *Contrastive study on RAIs in Applied Linguistics by L1 and L2 writers: rhetorical moves and linguistic realization* [Master's thesis], Huazhong University of Science and Technology.

Rungnaphawet, R. (2016). Moves, move sequences, and move cycling in Computer Engineering and Electrical Engineering research article abstracts. *PASAA PARITAT, 31*, 107-140. file-9-87-jf24zb814137.pdf (chula.ac.th).

Shehzad, W. (2010). Announcement of the principal findings and value addition in computer science research papers. *Ibérica*, *19*, 97-118. Retrieved from https://www.revistaiberica.org/index.php/iberica/article/view/356

Swales, J. M. (1990). *Genre analysis*. Cambridge University Press.

Swales, J. M. (2014). Genre analysis: English in academic and research settings. Cambridge University Press.

Swales, J. M., & Feak, C. B. (2004). *Academic writing for graduate students: Essential tasks and skills* (Vol. 1). University of Michigan Press.

Tankó, G. (2017). Literary research article abstracts: An analysis of rhetorical moves and their linguistic realizations. *Journal of English for Academic Purposes*, *27*, 42-55. https://doi.org/10.1016/j.jeap.2017.04.003

van Enk, A., & Power, K. (2017). What is a research article?: Genre variability and data selection in genre research. *Journal of English for Academic Purposes*, *29*, 1-11. https://doi.org/10.1016/j.jeap.2017.07.002

Varttala, T. (2001). Hedging in scientifically oriented discourse. Exploring variation according to discipline and intended audience.

Vilkaitė, L. (2016). Formulaic language is not all the same: Comparing the frequency of idiomatic phrases, collocations, lexical bundles, and phrasal verbs. *Taikomoji kalbotyra*, *8*, 28-54. DOI:10.15388/tk.2016.17505