

STRUCTURAL AND FUNCTIONAL ANALYSIS OF FOUR-WORD LEXICAL BUNDLES IN ACADEMIC BOOK REVIEWS PUBLISHED IN Q1-INDEXED INTERNATIONAL JOURNALS

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Article Info	Abstract
Article History Received: March 2026 Revised: April 2026 Accepted: June 2026 Published: July 2026	<i>Lexical bundles are an important feature of academic discourse, reflecting textual fluency, information density and rhetorical organization. While there is a massive frame of research on lexical bundles in academic genres, limited research has been done on lexical bundles in academic book reviews, especially in Q1-indexed international journals. The present corpus-based study explores the structural and functional distribution of four-word lexical bundles in academic book reviews published in Q1-indexed international journals. The corpus consists of twenty book reviews taken from ten Q1-indexed international journals. The analysis yielded 37 lexical bundles in this corpus. Structurally, fragments based on prepositional phrases and fragments based on noun phrases dominate the distribution, covering 78.38% of all lexical bundles. These patterns indicate a preference for compact packaging of information in terms of nominal and prepositional structures. In terms of function, the most frequently occurring category was referential bundles (56.75%), followed by discourse-organizing bundles (29.73%), and attitude bundles (13.51%). The prevalence of referential bundles reflects the focus of the genre on elaboration, description and academic evaluation of content, while the relatively low frequency of attitudinal bundles suggests adherence to academic objectivity. In general, the findings of the study reveal a close relationship between the structural patterns and the communicative functions of lexical bundles in the academic book reviews. The study demonstrates the benefits of corpus-based and genre-sensitive approaches for understanding academic discourse and has pedagogical implications for teaching academic writing, particularly in helping students to develop lexical patterns consistent with the standards of academic book reviews.</i>
Keywords Book review; Corpus-based study; Functions of lexical bundles; Lexical bundles; Structures of lexical bundles:	

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INTRODUCTION

Recurrent phraseological patterns are the basis of academic discourse for constructing knowledge, organizing information and communicating disciplinary meanings effectively. One such pattern is lexical bundles, which are recurrent sequences of words that often occur together in a particular register or genre. Lexical bundles have been the focus of considerable attention in corpus-based research as they contribute to textual fluency, cohesion and rhetorical organization (Biber et al., 2004; Cortes, 2004; Hyland, 2008b). Lexical bundles are not random collections of words, but rather conventionalized building blocks of discourse that help writers to express stance, organize arguments, and build relationships between ideas

and readers. Therefore, studying lexical bundles is of great significance for understanding how academic discourse is constructed and how disciplinary conventions are realized in language.

Lexical bundles have been extensively explored in diverse academic genres over the past two decades, including classroom discourse (Biber et al., 2004; Liu & Chen, 2020; Sanosi, 2022; Yunjung, 2025; Liu & Li, 2026), textbooks (Siricharoen & Wijitsopon, 2020; Priyatno et al., 2023), research articles (Jalilifar et al., 2016; Wright, 2019; Hernandez, 2020; Ren, 2021; Yang, 2022; Calingasan, 2026), theses and dissertations (Chen & Baker, 2010; Faqih & Harjanto, 2022; Islami et al., 2019; Wachidah et al., 2020; Li & Lei, 2025), and other academic writings. More recent studies have also shown that lexical bundles are closely tied to disciplinary identity, rhetorical purpose, and genre-specific communication practices. Taken together, these studies suggest that lexical bundles are more than simple word strings, but important linguistic resources for knowledge construction and academic argumentation.

Nevertheless, academic book reviews have been given considerably less attention in the face of this increasing body of research. This omission is remarkable, because book reviews are a special genre of evaluative academic discourse. Book reviews are not research articles, which report original findings; rather, book reviews combine descriptive, evaluative, persuasive, and disciplinary functions in a relatively concise text. Reviewers are asked to provide a summary of the book, assess the book's contribution to the field, identify its strengths and limitations, and contextualize their evaluation within the norms of a disciplinary community (East, 2011; Oinas & Leppälä, 2013; Husselbee & Coombs, 2023). In order to meet these communicative purposes, reviewers have to negotiate a delicate balance between criticism and appreciation that preserves academic credibility and objectivity. The rhetorical nature of book reviews makes this genre particularly useful for the investigation into the ways in which recurring phraseological patterns can serve the end of evaluation and persuasion in academic writing.

Lexical bundles are important in book reviews also for other reasons than genre description. From a pedagogical point of view, awareness of the structural and functional characteristics of lexical bundles can contribute to novice academic writers' increased awareness of the conventional phraseological patterns used to express evaluation, organize discourse, and build scholarly arguments. This is especially the case for second language writers, who often struggle to produce academic texts that are both linguistically natural and rhetorically appropriate. Therefore, identifying the lexical bundles that characterize successful book reviews may contribute to corpus-informed approaches to teaching academic writing.

While previous research has examined lexical bundles in different academic genres, three important gaps are left. First of all, there are not many studies of academic book reviews per se although they are important as evaluative academic discourse. Second, studies of lexical bundles have been conducted mainly in research articles, student writing, and spoken academic discourse, while the phraseological features of book reviews have been less studied. Third, most studies have concentrated on lexical bundles mostly in terms of their structure or function without systematically investigating how such bundles contribute to rhetorical organization in the genre. Thus, little is known about the relationship between lexical bundle use, communicative purpose and evaluative discourse in academic book reviews.

This gap is further more significant when viewed in the perspective of Q1-indexed international journals. First quartile journals are usually the most visible academically, with the highest editorial rigour and publication standards. Book reviews in such journals are therefore expected to display highly conventionalized and discipline-specific language practices. In this context, the examination of lexical bundles provides a good opportunity to

identify phraseological patterns characteristic of expert academic writing and to explore how evaluative and rhetorical functions are realized by experienced reviewers through recurrent language sequences. However, studies concentrating on lexical bundles in book reviews published in Q1-indexed journals are very scarce.

To fill these gaps, this research investigates the structural and functional distribution of four-word lexical bundles in academic book reviews published in Q1-indexed international journals. Four-word bundles were chosen because they are seen by many as the most structurally stable and functionally interpretable unit in lexical bundle research (Chen & Baker, 2010). In this study we attempt to provide a detailed description of the phraseological features that characterize high-quality academic book reviews, adopting a corpus-based approach and established structural and functional taxonomies (Biber et al., 2021; Salazar, 2014; Biber et al., 2004; Cortes, 2004; Biber & Barbieri, 2007; Hyland, 2008b; and Dontcheva-Navratilova, 2012). Furthermore, This study specifically addresses the following research questions: How are the structures of four-word lexical bundles distributed in respective book reviews published in Q1-indexed international journals? How are the functional categories of four-word lexical bundles distributed in respective book reviews published in Q1-indexed international journals?

RESEARCH METHOD

Research Design

In this study, a corpus-based descriptive design was used to examine the structural and functional characteristics of four-word lexical groups in academic book reviews published in Q1-indexed international journals. A corpus-based approach was chosen because it allows for the systematic identification and quantitative analysis of recurring phraseological patterns in authentic language data (Biber, 2008; McEnery & Hardie, 2012). With research questions focused on identifying the structural patterns and functional categories of lexical bundles, corpus linguistics provides an appropriate methodological framework for investigating recurring linguistic features that might not be identified through manual reading solely. This study employs a mixed-methods approach. Quantitatively, corpus analysis is used to identify recurring four-word lexical bundles based on predefined criteria of frequency and dispersion. Qualitatively, the extracted bundles were manually classified based on an established structural and functional taxonomy to determine their communicative roles within the book review genre. This mixed-methods analytical procedure enables this study to provide empirical evidence regarding the distribution of these bundles as well as interpretive insights into their rhetorical functions.

Corpus Description and Data Sources

The corpus is composed of 20 academic book reviews, extracted from 10 international journals indexed in the first quartile (Q1) of the Scimago Journal Rank (SJR) database in the field of linguistics and language. Q1-indexed international journals were chosen since they are known for their high visibility and reputation as publication venues with rigorous editorial standards, competitive peer-review processes, and internationally recognised academic quality. The book reviews in these journals tend therefore to be shaped by established disciplinary conventions and sophisticated academic language.

The name of these journals are *Applied Linguistics*, *ELT Journal*, *English for Specific Purposes*, *Internasional Journal of Bilingual Education and Bilingualism*, *Journal of English for Academic Purposes*, *Journal of Second Language Writing*, *Language*, *Language Testing*, *System*, and *TESOL Quarterly*. They were selected according to three inclusion criteria. First, during the data collection period, the journals were classified as Q1 in the SJR database. Second, the journals regularly publish book reviews as a recognised form of publication. Third, these journals are available via institutional subscriptions and can be retrieved as full

text for research purposes. In order to ensure the representativeness of the corpus, a stratified random sampling procedure was utilised to select two book reviews from each journal. The reviews selected were published between 2020 and 2023, and span a range of topics in linguistics and language. In addition, no reviewer is represented more than once in the corpus in order to reduce author-related bias. After compilation and pre-processing, the final corpus consists of 33,579 words (tokens). This corpus, although relatively small, is designed to be representative of the discourse of contemporary academic book reviews in high impact international journals.

Research Instruments

The primary software used for analysis in this study is AntConc version 4.2.2. AntConc was chosen because it provides reliable tools for corpus management, n-gram extraction, frequency counting, concordance, and keyword analysis. This software was used to identify four-word lexical groups and to calculate their frequency and distribution throughout the text. This study focuses exclusively on four-word lexical clusters. This choice is based on methodological and linguistic considerations. Previous research has found that four-word clusters achieve an optimal balance between functional specificity and frequency. Three-word bundles tend to be too general and structurally ambiguous, while five-word bundles occur less frequently and often yield limited data for analysis (Hyland, 2008b; Chen & Baker, 2010). Therefore, four-word bundles provide better analytical stability as well as clearer structural and functional interpretations.

Data Collection Techniques

Data collection was conducted in several steps. First, eligible journals indexed in Q1 were identified using the Scimago Journal Rank database. Second, journals in the field of Linguistics and Language were selected to retrieve book reviews published between 2020 and 2023. Third, the downloaded texts were filtered based on inclusion criteria and converted into editable plain text (.txt) files. The corpus was then cleaned of non-linguistic elements that could distort frequency counts, such as author biographies, references, page numbers, headers, footers, copyright notices, tables, figures, and publisher metadata. All files were cleaned, normalized to a common text format, and stored in the corpus database for analysis. Finally, the corpus files were imported into AntConc 4.2.2 to identify lexical bundles. The software generated all recurring four-word sequences that met the given frequency and dispersion constraints. The resulting bundles were manually inspected for duplicates and incomplete sequences, then classified according to structural and functional criteria. This process ensures that the final data set is an accurate representation of recurring phrase patterns in academic book reviews.

Data Analysis Techniques

To analyze the data, this study adopted a comprehensive framework. First, the classification of structural patterns used is a synthesis of the models proposed by Biber et al. (2021) and Salazar (2014), which serve as the main instrument in identifying manually the syntactic configuration of lexical bundles. This classification of structural patterns is presented in detail in Table 1.

Table 1
The structural patterns of lexical bundles used in this study

Structural Patterns of Lexical Bundles	Example of Lexical Bundles
Noun phrase with <i>of</i> -phrase fragment	<i>the surface of the, the shape of the, the nature of the</i>
Noun phrase with other post-modifier fragment	<i>such a way that, the degree to which, the extent to which</i>
Other noun phrase	<i>according to the manufacturer's, the present study, the present work</i>

Structural Patterns of Lexical Bundles	Example of Lexical Bundles
Prepositional phrase + <i>of</i>	<i>at the time of, at the end of</i>
Other prepositional phrase (fragment)	<i>in the next chapter, in the present study, in the nineteenth century</i>
Anticipatory <i>it</i> + verb or adjective phrase	<i>it is important to, it is necessary to, it is possible to</i>
Passive + prepositional phrase fragment	<i>is shown in figure, are shown in table</i>
Other passive fragment	<i>used in this study, similar results were obtained, were washed three times</i>
Copula <i>be</i> + noun phrase/adjective phrase	<i>is equal to the, may be due to</i>
(Verb phrase or noun phrase) + <i>that</i> -clause fragment	<i>has been shown that, should be noted that, can be seen that</i>
(Verb or adjective) + <i>to</i> -clause fragment	<i>is said to be, has been shown to, was found to be</i>
Adverbial-clause fragment	<i>as we shall see, as we have seen</i>
Pronoun/noun phrase + <i>be</i> (+ ...)	<i>this is not to, this is not the, there was no significant, there are a number</i>
Verb phrase with personal pronoun <i>we</i>	<i>we were unable to, here we show that, we have shown that</i>
Other verbal fragment	<i>play a role in, had no effect on, see materials and methods</i>
Other adjectival phrase	<i>similar to that of, significantly different from, consistent with this</i>
Other expressions	<i>the presence or absence, may or may not, than that of the, as well as the,</i>

Furthermore, the analysis of the communicative functions of lexical bundles is based on an extensive functional taxonomy of connections. This taxonomy integrates various prominent classification models from the literary corpus, including contributions from Biber et al. (2021), Salazar (2014), Biber et al. (2004), Cortes (2004), Biber & Barbieri (2007), Hyland (2008b), and Dontcheva-Navratilova (2012). Full details of this functional taxonomy are documented in Table 2.

Table 2
The functional taxonomy of lexical bundles used in this study

Functions of Lexical Bundles	Sub-functions
Referential bundles	Time/place/text-deixis bundles
	Procedure
	Quantification
	Description
	Grouping
	Topic-specific bundles
Discourse organizing bundles	Additive
	Comparative
	Inferential
	Causative
	Structuring
	Framing
	Citation
	Generalization
	Objective
	Stance
Attitudinal bundles	Engagement/interactional
	Acknowledgment

Additionally, to establish the reliability and validity of the research findings, a comprehensive interrater reliability process was employed. Target lexical bundles were initially identified automatically using *AntConc* software version 4.2.2 and then manually and independently categorized by four researchers (Raters A, B, C, and D) based on predetermined criteria. The second phase consisted of discussion and consensus negotiation among the four raters. This activity attempted to resolve any classification discrepancies that arose. If differences in analysis were identified, the majority opinion of the raters, based on theories or references from previous research, was adopted as the data. Through this collaborative activity, the research was able to build a sound foundation of reliability and validity, ensuring that the findings were based on a consistent and equitable consensus among the raters. Finally, to elaborate and explore the pedagogical implications of the findings, the results of the analysis regarding the variation of structural patterns and functions of lexical bundles recorded in book reviews are critically evaluated. This evaluation is then linked and compared with findings from relevant previous studies.

RESEARCH FINDINGS AND DISCUSSION

Research Findings

Corpus analysis identified 37 lexical bundles. The distribution was structurally dominated by prepositional phrase-based and noun phrase-based fragments, which together accounted for 78.38% of all identified lexical bundles. The high frequency of this construction points to a genre preference for nominal and prepositional fragments in order to realize conciseness and information density. Regarding functional classification, the most frequent category is referential bundles (56.75%), followed by discourse-organizing bundles (29.73%) and attitude bundles (13.51%). The high frequency of referential bundles shows the genre's emphasis on content expansion, description and scientific assessment, while the low frequency of attitude bundles shows the preference for an objective academic attitude. Overall, these findings suggest that the structural form and communicative function of lexical bundles in academic book reviews are closely related. Furthermore, the results of the data analysis conducted to answer the two main research questions of this study are explained in more detail in the following two sub-sections.

Structures of Four-Word Lexical Bundles

The classification of four-word lexical bundle structural patterns in this study primarily refers to the comprehensive framework proposed by Biber et al. (2021) and Salazar (2014), which includes a total of 17 categories. However, corpus analysis shows that not all of these categories are realized in the book review discourse studied. Specifically, only 11 lexical bundle structural categories were found to be actively used in this corpus. The structures of four-word lexical bundles identified in book reviews published in Q1-indexed international journals are summarized and presented in detail in Table 3.

Table 3
The Structures of Four-Word Lexical Bundles Found in Book Reviews
Published in Q1-indexed International Journals

Lexical Bundles	Structure	Variation of Lexical Bundles	Percentage
<i>Prepositional-phrase fragments</i>			
<i>from the perspective of, as a result of, at the end of, in the development of, with a discussion of, in the use of, to the field of, with the help of, on the part of.</i>	Prepositional phrase + of	9	24.32%

Lexical Bundles	Structure	Variation of Lexical Bundles	Percentage
<i>in the United States, of the book is, of the book and, of the book it, on the other hand, at the same time, in chapter the authors.</i>	Other prepositional phrases (fragments)	7	18.92%
Total of Prepositional-phrase fragments		16	43.24%
<i>Noun Structures</i>			
<i>an overview of the, a wide range of, the discussion of the, the end of the, the role of the, the use of the.</i>	Noun phrase with <i>of</i> -phrase fragment	6	16.22%
<i>the ways in which, the relationship between language, English language education in, this book is an.</i>	Noun phrase with other post-modifier fragments	4	10.81%
<i>English for academic purposes, language teaching and learning, teachers and teacher trainers.</i>	Other noun phrases	3	8.11%
Total of Noun Structure		13	35.14%
<i>Verb Structure</i>			
<i>highlights the significance of, to learn more about.</i>	Other verbal fragments	2	5.41%
Total of Verb Structure		2	5.41%
<i>Other Structures</i>			
<i>the book could be, the book consists of.</i>	Noun phrase + verb phrase	2	5.41%
<i>as well as the</i>	Other expressions	1	2.70%
<i>who are interested in.</i>	Other adjectival phrases	1	2.70%
<i>is one of the</i>	Copula <i>be</i> + noun phrase	1	2.70%
<i>as a second language</i>	Adverbial-clause fragment	1	2.70%
Total of Other Structure		6	16.21%
Grand Total		37	100%

Table 3 shows the structural distribution of four-word lexical bundles used in academic book reviews published in Q1-indexed international journals. Thirty-seven variations of lexical bundles were classified into four main structural categories: Noun Structures, Verb Structures, Prepositional Phrase Fragments, and Other Structures. The results indicate a preference for nominal and prepositional constructions, indicating the phraseological features of academic book review discourse.

Among these four categories, Prepositional Phrase Fragments were the most prominent, accounting for 43.24% of the total variation in lexical bundles identified. Within this category, the most productive subcategory was Prepositional Phrase + *of* (24.32%), followed by Other Prepositional Phrase (Fragment) (18.92%). The prominence of these structures suggests that reviewers frequently use prepositional constructions to establish relationships between ideas, to provide context, and to connect propositions in evaluative academic discourse. These patterns contribute to the dense, informative style typically associated with academic writing.

The second largest category is Noun Structure, which accounts for 35.14% of the total variation in lexical bundles. Noun Phrases with "of" Phrase Fragments (16.22%) top this category, followed by Noun Phrases with Other Post-Modifier Fragments (10.81%) and Other Noun Phrases (8.11%). The high frequency of noun-based bundles indicates a tendency for academic book reviews to present information through nominal constructions that allow

reviewers to discuss concepts, arguments, and scientific contributions concisely and precisely. In contrast, only 5.41% of the identified lexical bundle variance is Verb Structure, indicating the relatively marginal role of verbal constructions in the phraseological organization of this genre. 16.21% of the total variation is accounted for by Other Structures. These include a variety of less common constructions, such as noun phrases + verb phrases, adjective phrase fragments, copula constructions, and adverbial clause fragments.

Functions of Four-Word Lexical Bundles

The classification of four-word lexical bundles in this study primarily refers to the comprehensive framework proposed by Biber et al. (2021), Salazar (2014), Biber et al. (2004), Cortes (2004), Biber & Barbieri (2007), Hyland (2008b), and Dontcheva-Navratilova (2012), which includes three major functions, namely referential bundles, discourse organizing bundles, and attitudinal bundles. In this study, corpus analysis shows that all of these function categories were realized in the book review discourse studied. However, not all sub-categories of the discourse organizing bundle function were found in this corpus. The four-word lexical bundle functions identified in book reviews published in Q1-indexed international journals are summarized and presented in detail in Table 4.

Table 4
The Functions of Four-Word Lexical Bundles Found in Book Reviews
Published in Q1-indexed International Journals

No.	Types of Functions	Subcategory	Lexical Bundles	Total	Percentage
1.	Referential bundle	Topic-specific	<i>English for academic purposes, language teaching and learning, the relationship between language, to the field of, as a second language, English language education in, On the part of</i>	7	18.92%
		Description	<i>Of the book is, an overview of the, the book consists of, the discussion of the, the role of the</i>	5	13.51%
		Procedure	<i>In the development of, in the use of, with the help of, the use of the, to learn more about</i>	5	13.51%
		Place bundle/time deixis bundles	<i>In the United States, at the end of</i>	2	5.41%
		Quantification	<i>A wide range of</i>	1	2.70%
		Grouping	<i>Is one of the</i>	1	2.70%
		Total of Referential Bundles		21	56.75%
2.	Discourse organizing bundle	Structuring	<i>In chapter the authors, of the book and, the end of the, with a discussion of</i>	4	10.81%
		Comparative	<i>At the same time, on the other hand</i>	2	5.41%
		Framing	<i>From the perspective of, of the book it</i>	2	5.41%
		Causative	<i>As a result of</i>	1	2.70%
		Additive	<i>As well as the</i>	1	2.70%
		Inferential	<i>The ways in which</i>	1	2.70%
		Total of Discourse Organizing Bundles		11	29.73%
3.	Attitudinal bundle	Stance	<i>This book is an, highlights the significance of, the book could be</i>	3	8.11%
		Engagement	<i>Who are interested in</i>	1	2.70%

No.	Types of Functions	Subcategory	Lexical Bundles	Total	Percentage
		Acknowledgement	<i>Teachers and teacher trainers</i>	1	2.70%
	Total of Attitudinal Bundles			5	13.51%
	Grand Total			37	100%

Analyzing the functions reveals that the four-word lexical bundles are primarily driven by the Referential function, constituting the majority of the variation, with 56.75% or 21 of the 37 bundles. This referential function bundles mainly offers factual and contextual triggers, showing the topic-specific detail sub-category as the highest contributor at 18.92%, followed by description and procedure at 13.51% each. Additionally, the discourse organizing bundle is also important, covering 29.73% of the variation as it helps maintain coherence across sections and the structuring subcategory at 10.81% is central to managing the flow of the review. Conversely, the Attitudinal Bundle is the least sizeable at 13.51%, although it is vital as it captures the author's perspective over the reviewed work, with the Stance subcategory dominating the collection. This distribution indicates the assimilation level of academic book review discourse and the penchant underpinning factual information and coherence over attitude articulation.

Discussion

Structures of Four-Word Lexical Bundles

An analysis of the structural patterns of four-word lexical bundles found in the corpus of academic book reviews published in Q1-indexed journals (see Table 3) reveals not only the conventional features of academic discourse but also the idiosyncratic phraseological features of the book review genre. Thirty-seven lexical bundles were identified and classified into several structural categories. The results reveal a clear predominance of prepositional phrase fragments and noun phrase structures. This suggests that the phraseological basis of academic book reviews is predominantly formed using nominal and prepositional patterns. Among the identified structures, Prepositional Phrase + *of* exhibited the highest level of structural diversity, making up 24.32% of the total number of lexical bundle structures, with Other Prepositional Phrases (Fragments) accounting for 18.92%. This dominance supports the observation made by Conrad and Biber (2005) that lexical bundles in academic prose are mostly made up of noun phrase fragments and prepositional phrase fragments.

The findings are also consistent with prior studies in a range of academic genres. Similarly, Biber et al. (2004), Gezeğin-Bal (2019), and Shirazizadeh and Amirfazlian (2021) found that four-word lexical bundles in academic discourse mainly consist of prepositional phrase fragments and noun phrase structures. The recurrence of these structures suggests that lexical bundles function mainly as concise phraseological tools that facilitate informational density and lexical packaging, two characteristics of academic writing (Biber et al., 2021; Ädel & Erman, 2012). Academic writers rarely use complete clause constructions. Instead, they tend to compress information in nominal and prepositional structures. This allows for the efficient presentation of concepts, relationships and scholarly arguments.

The genre of book review has a number of distinct features, but the overall structural profile conforms with more general patterns of academic discourse. The large amount of prepositional phrase fragments indicates that reviewers often use phraseological patterns to establish contextual relations, to frame interpretations, and to connect propositions in the text. Such structures accommodate the communicative needs of book reviews, where writers are required to summarize content, situate scholarly contributions, and develop critical commentary within a limited textual space. In this sense, lexical bundles are not merely indicators of textual cohesion but also rhetorical devices that function to structure evaluative and interpretive discussion (Hyland, 2008b; Ädel, 2014).

This pattern differs somewhat from findings reported in other academic genres. Several studies have found noun phrase fragments to be the most dominant structure in the introductions of medical research articles (Jalali & Moini, 2014), research articles (Calingasan, 2026), and postgraduate theses (Fitrianasari et al., 2018). However, in this study, the prepositional-phrase fragment structure was the most dominant. This contrast indicates that structural preferences in lexical bundle use are heavily influenced by communicative purposes specific to genre. Research articles and theses are usually committed to describing research objects, methods and results, but book reviews require the author to put scholarly works in context, synthesize information and create critical interpretations. These rhetorical demands appear to encourage a greater use of prepositional phrase structures that are useful for the organization of the text and for the contextual framing of the text (Hyland, 2008a).

The findings also support the argument that lexical bundles in academic discourse are mostly incomplete structural units rather than complete clauses (Biber et al., 2021). The majority of the bundles in this corpus are phrasal fragments that act as discourse building blocks. This implies that reviewers depend a lot on formulaic expressions to keep up conceptual density and coherence without using syntactic complexity (Biber & Barbieri, 2007). Such a pattern is an example of the larger trend in academic discourse to favor the packaging of information in phrase level patterns.

Another contribution of this study is the discovery of a structural pattern Noun Phrase + Verb Phrase, of the type of bundles such as *the book could be* and *the book consists of*. Biber et al. (2021) also include non-conforming patterns in the larger category of Other Expressions, but the present findings suggest that this structure must be taken into account separately in the context of academic book reviews. The repeated use of the subject *the book* followed by a verb phrase seems to reflect the communicative needs of the genre, in particular the need to describe, characterize and position the reviewed work. This finding corroborates Salazar's (2014) claim that the study of less explored academic genres may uncover phraseological patterns that can expand or revise current lexical bundle taxonomies.

Theoretically, these findings support Hyland's (2012) argument that the use of formulaic language is subject to genre conventions and rhetorical purposes. The phraseological profile revealed in this study shows that academic book reviews employ lexical bundles differently from more expository genres such as research articles, as they have to perform information presentation, contextualization of scholarly contributions and construction of critical interpretations simultaneously. Pedagogically, the findings point to the importance of genre sensitive approaches to academic writing teaching. Teaching lexical bundles as genre-specific resources instead of decontextualized language items may raise students' and novice researchers' awareness of the contribution of phraseological patterns to effective academic communication (Ädel, 2014; Shirazizadeh & Amirfazlian, 2021).

Functions of Four-Word Lexical Bundles

Functional analysis of four-word lexical bundles identified in a corpus of book reviews published in Q1 journals (Table 4) provides deep insights into the rhetorical priorities and lexical-grammatical requirements of the genre. The results of functional grouping, based on the taxonomy of Biber et al. (2004) and Hyland (2008b), show that this genre prioritizes functions oriented towards content and discourse structure, in line with the information-dense and evaluative nature of academic book reviews. The distribution of functions shows a clear dominance of referential bundles (56.75%), followed by discourse-organizing bundles (29.73%) and attitudinal bundles (13.51%).

The Referential Bundles category is the most prominent function in the corpus, accounting for more than half of the total variation (56.75%), and reflecting the orientation of book reviews towards the presentation of conceptual, descriptive, and thematic information. This finding is highly consistent with previous research on academic discourse (Cortes, 2004;

Yang & Fang, 2021; Alasmay, 2025), which confirms that written academic texts rely on referential bundles to pack content and conceptual entities densely (lexical packing). The topic-specific subcategory emerged as the most frequently used type (18.92%), with bundles such as *English for academic purposes* and *language teaching and learning*. These bundles serve to name the main fields and concepts that are the focus of evaluation, ensuring that readers immediately understand the thematic scope of the book. These findings confirm the function of the book review genre, which must identify the conceptual domain and establish the relevance of the work being reviewed (Motta-Roth, 1995; Nodoushan & Montazeran, 2012).

The subcategories description (13.51%) and procedure (13.51%) also play an important role in conveying the content and structure of the book. Bundles such as *an overview of the* or *the discussion of the* are used to summarize the main content and features, while *in the development of* or *to learn more about* help explain the procedures, stages, or approaches discussed by the author of the book. This is in line with the results of studies by Cortes (2013) and Hernández (2020), which found that these types of bundles play a role in summarizing moves and descriptive commentary. In this regard, these elements are essential elements of evaluative-informative book reviews.

In addition, bundles with deictic and quantification functions such as *in the United States* and *a wide range of* support spatial-temporal and enumerative functions (Biber & Barbieri, 2007; Jalali et al., 2015), which help authors direct readers and convey the scope or variation of phenomena. Overall, the dominance of referential functions confirms that book reviews serve as texts oriented towards presenting information with high conceptual density, and demonstrate the superiority of nominal and prepositional structures in packaging meaning (Biber et al., 2021; Ädel & Erman, 2012). The second most important function, Discourse-Organizing Bundles (29.73%), serves to maintain discourse cohesion, organize argumentative structure, and guide readers through the text's evaluation flow. This role is particularly important given that book reviews are a highly complex rhetorical genre that combines description, evaluation, and recommendation.

The subcategories of structuring (10.81%) and framing (5.41%) are most prominent in this category. Bundles such as *in chapter the authors* help to mark the internal organization of the book and link the evaluation to specific sections, while bundles *from the perspective of* are used to position arguments within a particular theoretical framework. Both types exhibit a strong metatextual function, consistent with the findings of Hyland (2008b), Salazar (2014) and Dontcheva-Navratilova (2012) on the importance of textual metadiscourse in guiding readers. Furthermore, the subcategories comparative (*on the other hand, at the same time*) and causative (*as a result of*) are used to indicate logical relationships between ideas, whether in the form of contrast, simultaneity, or consequence. The use of these bundles supports evaluative reasoning, which is at the heart of book reviews (Hartley, 2010; Hartley, 2020). Meanwhile, additive (*as well as the*) and inferential (*the ways in which*) strengthen the connectivity of ideas, showing that book reviews utilize organizational bundles as interpropositional cohesion devices to maintain a logical and coherent argumentative flow.

Attitudinal Bundles category occupies the smallest portion (13.51%), but its function is important in conveying the author's stance or evaluation of the book. The low frequency of this category indicates an effort to maintain objectivity and academic formality, in line with the characteristics of written scientific prose that emphasizes implicit evaluation rather than explicit expression of attitude (Biber & Barbieri, 2007; Hyland, 2012). Bundles, such as *this book is an*, *highlights the significance of*, and *the book could be*, indicate an evaluative stance that focuses on assessing the scientific contribution and academic value of the book, rather than on interpersonal interaction. The engagement subcategory (e.g., *who are interested in*) appears only rarely, indicating that reader engagement is targeted and minimal, primarily to

identify the target audience rather than to persuade. This pattern confirms that the book review genre serves to critically but objectively assess works, rather than to build interpersonal closeness (Motta-Roth, 1995; Hartley, 2020).

These functional findings are closely aligned with the structural results in Table 4, reinforcing the relationship between function and lexical-grammatical form. Referential bundles are often realized through nominal structures and prepositional phrase fragments, for example, *an overview of the* (Description) and *in the development of* (Procedure), which structurally fall into the categories of Noun phrase with of-phrase fragment and Prepositional phrase + of (Biber et al. 2004). This indicates that the function of packaging information in this genre is realized through dense and formal structures. Meanwhile, discourse-organizing bundles often take the form of prepositional phrase fragments, such as *from the perspective of* and *as a result of*, which function as markers of inter-propositional cohesion and rhetorical framework organizers (Dontcheva-Navratilova, 2012; Cortes, 2013). This symbiotic relationship between structure and function supports Halliday & Hasan's (1989) view that lexical-grammatical choices reflect the underlying textual and ideational functions of discourse.

CONCLUSION

This study investigates the structural and functional features of four-word lexical bundles in academic book reviews published in Q1-indexed international journals. The results show that the use of lexical bundles is dominated by prepositional phrase-based and noun phrase-based structures, reflecting a tendency toward concise and information-dense expressions. Categorically, the most frequently occurring type of bundle is the referential, followed by discourse-organizing bundles and attitude bundles. These findings suggest that lexical bundles underpin how academic book reviews present scientific content, relationships between concepts, and the structure of critical discussion, whereas the author's attitude is expressed more selectively.

This study contributes to the growing corpus-based research on formulaic language by analyzing lexical bundles within the under-studied genre of academic book reviews. These findings also have pedagogical value as they highlight the importance of genre-sensitive instruction in academic writing. Increased awareness of the lexical bundles used in writing can help novice writers and second-language writers develop phraseological competence and produce texts consistent with the conventions of academic book reviews. Several limitations should be noted. The corpus is restricted to book reviews published in Q1-indexed journals in linguistics and language-related fields, which may limit the generalizability of the findings to other disciplinary contexts. Additionally, the corpus size is relatively small and specific to a single journal ranking category.

Future research should include a larger and more diverse corpus, encompassing book reviews from various disciplines and journal rankings, and examine the relationship between lexical sets and rhetorical moves. Such investigations will provide a richer understanding of how formulaic language contributes to genre-specific communication in academic settings. As a whole, this study demonstrates that lexical bundles are an important source of phraseology in academic book reviews, influencing discourse organization and the communication of scientific content. This study offers insights into the structural and functional patterns of formulaic language use in evaluative academic discourse, advancing our understanding of this phenomenon and contributing to the development of corpus-based, genre-sensitive academic writing pedagogy.

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INFORMED CONSENT STATEMENT

Not applicable. This study did not involve human participants, interviews, or surveys. The data were obtained from book reviews published in Q1-indexed academic journals that are publicly available and can be freely accessed and downloaded.

DATA AVAILABILITY STATEMENT

The data analyzed in this study consist of book reviews published in Q1-indexed academic journals. All book reviews used as the dataset are publicly accessible and can be freely downloaded from the respective journal websites. Because the data originate from publicly available sources, no additional dataset was generated or deposited in a repository. Further information regarding the sources of the data can be obtained from the corresponding author upon reasonable request.

DECLARATION OF AI USE

The authors emphasize that artificial intelligence (AI) tools were used only for limited editorial assistance, such as developing a manuscript outline and refining sentence structure, grammar, and linguistic expressions. The conceptualization of the study, corpus compilation, data extraction, data analysis, interpretation of results, discussion of findings, and conclusions were not developed using any AI tools. All analytical procedures, academic arguments, and intellectual contributions in this manuscript are the original work of the authors. The authors are fully responsible for the content of the manuscript and its adherence to standards of academic integrity and publication ethics.

REFERENCES

- Ädel, A. (2014). Selecting quantitative data for qualitative analysis: A case study connecting a lexicogrammatical pattern to rhetorical moves. *Journal of English for Academic Purposes*, 16, 68–80. <http://dx.doi.org/10.1016/j.jeap.2014.09.001>
- 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://www.doi.org/10.1016/j.esp.2011.08.004>
- Alasmary, A. (2025). Lexical bundles in psychology lectures and textbooks: a contrastive corpus-based study with implications for academic writing. *Frontiers in Psychology*, 16, 1545355. <https://doi.org/10.3389/fpsyg.2025.1545355>
- Biber, D. (2008). Corpus-based analysis of discourse: dimensions variation in conversation. In V. K. Bhatia, J. Flowerdew & R. H. Jones (Eds.), *Advances in Discourse Studies* (pp. 100-114). Routledge.
- Biber, D., & Barbieri, F. (2007). Lexical bundles in university spoken and written registers. *English for Specific Purposes*, 26(3), 263–286. <https://doi.org/10.1016/j.esp.2006.08.003>.
- Biber, D., Conrad, S., & Cortes, V. (2004). If you look at...: Lexical bundles in university teaching and textbooks. *Applied Linguistics*, 25(3), 371–405. <https://doi.org/10.1093/applin/25.3.371>.
- Biber, D., Johansson, S., Leech, G. N., Conrad, S., & Finegan, E. (2021). *Grammar of spoken and written English*. Amsterdam: John Benjamins.
- Calingasan, K. A. (2026). From corpus to classroom: A corpus-based analysis of lexical bundles in engineering research articles and pedagogical applications for research writing. *English for Specific Purposes*, 83, 155-166. <https://doi.org/10.1016/j.esp.2026.04.003>
- Chen, Y. H., & Baker, P. (2010). Lexical bundles in L1 and L2 academic writing. *Language Learning and Technology*, 14(2) 30–49. <https://doi.org/10.64152/10125/44213>

- Chen, Y. H., & Baker, P. (2016). Investigating criterial discourse features across second language development: Lexical bundle in rated learner essay, CEFR B1, B2 and C1. *Applied Linguistics*, 37(6), 849–880. <https://www.doi.org/10.1093/applin/amu065>
- Conrad, S., & Biber, D. (2005). The frequency and use of lexical bundles in conversation and academic prose. *Lexicographical*, 20, 56-71. Retrieved September 9, 2025, from https://pdxscholar.library.pdx.edu/cgi/viewcontent.cgi?article=1002&context=ling_fac . (Online Source)
- Cortes, V. (2004). Lexical bundles in published and student disciplinary writing: Examples from history and biology. *English for Specific Purposes*, 23(4), 397–423. <https://doi.org/10.1016/j.esp.2003.12.001>
- 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>
- Dontcheva-Navratilova, O. (2012). Lexical bundles in academic texts by non-native speakers. *Brno Studies in English*, 38(2), 37–58. <https://doi.org/10.5817/BSE2012-2-3>
- East, J. W. (2011). The scholarly book review in the humanities: An academic Cinderella?. *Journal of Scholarly Publishing*, 43(1), 52–67.
- Faqih, M. S., & Harjanto, I. (2022). English lexical bundles in the graduate theses: The frequency, structure, and distribution. *Journal of English Education and Linguistics Studies (JEELS)*, 9(1), 27–49. <https://doi.org/10.30762/jeels.v9i1.3652>
- Fitrianasari, N. I., Sulistyorini, T., & Sugiarti, T. R. (2018). Lexical bundles in academic writing by undergraduate and graduate students of English language education program. *Loquen*, 11(2), 1–14. <https://doi.org/10.32678/loquen.v11i02.1102>
- Gezegin-Bal, B. (2019). Lexical bundles in published research articles: A corpus-based study. *Journal of Language and Linguistic Studies*, 15(2), 520-534. <https://doi.org/10.17263/jlls.586188>
- Halliday, M. A. K., & Hasan, R. (1989). *Language, context, and text: Aspects of language in a social-semiotic perspective*. Oxford: Oxford University Press.
- Hartley, J. (2010). The anatomy of a book review. *Journal of Technical Writing and Communication*, 40(4), 473–487. <https://doi.org/10.2190/TW.40.4.g>
- Hartley, J. (2020). Writing a book review. In Marios Loukas, A. Arynchyna, M. M. Shoja, A. V. D’Antoni, S. M. Buerger, M. Karl & R. S. Tubbs (eds.), *A guide to the scientific career: Virtues, communication, and academic writing*, 559–563. Hoboken, NJ: John Wiley & Sons.
- Hernández, P. S. (2020). Lexical bundles and moves in research article abstracts of different disciplines. *ODISEA*, 21, 71–87. <https://doi.org/10.25115/odisea.v0i21.4130>
- Husselbee, L. P., & Coombs. H. V. (2023). Academic book reviews explained. *Utah Journal of Communication*, 0(2), 48–51. <https://doi.org/10.5281/zenodo.10064394>
- Hyland, K. (2008a). Academic clusters: Text patterning in published and postgraduate writing. *International Journal of Applied Linguistics*, 18(1), 41–62. <https://doi.org/10.1111/j.1473-4192.2008.00178.x>
- Hyland, K. (2008b). As can be seen: Lexical bundles and disciplinary variation. *English for Specific Purposes*, 27(1), 4–21. <https://doi.org/10.1016/j.esp.2007.06.001>
- Hyland, K. (2012). Bundles in academic discourse. *Annual Review of Applied Linguistics*, 32, 150–169. <https://doi.org/10.1017/S0267190512000037>
- Islami, S. A. D., Fitriati, S. W., & Mujiyanto, J. (2019). Structure and function of lexical bundles in the literature review of undergraduate students’ final projects. *English Education Journal*, 9(1), 62–73. Retrieved September 9, 2025, from <https://journal.unnes.ac.id/sju/index.php/eej/article/download/27578/12180>. (Online Source)

- Jalali, Z. S., & Moini, M. R. (2014). Structure of lexical bundles in introduction sections of medical research articles. *Procedia: Social and Behavioral Sciences*, 98, 719–726. <https://doi.org/10.1016/j.sbspro.2014.03.473>
- Jalali, Z. S., Moini, M. R., & Arani, M. A. (2015). Structural and functional analysis of lexical bundles in medical research articles: A corpus-based study. *International Journal of Information Sciences and Management*, 13(1), 51–69. Retrieved September 9, 2025, from https://ijism.isc.ac/article_698215_7fed3810f7829a39e7d32b9590b1d4a8.pdf. (Online Source)
- Jalilifar, A., Ghoreishi, S. M., & Roodband, S. A. E. (2016). Developing an inventory of core lexical bundles in English research articles: A cross-disciplinary corpus-based study. *Journal of World Languages*, 3(3), 184–203. <https://doi.org/10.1080/21698252.2017.1301279>
- Liu, C. Y., & Chen, H. J. H. (2020). Analyzing the functions of lexical bundles in undergraduate academic lectures for pedagogical use. *English for Specific Purposes*, 58, 122–137. <https://doi.org/10.1016/j.esp.2019.12.003>
- Li, Y., & Lei, H. (2025). Lexical Bundles in L1 and L2 English Academic Writing: Convergent and Divergent Usage. *Sage Open*, 15(2), 1–14. <https://doi.org/10.1177/21582440251333850>
- Liu, Y., & Li, D. (2026). A corpus-based comparative study of four-word lexical bundles in interpreted and non-interpreted English at UN Security Council meetings. *Applied Corpus Linguistics*, 6(2), 100212. <https://doi.org/10.1016/j.acorp.2026.100212>
- McEnery, T., & Hardie, A. (2012). *Corpus Linguistics: Method, theory and practice*. Cambridge University Press.
- Motta-Roth, D. (1995). Book reviews and disciplinary discourses: Defining a genre. In *Proceedings of the TESOL 29th Annual Convention & Exposition*, 385–386. Long Beach, CA: TESOL.
- Nodoushan, M. A. S., & Montazeran, H. (2012). The book review genre: A structural move analysis. *International Journal of Language Studies*, 6(1), 1–30. Retrieved September 9, 2025, from <https://files.eric.ed.gov/fulltext/ED528278.pdf>. (Online Source)
- Oinas, P., & Leppälä, S. (2013). Views on book reviews. *Regional Studies*, 47(10), 1785–1789.
- Priyatno, A., Oktaviani, Y. D., Widianingtyas, N., Dekhnich, O. V., & Widiati, U. (2023). Lexical bundles in Indonesian EFL textbooks: A corpus analysis. *Journal of Language and Education*, 9(2), 25–39. <https://doi.org/10.17323/jle.2023.16305>
- Ren, J. (2021). Variability and functions of lexical bundles in research articles of applied linguistics and pharmaceutical sciences. *Journal of English for Academic Purposes*, 50, 1–16. <https://doi.org/10.1016/j.jeap.2021.100968>
- Salazar, D. (2014). *Lexical Bundles in Native and Non-native Scientific Writing: Studies in Corpus Linguistics*. Amsterdam/Philadelphia: John Benjamins Publishing Company.
- Sanosi, A. B. (2022). The use and development of lexical bundles in Arab EFL writing: A corpus-driven study. *Journal of Language and Education*, 8(2), 106–121. <https://doi.org/10.17323/jle.2022.10826>
- Shirazizadeh, M., & Amirfazlian, R. (2021). Lexical bundles in theses, articles and textbooks of applied linguistics: Investigating intradisciplinary uniformity and variation. *Journal of English for Academic Purposes*, 49, 1–13. <https://doi.org/10.1016/j.jeap.2020.100946>
- Siricharoen, A., & Wijitsopon, R. (2020). A corpus-based comparative study of lexical bundles in authentic and textbook English business emails. *LEARN Journal: Language*

- Education and Acquisition Research Network*, 13(2), 41–63. Retrieved September 9, 2025, from <https://eric.ed.gov/?id=EJ1258791>. (Online Source)
- Wachidah, W. D. N. A., Fitriati, S. W. & Widhiyanto. (2020). Structures and functions of lexical bundles in findings and discussion sections of graduate students' theses. *English Education Journal*, 10(2), 131–142. Retrieved September 9, 2025, from <https://journal.unnes.ac.id/sju/index.php/eej/article/download/33994/14264>. (Online Source)
- Wright, H. R. (2019). Lexical bundles in stand-alone literature reviews: Sections, frequencies, and functions. *English for Specific Purposes*, 54, 1–14. <https://doi.org/10.1016/j.esp.2018.09.001>
- Yang, M. (2022). Connecting the functions of lexical bundles and moves in published research articles: The case of developmental and educational psychology. *Nordic Journal of English Studies*, 21, 141–189. <https://doi.org/10.35360/njes.743>
- Yang, W. & Fang, Q. (2021). The structures and functions of lexical bundles in argumentative essays by Chinese EFL students at the tertiary level. *International Journal of TESOL Studies*, 3(3), 41–60. <https://doi.org/10.46451/ijts.2021.09.03>
- Yunjung, K. (2025). A corpus analysis of prepositional phrase-lexical bundles in academic writing: L2 writers from Indo-European and Non-Indo-European languages. *Applied Corpus Linguistics*, 5(2), 100128. <https://doi.org/10.1016/j.acorp.2025.100128>