



Analyzing The Use of Four-Word Lexical Bundles in Literature and Philosophy Articles: A Comparative Study

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Abstract

Lexical bundles play a significant role in determining the quality of writing in general, and academic writing in particular. While an increasing number of studies investigating the use of lexical bundles in academic writing, studies on examining this use across different disciplines, remain few. The current study aims to investigate the structural and functional characteristics of four-word lexical bundles employed in academic writing by analyzing 400 research articles from the literature and philosophy fields. The study employs Biber et al.'s (2004) framework to analyze recurrent word combinations for frequency, structural patterns, and functional purposes that show how writing practices in different disciplines affect language use. The Findings showed that both literature and philosophy articles use phrasal lexical bundles as their main structural pattern at 77% and 79% respectively. It also showed that the writing style of philosophy articles contains more clausal bundles than their literary counterparts. In addition, the functional distribution of referential expressions in literature writing reaches 80%, while philosophy writing shows equal use of referential expressions (54%), discourse organizers (24%), and stance expressions (22%). The findings support the view that



lexical bundles are closely tied to the communicative purposes of academic disciplines. The study offers implications for English for Academic Purposes (EAP), particularly in helping learners recognize and use discipline-specific language features effectively.

Keywords: Lexical bundles; four-word bundles; academic writing

تحليل استخدام الحزم المعجمية الرباعية في مقالات الأدب والفلسفة: دراسة مقارنة

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الملخص

تؤدي الحزم المعجمية دورًا محوريًا في تحديد مستوى جودة الكتابة بوجه العموم، والكتابة الأكاديمية على وجه الخصوص. وعلى الرغم من تنامي الاهتمام البحثي باستخدام الحزم المعجمية في الكتابة الأكاديمية، إلا أن الدراسات التي تناولت هذا الاستخدام عبر مختلف التخصصات الأكاديمية لا تزال نادرة. وتسعى هذه الدراسة إلى استقصاء الخصائص البنوية والوظيفية للحزم المعجمية الرباعية من خلال تحليل أربع مائة مقال بحثي مستقى من مجالي الأدب والفلسفة. وتعتمد الدراسة على الإطار التحليلي الذي وضعه بيبر وزملاؤه (2004) لفحص التراكم اللفظية المتكررة، من حيث التواتر، والأنماط التركيبية، والأغراض الوظيفية، للكشف عن أثر ممارسات الكتابة في التخصصات المختلفة على أنماط استخدام اللغة. وقد أظهرت النتائج أن مقالات الأدب والفلسفة تعتمد بدرجة كبيرة على الحزم المعجمية الاسمية، بنسبة بلغت 77% و79% على التوالي. كما كشفت النتائج عن أن أسلوب الكتابة في المقالات الفلسفية يتسم باستخدام حزم جمالية أكثر مقارنة بالمقالات الأدبية. علاوة على ذلك، أظهرت الدراسة أن التعبيرات الإشارية تشكل نحو 80% من الوظائف اللغوية في الكتابة الأدبية، في حين توزعت الوظائف في الكتابة الفلسفية بين التعبيرات



الإشارية (54%)، وتنظيم الخطاب (24%)، والتعبيرات الموقفية (22%) على نحو متوازن. وتؤكد هذه النتائج الصلة الوثيقة بين الحزم المعجمية والأغراض التواصلية التي تنهض بها التخصصات الأكاديمية المختلفة. وتطرح الدراسة دلالات بالغة الأهمية لبرامج الإنجليزية لأغراض الأكاديمية، ولا سيما فيما يتصل بمساعدة الدارسين على التعرف إلى الخصائص اللغوية المرتبطة بتخصصاتهم، واكتساب القدرة على توظيفها بفعالية وتمكن.

كلمات مفتاحية: الحزم المعجمية; الحزم ذات الأربع كلمات; الكتابة الأكاديمية

Introduction

The language patterns in academic discourse among humanities scholars follow specific conventions that represent discipline-specific communication purposes. Academic writing features lexical bundles (LBs) as a major element since these recurrent word sequences occur more often than statistical probability (Biber et al., 2004). Multi-word expressions in academic writing function as essential components that help structure arguments while demonstrating academic stance (Hyland, 2008). Research on lexical bundles in scientific and technical disciplines exceeds studies about their use in humanities fields, especially in literature and philosophy.

This research investigates how four-word lexical bundles function in academic articles that belong to literature and philosophy. The humanities include two separate disciplines that maintain distinct rhetorical styles while using different epistemologies and argumentation methods. The academic writing style of literature articles emphasizes interpretive methods together with narrative



approaches, yet philosophy articles rely on logical analysis to present abstract ideas according to Becher and Trowler (2001). The distinct features between these fields will shape the nature and purpose of the lexical bundles that appear in their content.

A corpus-based analysis identifies and organizes four-word lexical bundles across peer-reviewed literature and philosophy journal articles while conducting comparative research, “Studies which take lexical bundles into consideration target only 4-word bundles because smaller lexical bundles (3-word) are usually combined into bigger ones” (Nasabady et al., 2020, p. 180). Moreover, most research is focused on groups of four words, possibly because they are nearly ten times more common than sequences of five words and provide access to a wider variety of structural and functional patterns for investigation (Samraj, 2024; Siu et al., 2024). The research examines both structural patterns, such as noun phrase + of and verb phrase fragments, and functional categories like stance expressions and discourse organizers according to Biber et al. (2004). The research investigates lexical bundles to understand their role in establishing disciplinary characteristics and academic writing techniques.

The research adds new findings to current studies examining formulaic language use in academic writing. The research offers valuable practical guidance for academic writing instruction, which benefits students and scholars studying various humanities subjects (Cortes, 2004; Hyland, 2008).



Literature Review

During the last two decades, corpus linguistics, along with academic discourse analysis, has shown rising interest in lexical bundle studies. Lexical bundles consisting of word sequences like *on the other hand* or *as a result of*, are identified as essential elements that form fluent conventional academic writing (Biber et al., 2004; Hyland, 2008). Although these bundles lack complete grammatical structure, they serve vital functions to arrange discourse while expressing stance and maintaining cohesion.

Academic discourse receives its distinctive form through lexical bundles, which hold substantial educational value for teaching academic writing. The considerable body of research shows that writing represents one of the most challenging skills for students and non-native academic writers to master because they need constant practice and access to high-quality reference materials (Alahmed & Kırmızı, 2021; Alahmed, Mohammed, & Kırmızı, 2020). The identification of standard bundles used in specific academic disciplines enables students to generate more natural-sounding and connected academic writing. The necessity to learn academic writing techniques exceeds verbal idea expression since the problem exists beyond speaking. The distinctive characteristics of academic writing require authors to create texts that display logical structure along with coherence and order, as well as conviction and clarity, and precision (Hashim, Jomaa & Alahmed, 2025, p.630).



Biber et al. (1999, 2004) initiated the systematic classification of lexical bundles by analyzing their structural features and functional properties. The researchers used large corpora of university teaching materials and textbooks to establish structural types (such as noun phrase + of-phrase and verb phrase fragments) and functional roles (such as stance expressions and discourse organizers, and referential expressions). The research framework established by these authors now functions as a fundamental base for multiple studies about academic English.

Hyland (2008) developed the research of lexical bundles by exploring their use in research articles that span different academic subjects. The study indicated how bundle usage varies by discipline since hard science writers preferred procedural and referential bundles, but education and applied linguistics writers used more stance and engagement bundles. According to Hyland, the disciplinary choices represent distinct epistemological approaches that exist between different fields of study.

Cortes (2004) examined articles in the disciplines of history and biology to analyze lexical bundles. The study revealed various distinctions between lexical bundles occurrence and usage patterns, together with their rhetorical functions. The study confirmed both field-specific discourse patterns and writing instruction methods that need more focus.



Chen and Baker (2010) examined lexical bundles across four academic disciplines: engineering, philosophy, applied linguistics, and biology. The study showed that philosophical texts included argumentation lexical bundles about abstract reasoning (e.g., it is important to note), while the pure scientific texts used standardized methodological and result reporting lexical bundles. The findings showed that bundle patterns emerge based on each field's particular rhetorical needs and communication standards.

The scientific community has conducted extensive research about lexical bundles in scientific and social science texts, but there is limited research about their employment in humanities subjects such as literature and philosophy. It was noted that the majority of the existing research categorize humanities disciplines under the single label "soft disciplines" without acknowledging their specific rhetorical characteristics. Becher and Trowler (2001) show that literary analysis needs interpretive commentary and figurative language, whereas philosophical writing requires logical structure and conceptual precision. The results showed that researchers need to perform thorough investigations between literary and philosophical writing to understand how different rhetorical elements manifest through lexical bundles.

This study highlights “four-word” lexical bundles usage, exclusively in literature and philosophy journal articles. The analysis uses discipline-specific corpora instead of general academic corpora to provide detailed insights about lexical



bundles in these two academic fields. The study tries to answer the following research questions:

1-To what extent do four-word lexical bundles occur in literature and philosophy research articles?

2-To what extent does discipline affect the structural and functional employment of four-word lexical bundles?

Methodology

1. Research Design

The current study uses a corpus-based, comparative design to examine four-word lexical bundles in academic articles, specifically in literature and philosophy. The research is both quantitative in identifying and counting the frequency of lexical bundles, and qualitative, in analyzing the structural contexts and patterns, and discourse functions. The study follows Biber et al's analytical framework. (2004), focusing on recurrent word sequences that appear frequently across multiple texts within each corpus.

2. Corpus Compilation

Two discipline-specific corpora were compiled for this study:

1-Literature Corpus: Composed of 200 peer-reviewed research articles.

2-Philosophy Corpus: Composed of 200 peer-reviewed research articles



Each corpus contains approximately 1,500,000 words, resulting in a combined total of 3,000,000 words. All articles were selected to reflect a range of subfields within each discipline and to ensure balance in word count and academic style.

3. Data Processing and Bundle Extraction

The texts were processed using **AntConc**, a corpus analysis toolkit developed by Laurence Anthony.

4. Classification and Analysis

The extracted four-word bundles were analyzed according to two main criteria:

- **Structural Classification:** Following Biber et al. (2004), bundles were grouped into:



| Category | Example |
|--|-------------------------------------|
| Phrasal | |
| NP-based | |
| (connector +) NP with of-phrase fragment | the end of the |
| NP with other post modifier fragment | the way in which |
| PP-based | |
| PP with embedded of-phrase fragment | as a result of |
| Other Prepositional Phrase (fragment) | at the same time, on the other hand |





Stance Expressions

Epistemic Stance

Personal

I think it was

Impersonal

are more likely to

Attitudinal/ Modality Stance

B.1) Desire

if you want to

B.2) Obligation/ Directive

Personal

you look at the

Impersonal

it is necessary to

B.3) Intention/Prediction

Personal

is going to be

Impersonal

B.4) Ability

Personal

to be able to

Impersonal

it is possible to

Discourse Organizers

Topic Introduction/Focus

in this chapter we

Topic Elaboration/ Clarification

on the other hand

Referential Expressions

Referential Expressions

one of the most

Imprecision

and things like that

Specification of Attributes

C.1) Quantity Specification

a lot of people

C.2) Tangible Framing Att.

in the form of

C.3) Intangible Framing Att.

in the case of

Time/Place/Text Reference

D.1) Place Reference

in the United States

D.2) Time Reference

at the same time

D.3) Text Deixis

as shown in Figure

D.4) Multi-functional Ref.

at the end of



Table (2) Functional classification of lexical bundles (Biber, Conrad and Cortes, 2004 p.384)

Findings

RQ1- To what extent do four-word lexical bundles occur in literature and philosophy research articles?

| Table | Phrasal | Clausal | Other Expressions | (3) |
|---------------|---------|---------|-------------------|-----|
| The | 745 | 37 | 180 | |
| Total: | 999 | | | |

frequency of structural lexical bundles in literature articles

The table above shows the use of structural lexical bundles in literature articles, as it can be seen that the authors used Phrasal (F= 745), Other Expressions (F=180), and Clausal (F=37).



| | | B-Clausal | | C-Other Expressions | | | |
|---|--------------------------------------|-------------------------------------|---------------------------------------|---|-------------------|--|-----------------|
| (verb/adjective +) to- clause fragment | | (VP +) that- clause fragment | | Adverbial clause fragment | | | |
| 22 | | 5 | | 10 | | | |
| Total: | | | | 37 | | | |
| | | | | A-Phrasal | | | |
| NP | | PP | | VP | | | |
| (connect or +) NP with of-phrase fragment | NP with other post modifier fragment | PP with embedded of-phrase fragment | Other Prepositional Phrase (fragment) | Anticipatory it + VP/adjective P + comp. cl | Passive verb +PPf | Copula be + noun phrase/adjective phrase | Pronoun/NP + be |
| 211 | 69 | 59 | 289 | 22 | 18 | 64 | 13 |
| 280 | | 348 | | | | 117 | |
| Total: | | | | | | 745 | |

Table (4) The frequency of Phrasal lexical bundles in literature articles

This table shows the employment of Phrasal lexical bundles in literature articles, as it is shown that the authors used PP (F= 348), NP (F=280), and VP (F=280).

Table (5) The frequency of Clausal and other expressions lexical bundles in literature articles

This table shows the use of Clausal and other expressions lexical bundles in



literature articles, as can be seen that the authors used Clausal, (verb/adjective +) to-clause fragment (F= 22), (VP +) that-clause fragment (F=5), and Adverbial clause fragment (F=10). Moreover, other expressions (F=180).

| | Phrasal |
|----------------------|---------|
| the end of the | 211 |
| the way in which | 69 |
| as a result of | 59 |
| at the same time | 190 |
| on the other hand | 99 |
| it is possible to | 22 |
| is based on the | 18 |
| is one of the | 59 |
| is due to the | 5 |
| this is not the | 13 |
| | Clausal |
| is likely to be | 2 |
| to be able to | 20 |
| should be noted that | 5 |
| as shown in figure | 1 |



if there is a

9

Other Expressions

as well as the

180

Table (6) The most common uses of Phrasal, Clausal, and Other Expressions

The table above shows the most common use of Phrasal, Clausal, and Other Expressions lexical bundles in literature articles, as it is shown that the authors employed *the end of the* (F= 211) followed by *at the same time* (F=190). Moreover, the authors rarely used *as shown in figure* (F=1), *is likely to be* (F=2).

| Stance Expressions | Discourse Organizers | Referential Expressions |
|--------------------|----------------------|-------------------------|
| 62 | 99 | 661 |
| Total: | 822 | |

Table (7) The employment of Functional lexical bundles in literature articles

This table shows the use of Functional lexical bundles in literature articles, as it is shown that the authors employed Stance Expressions (F= 62), Discourse Organizers (F=99), and Referential Expressions (F=661).



| A–Stance Expressions | | | | | | |
|----------------------|----------------|------------|------------------------------|--------------------------|--------------|----------------|
| Epistemic Stance | | | Attitudinal/ Modality Stance | | | |
| Persona l | Imperson al | Desir e | Obligation/ Directive | Intention/ Prediction | Ability | |
| 2 | 2 | 2 | Persona l | Imperson al | Persona l | Imperson al |
| | | | 0 | 11 | 0 | 3 |
| | | | | | | 20 |
| | | | | | | 22 |
| Total: | | | | | | 62 |

Table (8) The use of stance expressions lexical bundles in literature articles.

This table shows the use of stance expressions lexical bundles in literature articles, as can be seen that the authors used epistemic stance : personal (F= 2), and impersonal (F=2). Also, attudinal/ modality stance: desire (F=2), obligation/ directive: personal (F= 0), impersonal (F= 11), In addition to intention/ prediction: personal(F= 0), impersonal (F= 3). Also, they used ability :personal (F= 20), impersonal (F=22).

| B-Discourse Organizers | |
|--------------------------|----------------------------------|
| Topic Introduction/Focus | Topic Elaboration/ Clarification |
| 0 | 99 |
| Total: | 99 |

Table (9) The authors' use of Discourse Organizers LB in literature articles



This table shows the authors' use of Discourse Organizers LB in literature articles. As can be seen that the authors used Topic Introduction/Focus (F=0), Topic Elaboration/ Clarification (F= 99).

| C-Referential Expressions | | | | | | | | |
|---------------------------|-------------|-----------------------------|----------------------------|-------------------------------|---------------------------|-------------------|----------------|-----------------------------|
| Identification/ Focus | Imprecision | Specification of Attributes | | | Time/Place/Text Reference | | | |
| 74 | 0 | Quantity Specification | Tangible Framing Att | Intangible Framing Att. | Place Reference | Time Reference | Text Deixis | Multi- functional Ref |
| | | 3 | 9 | 70 | 72 | 19 | 1 | 1 |
| | | | 7 | | | 0 | | 5 |
| | | | | | | | | 4 |
| Total: | | | | | | | | 661 |

Table (10) The authors' use of Referential Expressions lexical bundles in literature articles

This table shows the authors' use of Referential Expressions LB in literature articles. As can be seen that the authors used Identification/ Focus (F=74), Imprecision (F= 0). Specification of Attributes: Quantity Specification (F=3), Tangible Framing Att. (F=97), Intangible Framing Att. (F= 70). Time/Place/Text Reference: Place Reference (F=72), Time Reference (F=190), Text Deixis



(F=1), Multi-functional Ref (F=154).

| Stance Expressions | |
|-------------------------|-----|
| I think it was | 2 |
| are more likely to | 2 |
| if you want to | 2 |
| you look at the | 0 |
| it is necessary to | 11 |
| is going to be | 3 |
| to be able to | 20 |
| it is possible to | 22 |
| Discourse Organizers | |
| in this chapter we | 0 |
| on the other hand | 99 |
| Referential Expressions | |
| one of the most | 74 |
| and things like that | 0 |
| a lot of people | 3 |
| in the form of | 97 |
| in the case of | 70 |
| in the United States | 72 |
| at the same time | 190 |



as shown in Figure

1

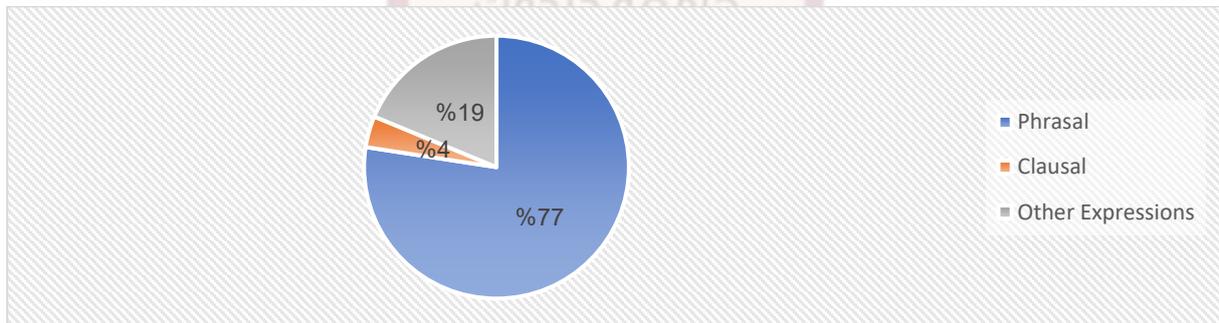
at the end of

154

Table (11) The use of Functional LB in literature articles by the authors

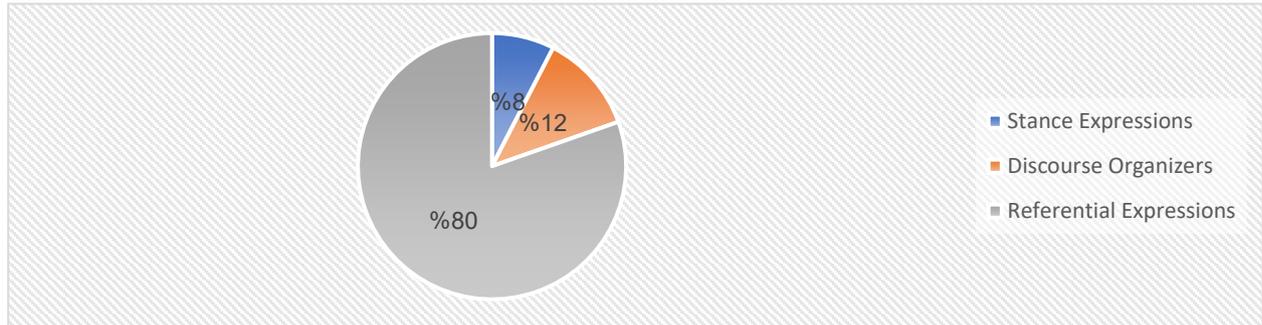
This table shows the use of Functional LB in literature articles by the authors. As can be seen that the authors used *at the same time* (F=190) followed by *at the end of* (F=154). Also, the authors rarely used some of Functional LB like *as shown in Figure* (F=1), *a lot of people* (F=3). Moreover, the authors didn't use some Functional LB like *in this chapter we* (F=0), and *things like that* (F=0).

Figure (1) The percentage of structural LBs in the literature articles



The figure above shows the percentage of structural LBs in the literature articles according to the categories. As can be seen that the authors used *Phrasal* 77%, followed by *other expressions* 19% and *Clausal* 4%.

Figure (2) The percentage of Functional LBs in the literature articles



The figure above shows the use of functional LB in literature articles according to the categories. As can be seen that the authors used *Referential Expressions* 80%, followed by *Discourse Organizers* 12% and *Stance Expressions* 8%.

| | Phrasal | Clausal | Other Expressions |
|---------------|---------|---------|-------------------|
| | 828 | 173 | 55 |
| Total: | 999 | | |

Table (12) The frequency of structural lexical bundles in philosophy articles

The table above shows the use of structural lexical bundles in philosophy articles, as it can be seen that the authors used Phrasal (F= 828), Other Expressions (F=55), and Clausal (F=173).



| A-Phrasal | | | | | | | VP |
|---|--------------------------------------|-------------------------------------|---------------------------------------|----------------------------------|-------------|------------------------------|-----------|
| NP | PP | NP | PP | Anticipator | Passiv | Copula be + | Pronoun/N |
| (connect or +) NP with of-phrase fragment | NP with other post modifier fragment | PP with embedded of-phrase fragment | Other Prepositional Phrase (fragment) | y it + VP/adjective P + comp. cl | e verb +PPf | noun phrase/adjective phrase | P + be |
| 55 | 93 | 59 | 420 | 64 | 24 | 71 | 42 |
| | | | 148 | | | | 201 |
| Total: | | | | | | | 828 |

Table (13) The frequency of Phrasal lexical bundles in philosophy articles

| | B-Clausal | C-Other Expressions |
|---------------------------------------|-----------------------------|---------------------------|
| (verb/adjective +) to-clause fragment | (VP +) that-clause fragment | Adverbial clause fragment |
| 117 | 16 | 40 |
| Total: | 173 | 55 |

This table shows the use of Phrasal lexical bundles in philosophy articles, as can be seen that the authors used PP (F= 479), NP (F=148), and VP (F=201).



Table (14) The frequency of Clausal and other expressions lexical bundles in philosophy articles

This table shows the use of Clausal and other expressions lexical bundles in literature articles, as can be seen that the authors used Clausal, (verb/adjective +) to-clause fragment (F= 117), (VP +) that-clause fragment (F=16), and Adverbial clause fragment (F=40). Moreover, other expressions (F=55).

| | Phrasal |
|-------------------|----------------|
| the end of the | 55 |
| the way in which | 93 |
| as a result of | 59 |
| at the same time | 174 |
| on the other hand | 246 |
| it is possible to | 64 |
| is based on the | 24 |
| is one of the | 52 |
| is due to the | 19 |
| this is not the | 42 |
| | Clausal |
| is likely to be | 14 |
| to be able to | 103 |



| | |
|--------------------------|----|
| should be noted that | 16 |
| as shown in figure | 1 |
| if there is a | 39 |
| Other Expressions | |
| as well as the | 55 |

Table (15) The most common uses of Phrasal, Clausal, and Other Expressions

This table shows the most common use of Phrasal, Clausal, and Other Expressions lexical bundles in philosophy articles, as it is shown that the authors employed *on the other hand* (F= 246) followed by *at the same time* (F=174). Moreover, the authors rarely used *as shown in figure* (F=1).

| Stance Expressions | Discourse Organizers | Referential Expressions |
|--------------------|----------------------|-------------------------|
| 217 | 246 | 536 |
| Total: | 999 | |

Table (16) The use of Functional lexical bundles in philosophy articles

The table above shows the use of Functional lexical bundles in philosophy articles, as it can be seen that the authors used Stance Expressions (F= 217), *Discourse Organizers* (F=246), and *Referential Expressions* (F=536).



| A-Stance Expressions | | | | | | | | | |
|----------------------|------------|--------|--------------------------|------------|------------------------------|------------|----------|------------|--|
| Epistemic Stance | | | | | Attitudinal/ Modality Stance | | | | |
| Personal | Impersonal | Desire | Obligation/ Directive | | Intention/ Prediction | | Ability | | |
| 0 | 14 | 5 | Personal | Impersonal | Personal | Impersonal | Personal | Impersonal | |
| | | | 0 | 24 | 0 | 7 | 103 | 64 | |
| Total: | | | | | | | | 217 | |

Table (17) The employment of stance expressions lexical bundles in philosophy articles This table shows the use of stance expressions lexical bundles in literature articles, as can be seen that the authors used epistemic stance: personal (F= 0), and impersonal (F=14). Also, attitudinal / modality stance: desire (F=5), obligation/ directive: personal (F= 0), impersonal (F= 24), In addition to intention/ prediction: personal (F= 0), impersonal (F= 7). Also, they used ability: personal (F= 103), impersonal (F=64).

| B-Discourse Organizers | |
|--------------------------|-------------------------------------|
| Topic Introduction/Focus | Topic Elaboration/ Clarification |
| 0 | 246 |
| Total: | 246 |

Table (18) The authors' use of Discourse Organizers LB in philosophy articles



This table shows the authors' use of Discourse Organizers LB in philosophy articles. As can be seen that the authors used Topic Introduction/Focus (F=0), Topic Elaboration/ Clarification (F= 246).

| | | C-Referential Expressions | | | | | | |
|-----------------------|-------------|-----------------------------|-----------------------|-------------------------|---------------------------|----------------|-------------|----------------------|
| Identification/ Focus | Imprecision | Specification of Attributes | | | Time/Place/Text Reference | | | |
| 30 | 0 | Quantity Specification | Tangible Framing Att. | Intangible Framing Att. | Place Reference | Time Reference | Text Deixis | Multi-functional Ref |
| | | 2 | 59 | 193 | 26 | 174 | 1 | 51 |
| Total: | | | | | | | | 536 |

Table (19) The authors' use of Referential Expressions lexical bundles in philosophy articles

This table shows the authors' use of Referential Expressions LB in philosophy articles. As can be seen that the authors used Identification/ Focus (F=30), Imprecision (F= 0). Specification of Attributes: Quantity Specification (F=2), Tangible Framing Att. (F=59), Intangible Framing Att. (F= 193). Time/Place/Text Reference: Place Reference (F=26), Time Reference (F=174), Text Deixis (F=1), Multi-functional Ref (F=51).



Stance Expressions

| | |
|--------------------|-----|
| I think it was | 0 |
| are more likely to | 14 |
| if you want to | 5 |
| you look at the | 0 |
| it is necessary to | 24 |
| is going to be | 7 |
| to be able to | 103 |
| it is possible to | 64 |

Discourse Organizers

| | |
|--------------------|-----|
| in this chapter we | 0 |
| on the other hand | 246 |

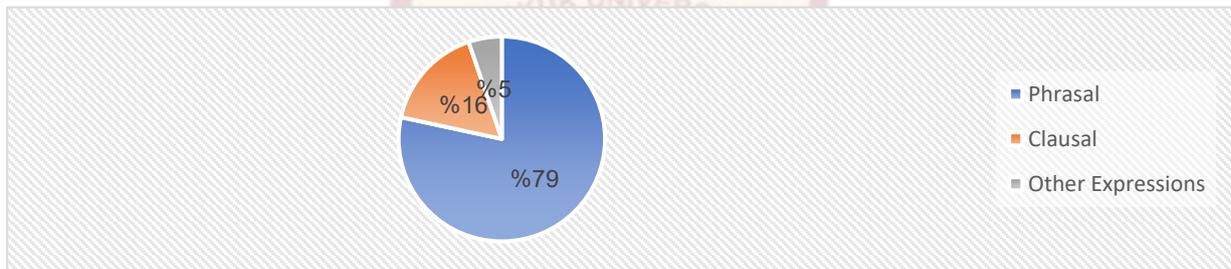
Referential Expressions

| | |
|----------------------|-----|
| one of the most | 30 |
| and things like that | 0 |
| a lot of people | 2 |
| in the form of | 59 |
| in the case of | 193 |
| in the United States | 26 |
| at the same time | 174 |
| as shown in Figure | 1 |
| at the end of | 51 |

Table (20) The use of Functional LB in philosophy articles by the authors

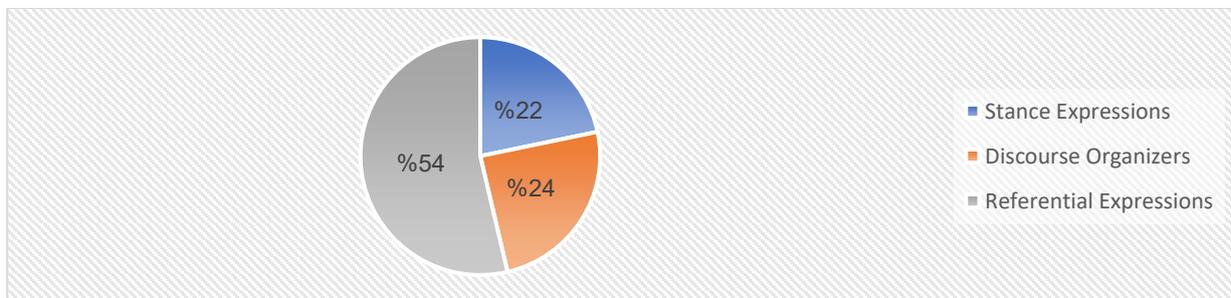
This table shows the use of Functional LB in philosophy articles by the authors. As it is shown that the authors used *on the other hand* (F=246) followed by *in the case of* (F=193). Also, the authors rarely used some of Functional LB like *as shown in Figure* (F=1), *a lot of people* (F=2). Moreover, the authors didn't use some Functional LB like *in this chapter we* (F=0), *I think it was* (F=0), and *things like that* (F=0).

Figure (3) The percentage of structural LBs in the philosophy articles



This figure shows the percentage of structural LBs in the philosophy articles according to the categories. As can be seen that the authors used *Phrasal* 79%, followed by *Clausal* 16% and *other expressions* 5%.

Figure (4) The percentage of Functional LBs in the philosophy articles



This figure shows the use of functional LB in philosophy articles according to the categories. As can be seen that the authors used *Referential Expressions* 54%,



followed by *Discourse Organizers* 24% and *Stance Expressions* 22%.

RQ2: To what extent does discipline affect the structural and functional employment of four-word lexical bundles?

| Structural Category | Literature (F) | Philosophy (F) | Difference | % Lit | % Phil |
|----------------------|----------------|----------------|------------|-------|--------|
| Total Structural LBs | 962 | 1056 | -94 | 100% | 100% |
| - Phrasal | 745 | 828 | -83 | 77.4% | 78.4% |
| - Clausal | 37 | 173 | -136 | 3.8% | 16.4% |
| - Other Expressions | 180 | 55 | +125 | 18.7% | 5.2% |

Table (21) Structural Lexical Bundles: Frequency Comparison

Phrasal bundles dominate both fields, but clausal bundles are used over 4.5 times more in philosophy. In contrast, other expressions are used over 3 times more in literature.

| Phrasal Type | Literature (F) | Philosophy (F) | Difference |
|---------------------------|----------------|----------------|------------|
| Prepositional Phrase (PP) | 348 | 479 | -131 |
| Noun Phrase (NP) | 280 | 148 | +132 |
| Verb Phrase (VP) | 280 | 201 | +79 |



Table (22) Types of Phrasal Bundles

Philosophy prefers PP bundles, while literature uses more NP and VP bundles, suggesting more descriptive and action-oriented patterns.

| Clausal Bundle Type | Literature (F) | Philosophy (F) | Difference |
|---------------------------|----------------|----------------|------------|
| To-clause fragment | 22 | 117 | -95 |
| That-clause fragment | 5 | 16 | -11 |
| Adverbial clause fragment | 10 | 40 | -30 |

Table (23) Clausal Bundles Breakdown

Philosophy articles heavily favor clausal structures, especially to-clause fragments, which support analytical and explanatory writing.



| Functional Category | Literature (F) | Philosophy (F) | Difference | % Lit | % Phil |
|---------------------------|----------------|----------------|------------|-------|--------|
| Total Functional LBs | 822 | 999 | -177 | 100% | 100% |
| - Referential Expressions | 661 | 536 | +125 | 80.4% | 53.6% |
| - Discourse Organizers | 99 | 246 | -147 | 12.0% | 24.6% |
| - Stance Expressions | 62 | 217 | -155 | 7.5% | 21.7% |

Table (23) Functional Lexical Bundles: Frequency Comparison

Literature writing is highly referential, whereas philosophy emphasizes discourse organization and stance, aligning with the argumentative nature of philosophical discourse.

| Stance Category | Lit (F) | Phil (F) | Notable Difference |
|---------------------------------|---------|----------|--------------------------|
| Epistemic (personal) | 2 | 0 | Lit uses slightly more |
| Epistemic (impersonal) | 2 | 14 | Philosophy dominates |
| Desire | 2 | 5 | Slightly more in Phil |
| Obligation (impersonal) | 11 | 24 | More than double in Phil |
| Prediction (impersonal) | 3 | 7 | Philosophy uses more |
| Ability (personal + impersonal) | 42 | 167 | 4x higher in Phil |

Table (24) Stance Subcategories Breakdown

Philosophy uses stance bundles extensively, especially those expressing ability and obligation, reflecting modal reasoning and argumentation strategies.

| Lexical Bundle | Literature (F) | Philosophy (F) |
|------------------|----------------|----------------|
| at the same time | 190 | 174 |



| | | |
|-------------------|-----|-----|
| the end of the | 211 | — |
| on the other hand | — | 246 |
| in the case of | — | 193 |

Table (25) Most Frequent Bundles (Top Two in Each Field)

Some overlap (e.g., "at the same time"), but philosophy favors contrastive and conditional expressions, while literature uses temporal and narrative bundles.

• Structural LBs Distribution:

- Literature: Phrasal (77%), Clausal (4%), Other (19%)
- Philosophy: Phrasal (79%), Clausal (16%), Other (5%)

• Functional LBs Distribution:

- Literature: Referential (80%), Discourse (12%), Stance (8%)
- Philosophy: Referential (54%), Discourse (25%), Stance (21%)

Conclusion

The current study explored and compared the employment of four-word lexical bundles in academic writing within literature and philosophy disciplines. In line with Biber et al. (2004)'s structural and functional frameworks, the findings indicate that there are some disciplinary differences in the use of lexical bundles in these two fields.

The Quantitative analysis showed that both disciplines have a very high use of



phrasal bundles and that philosophy articles have a higher use than literature articles (79% vs. 77%). However, clausal bundles were used much more frequently in philosophy (16%) than in literature (4%), which is in line with the argumentative nature of philosophy and its analytical and evaluative discourse (Hyland, 2008). On the other hand, literature articles demonstrated a wider use of “other expressions” (19%), which indicates a stylistic preference for more varied and context-dependent phrasing, which is most likely linked to the interpretative and narrative nature of literary analysis.

In terms of function, referential expressions were the most frequent type of lexical bundle in literary writing, accounting for 80%. They refer to the frequent need to describe, identify, and refer to certain texts, times, and places. Philosophical writing, however, showed a more equal distribution of functions, with referential expressions (54%), discourse organizers (24%), and stance expressions (22%) all being very well represented. This is because philosophy is a rhetorical discipline that aims at constructing arguments, clarifying complex

ideas, and expressing degrees of certainty or modality (Cortes, 2004; Hyland, 2008).

The high frequency of stance bundles in philosophy articles, especially those expressing ability and obligation, suggests that there is a strong need for authors to assess claims, express necessity, and engage in logical reasoning. In contrast, such evaluative stance-taking is much more limited in literary writing, where



authorial voice is often suppressed to focus on interpretive commentary grounded in the primary texts.

Thus, these findings support the argument that disciplinary discourse practices and epistemologies influence academic writing. As Biber and Barbieri (2007) emphasize, using lexical bundles is not random; it is closely related to a

discipline's communicative needs, audience expectations, and rhetorical goals. The study contributes to the field of formulaic language studies in the genre of academic writing and to the understanding of the different rhetorical features of the two disciplines by examining structural and functional aspects. The differences highlighted in this study also stress the importance of genre and discipline-specific language use and provide some useful implications for EAP (English for Academic Purposes) instruction, especially for students who want to write well in their respective academic communities. The study was limited to literature and philosophy disciplines, allowing other researchers to examine other disciplines in the future, hoping to be a useful addition to the literature

body of lexical bundles.

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