

Investigating Similar Lexical Bundles in Autobiographies of Pakistani Politicians

Mahwish Shamim¹, Tehseen Zahra²

¹PhD Scholar, Air University, Islamabad
Email: mahwishsahmim@gmail.com

²Assistant Professor, Department of Humanities, Air University, Islamabad
Correspondence: tehsin.azhar@yahoo.com

Abstract

Context determines the meanings of words, sentences, and text. A similar sequence of words can be variously interpreted due to differing contexts. This study was an attempt to investigate 4-word similar lexical bundles in a variety of contexts. The study was aided by the classical code model of Sperber and Wilson (1998) and structural categories of Biber (1996). Two autobiographies of Pakistani politicians, Benazir Bhutto and Pervaiz Musharraf, were analysed for the purpose and were descriptively presented employing a mixed-method approach. The contextual influence of lexical bundles was checked through AntConc3.5. The findings revealed that both the politicians had used similar 4-word lexical bundles contextually. The qualitative analysis of the lexical bundles from both autobiographies revealed that they were used repetitively, but the meanings were not the same each time. The bundles aided in improving the expression of political ideologies of the politicians and proved that the meanings of the bundles were context-bound.

Keywords: Contextual influence, lexical bundles, political influence, meaning

1. Introduction

Meaning is dependent on the context in which words are used. Sentences are, sometimes, similar but their contextual interpretation results in polarised meanings (Sperber & Wilson, 1998). To justify and answer the question regarding the difference in the meaning of a similar combination of words, several reasons including social variation, dialect, and high prestige are advocated at the macro level (O'Halloran, 2009). Words can be the same lexically but variant in meanings. The importance of context cannot be denied because words may look alike, grammatically similar, even in similar combinations, but their meanings would be entirely different. Context, therefore, clarifies the appropriate meanings of these strings of words.

If the contextual combinations of words are so important, a desire to investigate these combinations occurs among linguists who study lexical bundles. It is evident from various studies that few patterns/strings of words occur together more in one type of text than others. Biber (1996) studied these frequent types of combinations and concluded that

such frequent types of combinations were found in both spoken and written discourses. Hyland (2008) also investigated lexical bundles to show the importance of coherence in the text. His findings proved that if these strings were well developed, anyone could grasp their textual and contextual meaning. Firth (1957) also stressed the surrounding context of a word that is explained by “the company it keeps.” Thus, these views drive our focus on the importance of strings of lexical combinations.

The study of lexical bundles had always remained the focus of many researchers as Heng, Kashiha and Tan (2014) examined the frequency in their research and then they put their focus on the structure and function of lexical bundles. Granger (2018) investigated lexical bundles and collocation to know the accuracy in L1 transfer, and Nesi and Basturkmen (2006) frequently studied co-occurring words for categorizing cohesive devices from the spoken academic discourse. Bal (2010) also studied four lexical bundles according to the structural and functional model of Biber (1996). The focus of the present study was on the chosen similar 4-words lexical bundles taken from two autobiographies of Pakistani politicians. We have also attempted to investigate the contextual difference of these similar 4-words lexical bundles.

1.1 Statement of the Problem

Lexical bundles can be used variously in different contexts. Similar lexical bundles may communicate different meanings in various contexts. These lexical bundles are used to describe life events in autobiographies. To investigate whether the change of context brought variation in the meanings of the same lexical bundles, we selected similar 4-words lexical bundles from the autobiographies of Pakistani politicians. This study would explore 4- words lexical bundles according to the context in which they occur.

1.2 Aim of the Study

Researchers have investigated lexical bundles from a different point of view, for example, words with their company (Firth, 1957), lexical bundles and coherence (Hyland, 2008), and structural and functional categories (Biber, 1996). This study explores the similar 4-words lexical bundles in the autobiographies of Pakistani politicians according to the context. These similar lexical bundles are compared to check these politicians’ approach in using these bundles in their political context.

1.3 Research Objectives

The present study is based on the following objectives:

- To find and point out the similar 4-word lexical bundles used by Pakistani politicians in their autobiographies

- To investigate and interpret the contextual use of the lexical bundles

1.4 Research Questions

The present study is based on these research questions:

- How do similar 4- word lexical bundles communicate meaning in political autobiographies?
- How do writers employ the same lexical bundles in various contexts?

1.5 Theoretical Background

The theoretical framework of the study is based on Sperber and Wilson's (1998) classical code model. This coding model is considered a part of relevance theory but with a different angle. According to the model, when we intend to convey our message, we use a word and encode a specific meaning in it. The listener then decodes that meaning (Horn & Ward, 2004). Sperber and Wilson (1998) identify the basic idea behind this theory, “words of Mentalise”. When a speaker communicates, his words are the contextual reflection of his thoughts. Biber (1996) presents the structure of lexical bundles which we can divide into various interlinked structural categories (Rahimi, 2016). The above two arguments thus theoretically guide the study where similar 4- words lexical bundles are identified in the target texts tying them to a structure and a mental idea in a context.

2. Literature Review

Corpus linguistics is famous for its “pre-patterned word combination” (Granger, 2018). The electronic tackling of the large data and extracting specific types of structures and meanings are at the root of the approach. A recent trend is the shift of focus from isolated word towards the lexical structure (Granger, 2018). The study of language can be done from two perspectives (Biber, Reppen, & Conrad, 2007). First, it focuses on the phrases and structural units and how small units are combined to form a large one. Second, the use of these units is done by various people in their communication, and these are declared “actual settings” in a language (Biber, 1993). In successful linguistic production, these actual settings play a significant role. Sometimes, these are called phrasal verbs and, sometimes, idioms. In corpus linguistics, many writers and critics have given various names to the strings of words, for example, n-gram, recurrent word combinations, clusters, and formulaic sequences. These occurrences play as building blocks in a particular discourse. These lexical bundles follow a specific grammatical pattern in a discourse. Researchers and linguists have developed their interest in the study of these structures to know how meanings are constructed and conveyed through these structures. In this study, the focus is on those lexical bundles which remain stick with one

another and they were mostly seen together in any piece of text (Bal, 2010). These types of lexical bundles frequently occur in specific texts, and their occurrence can be changed according to registers. Lexical bundles are a specific sequence of words that can repeatedly occur in a text due to its specific discipline (Biber, 1996). The frequency of their occurrence matters a lot, the higher the frequency, the more frequent those lexical bundles would be. The identification of lexical bundles is based on some parameters, such as the length of these bundles, their occurrences in text, and the size of the corpus. In ten million words, three- word lexical bundle is sufficient, and 4-word lexical bundles can be found at least ten times per million words in any piece of text (Biber, 1996). On the other hand, in Cortes' (2000) opinion lexical bundles cannot be taken fixed.

When a person uses words in a context, he stores those words in his mind according to the context. With the change in contexts, the meanings would also change (Hoey, 2012). In classical code theory, the writers encode their messages in words or phrases. We may get more accurate information about these phrases if we know the contextual meanings of these lexical bundles. According to Sperber and Wilson (1998), these contextual meanings should be linguistically encoded in sentences otherwise, it would become too difficult for a reader to understand the true meaning of a sentence.

The use of lexical bundles is not an effortless job because a layman cannot learn their use in seconds. It takes time to grip them mentally. Mostly, they are complex and can change meanings according to context (Conrad & Biber, 2005). This is one reason that many users are unable to use these lexical bundles in their writings. Lexical bundles are dependent on register and discourse which result in a change in their grammar, form, and meaning. Language learners need to attend to the structure of these lexical bundles. Advanced users are expert in their use due to their academic background and wide experience in writing.

These bundles are not discipline depended, and they can occur in any discipline in a specific form and function. These form and function of lexical bundles are explored by Hyland (2008) to know their frequent occurrences in various disciplines. The chosen disciplines were microbiology, engineering, applied linguistics, and business studies. He explored hard sciences research-oriented bundles that were used by writers. In social sciences, writers use text-oriented bundles. He concluded that every discipline had its bundles according to the nature of the writing.

The meanings of lexical bundle change when different writers use them. Native writers use them according to their expertise in that language while non-native writers use them according to their understanding. Lo (2018) investigated texts written by different writers to know the variations in using lexical bundles. His focus was to find the

variation between the writing style of residents and non-residents of a particular area. Adel and Eman (2012, as cited in Lo, 2018) compared the lexical bundles of Swedish students with British native speakers to point out their academic writings differences and similarities. It was known that there was a difference in NS lexical bundles and NNS lexical bundles. Their study was limited to the writings of students' essays rather than interdisciplinary discourse.

A variation can be found in the use of lexical bundles by students of different levels. The students who study in higher classes are more expert in their use, while undergraduate students, sometimes, feel confusion in their use. Usage of these lexical bundles is discipline dependent also. In some disciplines, these bundles are used more and in some, less. The same point was in the mind of Durrant (2017) when he investigated the disciplinary differences in university students' writings. The main aim of his study was to present a new approach to studying these variations from a linguistic point of view than fixed patterns investigated by several writers in past studies. He compared the 4-word lexical bundles in two types of texts. After the analysis, he put similar lexical bundles in one group. The findings of his study revealed that traditional categories in disciplines were correct, and a gap could be visible in hard and soft disciplines. These studies showed that many critics had put their attention towards the study of lexical bundles and explain their aspects from different points of view (Heng et al., 2014).

3. Methodology

In this study, two political autobiographies, Pervaiz Musharraf, an army general and Benazir Bhutto, who led the Pakistan Peoples Party, are analyzed. The study is descriptive, and the methodological approach is mixed. After cleaning the data, the software of Lawrence Anthony "AntConc 3.5" was used to identify 4-word lexical bundles. We selected 4-word lexical bundles to analyse our corpus because Conrad and Biber (2005) believe that writers are habitual to use these bundles more than 70% of their conversation and writing. After loading both clean files in AntConc 3.5, we got similar 4-word lexical bundles from the texts.

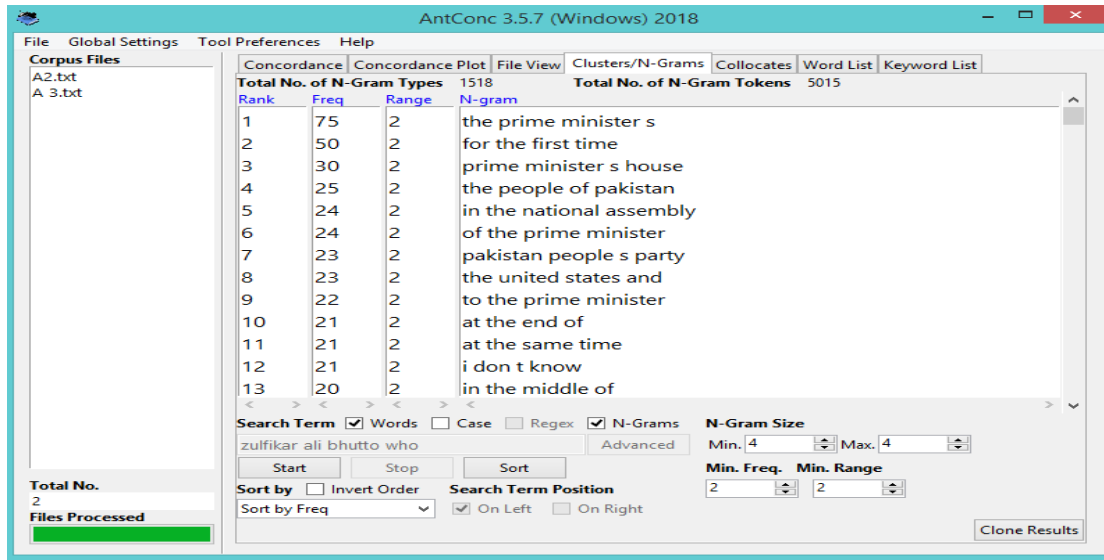


Figure 1: Exploring N-grams through AntConc

For the present research study, we selected 4 N-Grams and their frequency and range were two. We found 1518 sets of 4-word lexical bundles from the corpus, but we selected through convenient sampling only those 4-words lexical bundles that fit according to Biber's given structural categories. These 4-words lexical bundles were divided into five categories and table 1 presents these selected lexical bundles. We selected those 4 words lexical bundles, which were found in both texts, but they vary in their meanings due to their contexts. The study's focus was on knowing contextual meaning; therefore, we selected concordance lines according to the frequency of these lexical bundles. We selected six concordance lines from the first bundle, from the second and third bundles four lines, and from the fourth and fifth bundles, we chose two concordance lines. The selected data were analysed qualitatively and quantitatively. Findings and conclusions of the study were drawn based on data analysis and discussion.

4. Results and Discussion

Table 1 shows the N-Grams of both texts. Only five 4-words lexical bundles were selected from the texts. The selected similar 4-word lexical bundles were context-dependent. While analysing the context of selected lexical bundles, we observed that their structures were similar, but they conveyed different contextual meanings. Table 1 (Appendix A) shows the selected similar 4-word lexical bundles. The five structural categories of Biber (1996) are also mentioned, according to which similar 4-word lexical bundles have been selected.

4.1 Noun phrase with of-phrase fragment: the people of Pakistan

The first structural category that is presented by Biber (1996) is a noun phrase with an of-phrase fragment. The first part of this phrase is based on “noun phrase”, and the latter half is based on “of the phrase”. The instances of the phrase in texts are listed in table 2.

Table 2

Noun Phrase with Of-Phrase Fragment- the people of Pakistan

Phrase	Contextual Meanings
Banazir Bhutto uses <i>the people of Pakistan</i>	Sense of belonging
	Sense of nationhood
	Description of the historical event
Pervaiz Musharraf uses <i>the people of Pakistan</i>	Political use
	Description of specific people
	Description of specific people

A similar 4-word lexical bundle was “the people of Pakistan”. During the analysis of the bundle, we observed that the bundle was used differently in both autobiographies. It is seen that all the people write differently, so these two writers have written differently. From the contextual analysis of the text, Benazir Bhutto associates power with the phrase and thus derives force from it in her expressions. She states,

“...Any sellout by Pakistan under pressure would be unacceptable to the people of Pakistan and heighten the chances of a new war.”

Here “the people of Pakistan” points to a nation's geographical reality and territorial existence on whose behalf the writer is making a claim assuming that it would be the decision of those she represented. She has not used this phrase in isolation, so this phrase stands for Pakistan as a whole. She also attempts to legitimise her claim by referring to the people. In another situation, she had used the lexical bundle to increase the intensity of an event. When Zulfikar Ali Bhutto came back from India, he brought a piece of good news. He had a long discussion with Mrs Ghandi on the issues of territory and prisoners’ release and he settled the issue of territory. This was an important victory for the people of Pakistan.

“... It is a victory for the people of Pakistan and India who have won peace after three wars.” ...”

She expressed that the people of Pakistan as a nation acted for their victory. They fought for the dignity of their country like a brave nation. From the contextual analysis of this bundle, we perceive the presence of war in its background.

" ... the people of Pakistan enjoyed the first Constitution in Pakistan's history to introduce fundamental human rights ..."

The third lexical bundle refers to a historical event. Here "people of Pakistan" represents a democratic reality alienated from the isolated decisions of a dictator. In other words, she and her party are the people, while her opponents were few individuals and not dedicated representatives.

Pervaiz Musharraf manipulates the power associated with the phrase but in the opposite manner. He speaks for the military bureaucracy against the democratic elite and considers the power i.e., the people siding with the former. He considers it treason whosoever lock horns with the military.

"The people of Pakistan would have considered it high treason."

In another context, his use of the phrase represents a tiny minority who may be aware of the consequences of getting aid from international agencies. The audience is some specific type of people, not the whole country. According to him,

"I was quite aware that IMF programs were highly resented by the people of Pakistan but we wanted to use the IMF to achieve our strategic objectives."

In another context, Musharraf again uses the phrase, which would be less relevant to most people. He tried to increase the earnings of Pakistani people so he considered all the possible ways of earning and saving money. He took notice of the fact that paying tax in Pakistan is not a tradition by most people. When he mentions taxpayers, they constitute a tiny minority as more than half of the population live below the poverty line and do not know the reason and mechanism for paying taxes. Further, the elitist classes are to be taxed, find ways and means to avoid paying them.

"The people of Pakistan were not at all accustomed to paying taxes."

4.2 Other Prepositional Phrase: at the time of

The second selected lexical bundle was "at the time of". Generally, this bundle seems an indication of some point in the past time. Both politicians have used this bundle differently in their autobiographies. The contextual meanings are given in table 3.

Table 3

Other Prepositional Phrase: at the time of

Phrase	Contextual Meanings
Banazir Bhutto's use of "at the time of"	Refers to the past event
	Depiction of Islamic history
Pervaiz Musharraf's use of "at the time of"	Refers to a personal and political event
	Refers to time

The first context of "at the time of" indicates a past event in which the personal and political elements are embedded. Benazir Bhutto uses the lexical bundle to show how Zia ul Haq promised in hard times, but he did not act according to his promise when this time was over. After the death of Zulfikar Ali Bhutto, Benazir had to cope with various difficult situations. She had to defend the position of her father against the harsh charges of Zia. At the same time, she was making necessary arrangements for the coming election. It also points to his turning away from personal promise to his political power and his denial of the promises he had once made. The use of such words in context as "trumped-up charges" and "impending victory" enhances the impact of the unfulfilled promises.

"...toward the elections, Zia had promised at the time of the coup, then had cancelled in the face of our impending victory."

In another instance, Benazir uses the bundle to describe an Islamic event in the past. In her childhood, she had a great affiliation with her house, Al-Murtaza because she found a connection between her ancestors and her existing pride. Some family members told her that their ancestors took a direct part in the Muslim invasion of India in A.D.712.

"... the Hindu warrior class in India which converted to Islam at the time of the Muslim invasion or from the conquering Arabs who entered India through our home province of Sindh ..."

From the texts mentioned above, it is clear that Benazir has used a similar lexical bundle with different meanings in her autobiography. Pervaiz Musharraf has also used this lexical bundle in the sense of an event in the past. For instance, in the following lines, the bundle reflects the partition of India that was a political event. A tussle started between Nawaz Sharif and Pervaiz Musharraf due to some misunderstanding in October 1999. Nawaz Sharif developed some doubts on his loyalty that Pervaiz Musharraf was planning a coup against him.

"As I said, perhaps Nawaz Sharif expected me to be more pliable, since my family had migrated from India at the time of Partition."

Here Pervaiz Musharraf has used these words as a reason for misunderstanding of his personality by Nawaz Sharif. The second context is about referring to a specific point in time while catching Osama. After the incident of 9/11, many terrorists entered Afghanistan and Pakistan, so Pervaiz Musharraf arranged some search operations. He claimed that he caught many known and unknown terrorists, and handed over almost 369 terrorists to the United States. This lexical bundle tells us that Pervaiz Musharraf was boosting his power. He said that he had caught many Afghans who were considered rebellious without caring who they were, and wiped away terrorism from the land of Pakistan.

“The biggest of them all, Osama bin Laden, is still at large at the time of this writing, but we have caught many, many others.”

4.3 Noun phrase with other post-modifier fragments: early in the morning

When we read the context of this 4-words lexical bundle, we notice this lexical bundle referring to an event's specific time of occurrence.

Table 4

Noun phrase with other post-modifier fragments: early in the morning

Phrase	Contextual Meanings
Banazir Bhutto's use of "early in the morning"	General description of the arrival of milkman
	refers to something important
Pervaiz Musharraf's use of "early in the morning"	Sense of spirituality related to institutions' routine
	Sense of spirituality

This bundle, "early in the morning", in the first context, displays the occurrence of an event with the general routine of work. The simple sentence "When the milkman came" shows that Benazir related this routine work with the occurrence of a significant incident. Before the two nights of Zulfikar Ali Bhutto's assassination, the army raided 70 Clifton. They searched the house without any search warrant. They took personal things, tortured the staff, threatened them and locked them into a room. The next day, when the milkman arrived, he found all the staff locked in a room.

"When the milkman came early in the morning, he was locked in with them."

The other context was about part of a narrative event. The purpose of this lexical bundle was to add meaning to something important that was pre-decided.

“You're already scheduled to leave for Karachi early in the morning,
"she says to my brothers, giving them the money.”

Pervaiz Musharraf has used this lexical bundle as the description of an event as part of some institution's routine. He has used it in a standard way of expression without putting any political description.

“Early in the morning when the college gates opened, we would sneak
back in.”

In the second instance, the bundle has been used as a part of an event but with a sense of spirituality. Early in the morning is pointing here towards pilgrimage that is a spiritual occasion.

“He said that we would be leaving from Lahore early in the morning.”

4.4 Anticipatory it + verb phrase/adjective phrase: it is necessary to

It is clear that “it” is used for anticipation, but how Pakistani politicians have used this, is discussed as follows.

Table 5

Anticipatory it + verb phrase/adjective phrase: it is necessary to

Phrase	Contextual Meanings
Benazir Bhutto’s use of “it is necessary to:	Sense of action
Pervaiz Musharraf’s use of “it is necessary to”	Sense of thinking

Benazir Bhutto has used this 4-words lexical bundle “it is necessary to” in the sense of some action. Martial Law continued, and it was necessary to keep Benazir away from it. In the statement of a newspaper, *Times*, she had quoted in her autobiography to show the favour of military law and suppression of political leaders.

“... the efficient conduct of Martial Law, it is necessary to detain the
said Miss Benazir Bhutto. . . .”

Pervaiz Musharraf used “it is necessary to” for explaining thought processes. This lexical bundle explains that he tried to understand the prime minister's thinking for diverting his plane in the air.

*“To understand the prime minister's thinking, it is necessary to backtrack
a few weeks.”*

4.5 Passive verb + prepositional phrase fragment: Had been brought to

“Had been brought to” is the final chosen 4-words lexical bundle from the autobiographies of Pakistani politicians. The first part of this structure is based on a passive verb that included a prepositional phrase fragment.

Table 6

Passive verb + prepositional phrase fragment: Had been brought to

Phrase	Contextual Meanings
Benazir Bhutto’s use of “Had been brought to”	Related to his progress and power
Pervaiz Musharraf’s use of “Had been brought to”	Physical sense

Benazir has treated this lexical bundle to illustrate the developmental works in Pakistan at the time of her party rule. Throughout her autobiography, she has tried to show the original picture of developments in Pakistan at the time of Zulfikar Ali Bhutto. At many places, she has also depicted that her party was the first political party of Pakistan that worked for the betterment of the common public. While using passive structure, she has highlighted developmental works such as electricity, parks, and education which were performed by her government. She remained quite successful while conveying that her party worked to establish both city and rural areas. The contextual analysis also showed that Benazir Bhutto has discussed through this lexical bundle the concept of progress and power in Pakistani rural areas.

“Electricity had been brought to many villages in rural areas.”

Pervaiz Musharraf has treated this lexical bundle to explain a physical event. He describes with the help of this lexical bundle the murder of Daniel Pearl. This lexical bundle indicated that a conspiracy was in progress for many days, and some people were doing cautious planning for it. From the last one year, “some rockets had been brought to Islamabad” shows that some procedural work was going on. So, he has explained a reason for a physical incident.

“Arshad also told us that some rockets had been brought to Islamabad a year earlier and were supposed to be used to assassinate...”

5. Conclusion

The analysis of the above mentioned selected lexical bundles showed that they had been used for several purposes to support the narrative of the authors. The bundles

are similar and simple too, but their semantic connotations vary according to the context. They give different meanings and messages as context changes.

The study was based on the structural features as described by Biber (1996). The data reveal that both politicians realise the use of lexical bundles and know what difference they would make to impart their messages. It is observed that there is a relationship between and among “language, representation, power and politics” (Kaufer & Hariman, 2008). Thus, the politicians have used the lexical bundles to improve their image and standing, which adds to their ideological background. It is also implied that both have a background in politics and know how language can be manipulated to express and justify differing decisions. We searched concordance lines and extracted these senses from them: a sense of belonging, sense of nationhood, description of people's position, historical and religious sense, reference to time, manner and action, and sense of spirituality. After finding these senses we can say that due to different contexts, 4- words lexical bundles provide various senses. Although those 4-words lexical bundles were the same their meanings were different from one another.

References

- Bal, B. (2010). *Analysis of four-word lexical bundles in published research articles written by Turkish scholars*. Retrieved from https://www.academia.edu/35406317/Analysis_of_Four_word_Lexical_Bundles_in_Published_Resesarch_Articles_Written_by_Turkish_Scholars
- Biber, D. (1993). Representativeness in corpus design. *Literacy and Linguistic Computing*, 8(4), 377-407. doi:10.1093/applin/25.3.371
- Biber, D. (1996). Investigating language use through corpus-based analyses of association patterns. *International journal of corpus linguistics*, 1(2), 171-197. doi: <https://doi.org/10.1075/ijcl.1.2.02bib>
- Biber, D. Reppen, R., & Conrad, S. (2007). *Corpus linguistics: Investigating language structure and use*. Cambridge, United Kingdom: Cambridge Univ. Press.
- Conrad, S. M., & Biber, D. (2005). The frequency and use of lexical bundles in conversation and academic prose. *Lexicographica*. doi: 10.1515/9783484604674.56
- Cortes, V. (2004). Lexical bundles in published and student disciplinary writing: Examples from history and biology. *English for specific purposes*, 23(4), 397-423. doi: <https://doi.org/10.1016/j.esp.2003.12.001>

- Durrant, P. (2017). Lexical bundles and disciplinary variation in university students' writing: Mapping the territories. *Applied Linguistics*, 38(2), 165-193. doi: <https://doi.org/10.1093/applin/amv011>
- Firth, J. (1957). Papers in Linguistics. *Journal of Applied Linguistics*, 17 (3), 402-413. doi: <https://doi.org/10.1111/j.1473-4192.2007.00164.x>
- Granger, S. (2018). Formulaic sequences in learner corpora: Collocations and lexical bundles. In C, Siyanova-Chanturia, S. Pellicer (Eds.), *Understanding formulaic language: A second language acquisition perspective* (228-247). Routledge.
- Heng, C. S., Kashiha, H., & Tan, H. (2014). Lexical bundles: Facilitating university "talk" in group discussions. *English Language Teaching*, 7(4), 1. doi:10.5539/elt.v7n4p1
- Hoey, M. (2012). *Lexical priming: A new theory of words and language*. London: Routledge.
- Horn, L. R., & Ward, G. (2004). Handbook of Pragmatics. Retrieved from <https://www.felsemiotica.com/descargas/Horn-Laurence-R.-and-Ward-Gregory-Ed.-The-Handbook-of-Pragmatics.pdf>
- Hyland, K. (2008). As can be seen: Lexical bundles and disciplinary variation. *English for specific purposes*, 27(1), 4-21. doi :10.1016/j.esp.2007.06.001
- Kaufer, D., & Hariman, R. (2008). Discriminating political styles as genres: A corpus study exploring Hariman's theory of political style. *Text & Talk-An Interdisciplinary Journal of Language, Discourse Communication Studies*, 28(4), 475-500. doi: 10.1515/TEXT.2008.023
- Lo, C. C. (2018). Lexical bundles and disciplinary variation in EFL master's thesis. *Proceedings of the The 4th Asia Pacific Corpuslinguistics Conference*.
- Nesi, H., & Basturkmen, H. (2006). Lexical bundles and discourse signalling in academic lectures. *International journal of corpus linguistics*, 11(3), 283-304. doi: <https://doi.org/10.1075/bct.17.03nes>
- O'Halloran, K. (2009). Inferencing and cultural reproduction: a corpus-based critical discourse analysis. *Text & Talk-An Interdisciplinary Journal of Language, Discourse Communication Studies*, 29(1), 21-51. doi: 10.1515/TEXT.2009.002

Rahimi, A. (2016). *Lexical bundles in computational linguistics academic literature*. arXiv.org, Cornell University.

Sperber, D., & Wilson, D. (1998). The mapping between the mental and the public lexicon. *Language and thought: Interdisciplinary themes*, 184-200. doi: 10.1017/CBO9780511597909.012

Appendix A

Table 1

Similar 4-Word Lexical Bundles

No	Structural Category	4-word lexical bundles found in both autobiographies	Frequency
1	Noun phrase with the of-phrase fragment	the people of Pakistan	25
2	Other prepositional phrases	at the time of	9
3	Noun phrase with other post-modifier fragments	early in the morning	8
4	Anticipatory it + verb phrase/adjective phrase	it is necessary to	2
5	Passive verb + prepositional phrase fragment	Had been brought to	2