

The Use of Lexical Bundles in Findings and Discussion Sections of Graduate Students' Thesis

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Lexical bundles is a combination of words which consists of three or even more words that frequently occur together in particular registers. It is seen as an important aspect that should be mastered in order to create a qualified text. This study aims at analyzing the lexical bundles used in findings and discussion sections of graduate students' thesis in terms of structures, functions, and the role of lexical bundles in forming coherence of the students' texts. This study employs qualitative approach. The data are taken from 10 Chapter IV, Findings and Discussion of graduate students' thesis. In the process of analysis, the researcher uses three instruments in the form of tables to collect and analyze the lexical bundles manually based on the structures of lexical bundles proposed by Biber, et. al. (1999), and the functions of lexical bundles proposed by Hyland (2008) framework. There are 74 lexical bundles found in the students' texts. The findings reveals that first, the lexical bundles found in the students' texts make use of all the twelve structural forms and the most dominantly used is structure type 4 other prepositional phrase (fragment); second, the lexical bundles found in the students' texts serve all of the three functional types and the most dominantly used is text-oriented function and third, the lexical bundles found in the students' texts have an important role informing coherence of the texts. It indicates that the lexical bundles make use of two coherence items such as reference and transition signals.

INTRODUCTION

University students face different challenges when they enter academic world. They challenged to get their final projects or thesis at the end of their study and their articles to be published. The ultimate goal of teaching and learning English is communicative competence aiming at how students create texts in appropriate context. Since English become a foreign language for Indonesian people, there are some problems occur in the English language teaching and learning. Frequently, most of the students feel difficulty in writing their final projects or thesis. They find the difficulties in producing a communicative writing and in utilizing an appropriate grammar and vocabulary. Most of the students did not use an appropriate sequence of word in writing their texts, so that their texts don't make sense. Whereas, students should convey their intended meaning of their writing to the readers, so they get the points of their writing. In order to make it good as well as communicative competence, they should expand their ideas like experts and they need to learn certain sequences of word frequently used by established academic.

One important component to achieve communicative competence is formulaic expressions which enable students to create natural and fluent in spoken and written texts. Formulaic expressions defined as a prefabricated word or group of words that mostly used by English native speakers in their daily communication (Celce-Murcia, 2007). It can be meant that formulaic expressions is a multi-word expression that commonly used by native speakers in written and spoken texts. Lexical bundles is one of formulaic expressions

classification which frequently used in both spoken and written language naturally.

The term “lexical bundles” was first defined by Biber et al., (1999) in the Longman Grammar of Spoken and Written English. They define that lexical bundles are recurrent expressions, regardless of their idiomaticity, and regardless of their structural status, simply sequences of word forms that commonly go together in natural discourse. The use of lexical bundles help writers to build the meanings in a text and making sense of certain registers (Hyland, 2008). It is seen as an important aspect that should be mastered in order to convey a communicative purpose and to create a qualified text either spoken or written language.

Furthermore, there are three reasons why the recurrent word combinations are significant for the development of academic writing skills; first, lexical bundles are usually repeated and an essential part of the structural material. Second, they are frequently used, lexical bundles are defining markers of successful writing. Third, these bundles are the combination of grammar and vocabulary, thereby lexicogrammatical underpinnings of a language (Coxhead & Byrd, 2007 as cited in Ucar, 2017).

Studies on lexical bundles structurally and functionally have been conducted by some researchers in spoken register, such as lectures, public dialogue, political speech, group discussions, and conversations (Aini, Faridi, & Fitriati, 2018; Cortes, 2009; Darweesh & Ali, 2017; Neely & Huang, 2013b) and in written register, such as research articles, students’ final projects, theses, dissertations, argumentative text, textbooks (Allan, 2017; Hyland, 2008; Islami, Fitriati, & Mujiyanto, 2019; Jalali, 2013; Kwary, Ratri, & Artha, 2017; Yang, 2017). However, there was a difference between the uses of lexical bundles structurally and functionally in the academic prose and conversation (Biber, Conrad, and Cortes, 2004). As the pioneer study, Biber et al. (1999) found that conversation and academic prose present distinctive distribution patterns of lexical bundles. They found that the most structural forms in conversation was lexical bundles that incorporate verb phrase fragment, while the most structural forms in academic prose was lexical bundles that incorporate noun phrase and prepositional phrase. In the next study, Conrad and Biber (2005) revealed that conversation tends to use more personal stance expressions, while academic prose use more referential expressions.

Those previous studies found some points related to this study about lexical bundles. However, this present study is different from those previous studies. This present study focuses on analyzing written register, particularly Chapter IV, Findings and Discussion sections of graduate students' thesis as the research object. Furthermore, this study also focuses on analyzing three, four, and five word bundles. The aims of this study are to analyze the use of lexical bundles in term of structures and functions and also their role in forming coherence in the findings and discussion sections of students' thesis.

METHOD

This study employed qualitative study and designed as a discourse analysis particularly textual analysis, since the main data is in the form of phrases or clauses. This study focused on analyzing written form as the main data. The object of this study were Chapter IV, Findings and Discussion Section of students' thesis of graduate program of English Language Education of Universitas Negeri Semarang. The researcher choose 10 data randomly and analyze the lexical bundles found in the students' thesis as the primer data in this study.

There are some steps conducted to gather the data. First, collecting 10 chapter IV, Findings and Discussion Section of graduate students' thesis randomly from the library of UNNES and give a number for each text in order to help the researcher easily for the next process of collecting the data. Second, identifying all lexical bundles found and highlighting the data which contained any kinds of lexical bundles presented in the findings and discussion sections. Third, grouping all the bundles identified in each text and placing them into table based on the number of students' texts. The bundles which appear at least three times in three to five texts are included as lexical bundles

that will be analyzed. The last, collecting all bundles which categorized into lexical bundles and placing them into a table based on their structural forms and functional types.

After the data gathered, the researcher conducted several steps to analyze the data manually. First, categorizing the structures of lexical bundles which adopted from Biber et al's.(1999) study. Second, categorizing the functions of lexical bundles which adopted from Hyland's (2008) study. Third, analyzing the role of lexical bundles in forming the coherence in findings and discussion sections of the students' thesis. Fourth, interpreting and explaining the use of structural forms and functional types of lexical bundles found in the findings and discussion section of graduate students' thesis and the role of those bundles in forming coherence of the texts. The last, describing the findings based on the three research problems in present study and discussing the findings by presenting some relevant theories.

FINDINGS AND DISCUSSION

Based on the results of analysis, I found 74 lexical bundles occurred in 10 of chapter IV, findings and discussion sections of graduate students' thesis. The 74 bundles found would be analyzed based on their structures and functions, and their role in forming coherence of the students' texts.

Structures of Lexical Bundles in Findings and Discussion Sections of Graduate Students' Thesis

Biber et al. (1999) categorize the structural forms of lexical bundles in academic prose into twelve. Accordingly, I found that those 74 lexical bundles occurred can be identified into twelve structure categories of lexical bundles. The analysis of structural forms of lexical bundles would be presented in the following table:

Table 1. Structures of Lexical Bundles in Students' Texts

Structures of LBs	Lexical Bundles
Type 1: Noun phrase with <i>of</i> -phrase fragment	Both of the The result of The role of The findings ofThe analysis of The examples ofThe use of The relation consists ofThis part consists of The mean score of the
Type 2: Noun phrase with other post-modifier fragments	The relation between The text is below
Type 3: Prepositional phrase with embedded <i>of</i> -phrase fragment	In terms of In front of the In the form of In the case of In this context of
Type 4: Other prepositional phrase (fragment)	According to theAs a result Based on the From the data In line with In this case In this section According to example aboveBy looking at the From the analysis resultsFor example in the From the result of In the following tableIn the same time On the other hand

<p>Type 5: Anticipatory <i>it</i> + verb phrase/adjective phrase</p>	<p>It showed that It means that It is different from It was supported by It was indicated that It was found that It was related to It is found that It refers to It showed from It can be concluded that It can be seen that It can be said that It can be indicated that</p>
<p>Type 6: Passive verb + prepositional phrase fragment</p>	<p>Is divided into Can be identified as Can be used in Can be seen in Can be shown in</p>
<p>Type 7: Copula <i>be</i> + noun phrase/adjective phrase</p>	<p>Is one of</p>
<p>Type 8: (Verb phrase +) <i>that</i>-clause fragment</p>	<p>The researcher found that The result showed that The researcher showed that The data showed that That would be achieved by That would be done by That focused only on the</p>
<p>Type 9: (Verb/adjective +) <i>to</i>-clause fragment</p>	<p>Can be used to Can be related to To be able</p>

	to To refer to the
Type 10: Adverbial clause fragment	As can be seen in
Type 11: Pronoun/noun phrase + <i>be</i> (+...)	There were only There was a There were no There is no There are some There is a There are a lot of There is significant different between This is in line with
Type 12: Other expressions	Such as the

As can be seen in table 1 above, the most dominant structural form of lexical bundles in findings and discussion sections of students' thesis is structure type 4 other prepositional phrase (fragment). It is found that there are 15 lexical bundles appeared for type 4, such as according to the, based on the, from the data, in this case, in this section, according to example above, etc. These bundles can be identified in a formula prepositional + phrase fragment. The second structural form that mostly occur is type 5 anticipatory it + verb phrase/adjective phrase which consists of 14 lexical bundles such as the bundles it was supported by, it was indicated that, it was found that, it was related to, it is found that, etc. These bundles are used report the writer's kind of stance related to studies.

The next structural form is the lexical bundles that incorporate noun phrase with of-phrase fragment, which symbolized as type 1 and it consists of 10 lexical bundles such as the bundles both of the, the result of, the role of, the findings of, the analysis of, the examples of, etc. This structure is aimed to identify a variety of abstract qualities and identification of amount. The other structure is type 11 pronoun/noun phrase + be (+...) which consists of 9 lexical bundles such as the bundles there were only, there was a, there were no, there is no, there are some, there is a, etc. These bundles in this form are used to inform packaging purposes and to link information that follows.

Structure type 8 (verb phrase +) that- clause fragment which consists of 7 lexical bundles such as the bundles the researcher found that, the result showed that, the researcher showed that, and the data showed that, type 3 prepositional phrase with embedded of-phrase fragment which consists of 6 lexical bundles such as the bundles as a result, in terms of, in front of the, in the form of, in the case of, and in this context of, which is used to show logical relations. Type 6 passive verb + prepositional phrase fragment which consists of 5 lexical bundles such as the bundles is divided into, can be identified as, can be used in, can be seen in, and can be shown in, which is used to marks a locative. Type 9 (verb/adjective +) to-clause fragment which consists of 4 lexical bundles such as the bundles as can be used to and can be related to, which is aimed to identify previous findings or known information. Type 2 noun phrase with other post-modifier fragments which consists of 2 lexical bundles such as the relation between and the text is below, which is used to identify relationships among entities.

Then, it is found only 1 lexical bundles occurred for each of type 7 copula be + noun phrase/adjective phrase such as is one of, type 10 adverbial clause fragment such as as can be seen in, which used for deictic reference to other discourse segments. The last is type 12 other expressions which only consists of such as the.

In conclusion, the results of this study revealed that type 4 other prepositional phrase was the most frequently used lexical bundles in findings and discussion sections of graduate students' thesis structurally. It is in line with the finding of the previous studies carried out by Arani, Jalali, and Moini (2015) and Ucar (2017). They carried out a study on lexical bundles in research articles which found that the largest structural category of lexical

bundles in research articles was other prepositional phrase.

Functions of Lexical Bundles in Findings and Discussion Sections of Graduate Students' Thesis

Hyland (2008) proposed three functional types of lexical bundles, they are research- oriented, text-oriented, and participant-oriented. The findings showed that from the total 74 lexical bundles found in the students' texts, there are 28 lexical bundles classified as research- oriented, 34 lexical bundles classified as text-oriented, and 12 lexical bundles classified as participant-oriented. It can be said that the most functional type of lexical bundles appeared in findings and discussion sections of graduate students' thesis is text-oriented. The analysis of functional types of lexical bundles would be presented in the following table:

Table 2. Functions of Lexical Bundles in Students' Texts

Functions of Lexical Bundles	Lexical Bundles
Research-oriented	
Location	In front of the In the same time In this context of
Procedure	The role of The use of It was supported by
Quantification	Both of the Is one of There were only There was a There were no There is no There are some There is a There are a lot of The mean score of the
Description	In line with The findings of The analysis of The examples of Such as the For example in It was related to The relation consists of This part consists of This is in line with There is significant different between That only focused on the
Topic	-

Text-oriented

Transition signals

On the other hand

Resultative signals

As a result

It showed

thatThe

result of

From the analysis

resultsFrom the result

of

It was indicated

thatIt was found

that

It is found that

It showed from the

The data showed

that

The researcher found that

The result showed that

	The researcher showed that
Structuring signals	From the data In this section It means that In the following tableIt refers to the The text is belowTo refer to the It is different from It can be concluded thatIt can be said that It can be indicated that It can be seen that
Framing signals	According to theBased on the In this caseIn terms of The relation between According to example aboveIn the case of In the form of
Participant-oriented	
Stance features	To be able to That would be achieved byThat would be done by
Engagement features	Is divided into By looking at the Can be identified asCan be used in Can be used to Can be related toCan be seen

in Can be
shown in
As can be seen in

As can be seen from table 2 above, the first functions of lexical bundles is research-oriented. The findings showed that there are 28 lexical bundles which categorized into research-oriented. This type is functioned to help writers to structure their activities and experiences of the real world (Hyland, 2008, p. 13). Furthermore, the researcher found three bundles such as *in front of the, in the same time, in this context of* categorized as location research-oriented, three bundles such as *the role of, the use of, it was supported by* categorized as procedure, ten bundles such as *both of the, is one of, there were only, there was a, there were no, there is no, etc.*, categorized as quantification, and twelve bundles such as *in line with, the findings of, the analysis of, the examples of, such as the, for example in, it was related to, etc.*, categorized as description. The bundle *in the same time* as location research-oriented indicate time. By using this bundle, the writer tried to explain the exact time of something happened in the research or the real world. The bundle *the use of* as procedure research-oriented explained about the step of a process. By using this bundle, the writer tried to explain the step of process in conducting something in the research. The bundle there are some as quantification research-oriented was used to describe a quantity of something. By using this bundle, the researcher tried to explain the quantity of scores or frequency as a result of the research analysis. The bundle the findings of showed a description of how the findings or the results of the research. By using this bundles, the researcher tried to describe the findings of the research being conducted.

The second functions of lexical bundles is text-oriented. The results showed that there are 34 lexical bundles which categorized into text- oriented. This type concerned with the organization of the text and its meaning as a message or argument includes (Hyland, 2008, p. 13). Moreover, the researcher found one bundle, it was *on the other hand* which classified as transition signals, thirteen bundles such as *as a result, it showed that, the result of, from the analysis results, from the result of, it was indicated that, etc.*, classified as resultative signals, twelve bundles such as *from the data, in this section, it means that, in the following table, it refers to the, the text is below, etc.*, classified as structuring signals, and eight bundles such as *according to the, based on the, in this case, in terms of, the relation between, etc.*, classified as framing signals.

The bundle *on the other hand* as transition signals text-oriented is used to establish additive or contrastive links between elements. By using this bundle, the writer contrast two arguments in the research. The bundle *as a result* as resultative signals is used to mark inferential or conclusion of the findings. By using this bundle, the writer describe the inference or the result of the research being conducted. The bundle *it can be concluded that* as structuring signals is used to make a conclusion about something. By using this bundle, the writer tried to make a conclusion of particular topic related to the research. The bundle *in the case of* as framing signals is used to situate arguments of something. By using this bundle, the writer situated the arguments by specifying the case of the topic.

The final functional type of lexical bundles is participant-oriented. The researcher found that there are 12 lexical bundles which categorized into participant-oriented. This type focused on the writer or reader of the text (Hyland, 2008, p 14). The bundles of this type consists of *to be able to*, *that would be achieved by*, and *that would be done by* which categorized into stance features participant-oriented and nine bundles such as *is divided into*, *by looking at the*, *can be identified as*, *can be used in*, *can be used to*, *can be related to*, etc., categorized into engagement features. The bundle *to be able to* as stance features is used to indicate possibility or ability. Meanwhile, the bundle *can be used to* as engagement features is aimed to show information that has been known.

In conclusion, the results of this study showed that text-oriented is the most functional types of lexical bundles appeared in findings and discussion sections of graduate students' thesis. It means that the students concerned with the organization of the text and the argument of the research includes. It is in line with the finding of the previous studies carried out by Amirian, Ketabi, and Eshaghi (2013), Arani, Jalali, and Moini (2015), Chen and Baker (2010), Gungor and Uysal (2016) and Jalali (2013). They found that text-oriented were most frequently used in the academic prose. In this case, the academic prose is in form of students' texts and research articles.

The Role of Lexical Bundles in Forming Coherence of Graduate Students' Thesis

As a result of analysis, the researcher found 29 bundles of the total 74 occurrences bundles that identified as coherence in findings and discussion sections of graduate students' thesis. The researcher found two coherence devices in the students' texts, such as reference and transition signals. There are 17 bundles categorized into reference, such as *in this context of*, *it was supported by*, *this part consists of*, *it was related to*, *this is in line with*, *it showed that*, etc. Structurally, those lexical bundles can be identified as structure type 3, type 5, type 1, type

11, and type 4. Then, functionally they can be classified into research and text oriented.

Besides, there are 12 bundles categorized into transition signals, such as *in the same time, in front of the, for example in, such as the, on the other hand, as a result, etc.* Structurally, those lexical bundles can be identified as structure type 3, type 4, type 12, type 2, type 5, and type 10. Then, functionally they can be classified into research, text, and participant- oriented.

According to analysis results, it can be concluded that lexical bundles have an important role in forming coherence in findings and discussion sections of graduate students' thesis. It can be seen from the analysis of structures and functions of lexical bundle in the students' texts which has relation to coherence devices.

CONCLUSIONS AND SUGGESTIONS

Based on the analysis and discussion of this present study, some conclusions can be drawn. Conclusions in this study are about the use of lexical bundles structurally and functionally and their role in forming coherence in findings and discussion section of graduate students' thesis.

First, the twelve structural forms of lexical bundles in academic prose which proposed by Biber et al. (1999) are used by graduate students in writing their thesis. Furthermore, structure type 4 other prepositional phrase (fragment) was identified as the most structural forms of lexical bundles used in the students' texts for specifying a particular discourse context, identifying particular location, and contrasting two arguments or events presented.

Second, the three functional types of lexical bundles which proposed by Hyland (2008) are used by graduate students in writing their thesis. In addition, the most functional type of lexical bundles used in students' texts is text- oriented. Which means that the students concerned with the organization of the text and the argument of the research includes.

Third, the use of lexical bundles have an important role in forming coherence of the students' texts. It can be seen from the analysis of structures and functions of lexical bundles in the students' texts which has relation to coherence devices, that is reference and transition signals.

The conclusions explained above lead the researcher to provide some suggestions. For EFL learners, this study may give additional source about the structures and functions of lexical bundles as one of formulaic expressions in writing texts, especially in findings and discussion section of students' thesis. This will help students to create a coherence text and achieve a communicative purpose of the text. For English teachers, this study could participate as the additional knowledge for educational material. Then, it may contribute to be used as a reference in teaching word arrangement, especially for structures and functions of lexical bundles in order to create a qualified text in the process of teaching and learning English. As we have found that lexical bundles could make writers more natural in writing their texts.

Furthermore, this study still has weaknesses since the researcher only used one expert judgment to verify the validity of the data, therefore the interpretation might be biased. In addition, since this study only focuses on the use of lexical bundles in written discourse especially in findings and discussion section of students' thesis. Therefore, further researchers might conduct such topic and find out more about lexical bundles in different parts of students' thesis except findings and discussion section or in different registers, it could be in spoken or written form.

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