DISCOURSE PATTERNS OF APPLIED LINGUISTICS RESEARCH ARTICLE ABSTRACTS IN ENGLISH

Kamalatul Hafidzoh[1], Tofan Dwi Hardjanto[2]
[1,2]Universitas Gadjah Mada, Yogyakarta
kamala.hafidzoh@gmail.com

Abstract

An abstract has important role in summarizing and promoting its research article. Because of the important role, abstracts contain discourse patterns that have communicative purposes. This study aims at investigating discourse patterns and its linguistic characteristics of applied linguistics article abstracts in English. The research corpus consisted of 30 research article abstracts in English written by English native speakers and published in *Applied Linguistics* journal and *Journal of English for Academic Purposes* in 2016-2018. The data were analyzed by using five-move abstract pattern proposed by Pho (2013). The results showed that the common patterns of the abstracts were the patterns which contained five moves and four moves. Furthermore, the abstracts tended to use present tense and active voice. It can be concluded the results provide new findings among study of discourse patterns of English research article abstracts written by English native speakers, especially in applied linguistics.

Keywords: discourse pattern, abstract, applied linguistics, English native speaker

Introduction

Since abstract plays an important role in research articles (RA), the readers prefer to read the abstract and the title before reading the research article as a whole. Another hand, there are some readers who tend to read the abstracts without reading RA in order to save their time (Graetz, 1985). Moreover, the abstracts of online journals, in general, can be freely and easily accessed while some RA cannot be freely accessed. Therefore, as a summary of RA (Bhatia, 1993; Cleveland, 1983:104; ANSI, 2010:1, Houghton, 1975) and a medium of sending ideas to the readers (Hyland, 2000) and has the function in promoting RA (Cleaveland, 1983:110; Hyland, 2000:64), the abstract should be self-contained (McGirr, 1973) and it has to be written in effective patterns interestingly and clearly because every part of abstract contains particular functions which have to be delivered to the readers.

In general, the abstracts can be divided into some types. Based on American National Standards Institutes (2010), there are six types of abstracts, namely informative abstract, structured abstract, indicative abstract, indicative-informative abstract, critical abstract, and slanted abstract. The types of abstracts can influence the discourse patterns of abstract. On the other hand, although many abstract guidelines have been published by journals or institutes, for example Swales & Feak (2000), ANSI (2010), Hartley & Cabanac (2017), and UM Press (2017), the authors can arrange the abstracts in different discourse patterns. It is because those guidelines only give instructions about maximum words, font, etc., and there is no fixed guidelines that must be obeyed by all authors.

Discourse pattern which is commonly known as genre is a communicative events that contain communicative purposes, and these purposes are shared among discourse community (Swales, 1990:58). Additionally, genre analysis by means of a framework known as move-step approach developed by Swales (1981; 1990) in order to uncover the communicative process in certain genre, such as RA abstracts. Research article abstract has important feature known as move. According to Swales (2004:228), a move is a "discourse or rhetorical unit that performs a coherent communicative function in a written or spoken discourse". The study about discourse pattern was firstly developed by Swales (1981) in his study, namely Aspects of Article Introduction. Swales' theory is known as CARS (Create a Research Space) model in which this consisted of four moves in abstracts, and then it is revised into three moves (Swales, 1990; 2004).

There are number of move pattern models that have been developed so far. Bathia (1993) and Hardjanto (1997) developed four-move abstracts. Santos (1996), Hyland (2000), Swales & Feak (2004), and Pho (2013) developed five-move abstracts. Five-move abstracts developed by Pho (2013) is one of the latest discourse pattern theories which is often used by some researchers in the studies.

Pho (2013), in his book "Authorial Stance in Research Articles", proposed twenty one moves and steps of research articles. These moves are divided into five sections of RA, including abstract, introduction, methods, results, and discussion-conclusions. However, the moves of abstracts consist of five moves, including situating the research (M1), presenting the research (M2), describing methodology (M3), summarizing the findings (M4), and discussing the research (M5). Furthermore, in order to share the communicative purposes, each move can contain

linguistic characteristics, such as lexical markers and grammatical markers. For example, words "important" and "interest" can be categorized as lexical marker of "situating the research" move, or a move which has function to show that the study is important and interesting so it should be done (Hardjanto, 1997:118).

Today, RA, especially the abstracts, are commonly written in English, therefore those can be globally read. Moreover, because of this fact, many researchers have investigated RA abstracts in English, specifically focused on its discourse patterns and its linguistic characteristics. Hardjanto (1997), Samraj (2005), and Doro (2013) have investigated discourse patterns of cross-disciplinary RA abstracts in English. Loi (2010) has investigated discourse patterns of RA introductions of psychology discipline in English and in Chinese. Fania and Barati (2017) have investigated discourse pattern of RA introduction of applied linguistics in English, and focused on comparing RA introduction written by English native speakers and Iran native speakers. Pho (2013), and Can, Karabacak, and Qin (2016) have investigated RA abstracts of applied linguistics in English.

However, this study attempts to investigate discourse patterns and linguistic characteristics of applied linguistics research article abstracts in English, especially written by English native speakers. Although two previous studies, Pho (2013) and Can, Karabacak and Qin (2016), have investigated RA abstracts of applied linguistics in English, both did not focus on the authors of RA abstracts.

Methodology

The corpus for this research consists of 30 applied linguistics RA abstracts published in Applied Linguistics journal and Journal of English for Academic Purposes in 2016-2018. These journals were selected based on its indexing. The selected journals had to be indexed by Scopus and had to be freely and easily accessible on the Internet. Moreover, the abstracts were selected based on the affiliation of the author and the length of the abstract. Only abstracts written by English native speakers were selected, and it was identified through author's affiliation. Furthermore, if the abstract was written by more than one author, identifying author's affiliation was based on the affiliation of the first author. In addition, maximum length of the abstracts was 250 words and the abstracts have to contain more than three sentences. The abstracts that contained more than 250 words and less than three sentences probably did not show the characteristics of discourse patterns, especially five-move abstract pattern proposed by Pho (2013).

For ease of reference and analysis, each abstract was given some codes. PJ was a code for native speaker. After this code, each abstract was given a number. After that, each abstract was given the abbreviation, AL for Applied Linguistics journal and EAP for Journal of English for Academic Purposes.

The abbreviation was written before the year. For example, PJ01-AL2016, PJ02-AL2016, PJ06-AL2017, PJ16-EAP2016, etc. The selection of the abstracts was also done through convenient sampling.

After the abstracts were successfully collected and given codes, the abstracts were analyzed by using these steps:

1. Identifying total number of words and sentences for each journal. The total number did not include key words and title because those were not part of discourse pattern of RA abstracts.
2. Identifying the types of each abstract based on American National Standards Institute (2010).
3. Identifying discourse patterns in each abstract based on Pho's theory (2013). This analyses was done by using *top-down* approach in which it is done by these two steps: first, identifying discourse pattern, and second, identifying linguistic characteristics. In addition, the analyses of each move was done in clause. In order to make the process of analyses easier, each move was given a code: M1 for first move, M2 for second move, M3 for third move, M4 for forth move, M5 for fifth move.
4. Identifying obligatory move, prototypical move, and optional move based on Hardjanto's theory (2017:76). This analyses used percentage formula.

   Percentage formula:

   $$\frac{\text{Total occurrence of each move}}{\text{Total data}} \times 100$$

5. Identifying distribution of discourse patterns by using percentage formula.
6. Identifying linguistic characteristics in each move, including lexical marker and grammatical marker. Analyzing grammatical marker was done per 1.000 words by using normalization formula.

   $$\frac{\text{Total finite verbs}}{\text{Total words}} \times 1.000$$

Findings and Discussion

According to American National Standards Institute (2010), all data can be categorized as informative abstracts. "Informative abstracts are generally used for documents pertaining to experimental investigations, inquiries, or surveys. These abstracts state the purpose, methodology, results, and conclusions presented in the original document" (ANSI:2010). Furthermore, table 1 below shows total words and total sentences.

Table 1.
Total words and sentences in the corpus

Journals	Total Words	Total Sentences
Applied Linguistics	2.557	113
Journal of English for Academic Purposes	2.644	102
	Total = 5.201	215
	Mean = 173	7

Based on table 1, the data consist of 5.201 words and 215 sentences. It means that each abstract consists of 173 words and 7 sentences. The result is in line with abstract guidelines of those two journals and abstract guidelines of ANSI (2010). Generally, those abstract guideline states that the maximum length of the abstract is 250 words.

On the other hand, based on the five-move model proposed by Pho (2013), the data were analyzed for the discourse patterns and the linguistic characteristics. Table 2 summarizes the results for the discourse patterns.

Table 2.
Frequency of discourse patterns in the corpus

1-2-3-4-5 (%)	1-2-3-4 (%)	2-3-4-5 (%)	2-3-4 (%)	Others (%)
17	17	33,3	10	23,3

Table 2 shows that the highest frequency of the discourse patterns of the abstracts are five-move model and four-move model, especially 2-3-4-5 pattern (33%). This pattern consists of presenting the research, describing methodology, summarizing the findings, and discussing the research. The examples of the data that have four moves and five moves are presented below.

---

(1) A Phrase-Frame List for Social Science Research Article Introductions (PJ30-EAP2018)
This study aimed to contribute to recent corpus-based efforts in compiling lists of academic expressions by deriving a pedagogically useful list of phrase-frames for a specific part-genre, i.e. research article introductions, in six social science disciplines. (M2) A combination of corpus statistics was used to extract an initial set of phrase-frame candidates with adequate frequency, variant diversity, and range across disciplines. These candidates were then manually filtered in several steps to ensure their semantic completeness and pedagogical value. The resulting 370 five-word phrase-frames and 84 six-word phrase-frames were analyzed structurally and functionally. (M3) Evaluation of a random sample of 100 phrase frames by a panel of academic writing instructors and student writers indicated that the overwhelming majority of the phrase-frames were considered pedagogically useful by either the instructors or the student writers, or both. (M4) The implications of the current study for academic formulaic language research and of the phrase-frame list compiled for academic writing pedagogy are considered. (M5)

---

(2) Task-based needs analysis of L2 pragmatics in an EAP context (PJ26-EAP2018)
Various EAP language use situations require pragmatic competence, such as making a recommendation letter request to a professor or composing e-mails for different purposes. These situations reflect real-life contexts emphasizing what students are able to do with the language, which speaks to the essence of task-based pragmatic instruction. However, research on a task-based approach to EAP pragmatic needs and how stakeholders' needs can inform pragmatic instruction is still limited. (M1) Thus, this study investigates various stakeholders' perceptions of task-based pragmatic needs in an EAP context. (M2) The needs analysis conducted for this study involved interviews with administrators, instructors, and students and a questionnaire administered to 180 students. (M3) In general, relatively strong pragmatic needs were revealed along with different patterns of needs across the stakeholder groups, students' proficiency levels, and academic status. The majority of students expressed needs in communicating with a professor and culture-specific written genres. Low-level students expressed stronger pragmatic learning needs and high-level students expressed noticeable interests in understanding a professor's cultural jokes and implied meaning. Triangulating various stakeholders' opinions enabled gaining multiple perspectives on the task-based pragmatic needs in an EAP context. (M4) The findings are further discussed in terms of how they inform the development of meaningful EAP pragmatic tasks. (M5)

The results of the most common discourse patterns of the data are in line with some studies. For example, Pho (2013) and Can, Karabacak, and Qin (2016) stated that English abstracts of applied linguistics RA were dominated by four or five moves. However, the frequency shows that English native speakers tend to write or present the abstracts of applied linguistics in English without providing introduction of topic or M1 (situating the research). In addition, it is supported by the frequency of occurrence of each move.

Based on the frequency, M1 was used in only 43,3% of the data, thus, M1 could be considered as optional move. Another hand, M2 and M4 could be

DISCOURSE PATTERNS OF APPLIED LINGUISTICS RESEARCH ARTICLE ABSTRACTS IN ENGLISH
Kamalatul Hafidzoh, Tofan Dwi Hardjanto

358

considered as obligatory moves as both were found in all data. Another obligatory move was M3 because it was used in almost all data (97%). Move 5 was found in only 70% of the data so it could be considered as prototypical move. The results suggest that English native speakers prefer to provide discussion of the research than background information of the research. It means that they assume M5 is more important than M1. In order to know each move in detail, the examples below illustrate the use of each move in the corpus.

1. Situating the research (M1)

The first move of the abstract proposed by Pho (2013) is "situating the research" move. This move provides background information of the research. It can contain definition of topic, the latest issue of topic, or previous studies related to topic. Generally, this move has a function to show to the readers that there is still a gap in the topic. For example:

> (3) Personal Statements are considered as an academic promotional genre that students will usually have to compose as part of their application for graduate study. Yet, relatively little research has explored this type of text across institutional contexts. (PJ16-EAP2016)
> (4) Knowledge of core academic vocabulary plays a major role in many gate keeping tests for higher education and is critical to successful academic performance. While researchers have described the linguistic characteristics of academic language use from a variety of perspectives, including the use of academic vocabulary, many of the investigations focus on the texts that students are exposed to or discuss how to teach those words. Yet, relatively few studies explore how students actually use these words in their scholarly papers. (PJ24-EAP2018)

The first example of this move (3) contains two points. First, it provides description of the topic. After describing the topic, it shows a gap of the topic. The move from first point into second point is marked by a word "yet". The second example (4) contains three points: describing the important things of the topic, describing previous studies, and showing a gap of the topic. Similar with the first example (3), in this example, showing a gap of the topic is also marked by a word "yet". It can be concluded that the authors tend to provide gap of the topic in M1 in order to show to the readers that the research is important. Furthermore, it can be concluded that a word "yet" or other negative words, such as however, although, few, etc, can be categorized as lexical markers of M1.

2. Presenting the research (M2)

This move can be identified by a question "what is the study about?". In general, this move contains the purpose of the study. For example:

> (5) This longitudinal study examined the contribution of morphological awareness to English as a Second Language (ESL) reading comprehension. (PJ06-AL2017)

The example above is one of "presenting the research" move. This move was found in all data so it is categorized as obligatory move. Since this move provides the purpose of the research, the main marker is lexical marker. In general, this move is marked by words related to purpose, such as examine, investigate, aim, etc. It is also marked by noun related to the research, such as the present study and the study.

3. Describing methodology (M3)

Clearly, this move consists of the information about methodology of the research. For example, data sources, methods of collecting data, and methods of analyzing data. Similar with the previous move, it was also found in all data in the corpus, for example:

> (6) A total of 822 papers collected within the past 5 years were analyzed for imperative use, with particular emphasis placed on the main text of papers from the five disciplines with the highest proportion of imperatives. In each of these disciplines, text-based interviews were conducted with faculty members to establish disciplinary contexts. (PJ01-AL2016)

The example above shows M3 in which it contains information related to methodology. In detail, it explains data sources or corpus of the research, methods of data collection, and methods of data analysis. However, the explanation of methods of data analysis is not really clear and detail because the limitation of the length of the abstract. Since this move explains the procedures in which is it past events, this move is generally marked by past tense.

4. Summarizing the findings (M4)

This move can be identified by a question "what did the researcher find?" so it functions to give summary of the findings. In the corpus, it was found in all data. For example:

> (7) Results showed significant relationships between academic vocabulary use and essay scores in some text-types, and differences in the way academic vocabulary is used across text-types and levels of instruction, independent of the drafts. A closer analysis showed that rhetorical purposes have a strong impact on the amount of

academic vocabulary used. (PJ24-EAP2018)

Example (7) is one of the examples of M4 found in the corpus. As this move has a main function to explain the summary of the findings, it is generally marked by lexical markers, including noun, such as results and findings, and verb, such as show, reveal, and indicate.

5. Discussing the research (M5)

In order to identify this move, the researchers can ask to themselves "what do the results mean?" or "so what?". By asking those questions, this move contains answers related to interpretation of the results, recommendation for the readers, and implications or applications of the study. Based on the frequency that have been explained above, this move was assumed as one of the important moves in the corpus although it is not the obligatory move. The example of this move is presented below.

(8) The implications of the current study for academic formulaic language research and of the phrase-frame list compiled for academic writing pedagogy are considered. (PJ30-AL2018)

Example (8) is one of the examples of M5 found in the corpus. Furthermore, the example shows implication of the research. It can be seen through the lexical marker, a word "implication". However, M5 in the corpus consists of two types:

explicit research discussion and implicit research discussion. It is called as explicit because the components of this move are discussed explicitly in the abstract. On the other hand, it is called as implicit research discussion because the discussion is explained implicitly. It means that in the abstract, the authors only mention some points or components that will be discussed, whereas the detail discussion are presented in research article, specifically in "results and discussion" part.

In short, five moves of abstracts can be identified by linguistic characteristics, especially lexical markers and grammatical markers. However, in some cases, there is a move that does not have a clear marker, this kind of move can be identified by topic of move. For example, a move that contains information about procedures can be categorized as M3 although the move does not state clearly a word "procedure" or "methods".

On the other hand, the five moves of abstract have a tendency of the use of tenses and voice. Based on the analysis, the results show that M1, M2, and M5 tended to use present tense in active voice (44,67). M3 tended to use past tense in passive voice, whereas M4 tended to use past tense in active voice. Past passive tense is used in M3 because the main function of this move is to describe past events and procedures. Table 3 summarizes the frequency of tenses and voice per 1.000 words.

Table 3.
The frequency of tenses and voice per 1.000 words

Finite Verbs	M1	M2	M3	M4	M5
Active					
Present	44,67	41,35	8,75	25,62	49,93
Past	0	9,54	15,11	33,96	1,34
Present perfect	10,30	1,06	0	0	2,69
Present progressive	0	0	0	0,59	0
Future tense	1,71	0	0	0	0
Total	56,68	51,95	23,86	60,17	53,96
Finite Verbs	M1	M2	M3	M4	M5
Passive					
Present	20,61	5,30	4,77	3,57	9,44
Past	0	1,06	31,82	10,13	0
Present perfect	0	0	0	0	0
Present progressive	0	0	0	0	0
Future tense	0	0	0	0	1,34
Total	20,61	6,36	36,59	13,7	10,78

Conclusion

The investigation of disccourse pattern of applied linguistics research article abstracts in English written by English native speakers are divided into several sections which are called moves. Each move has communicative purposes. Additionally, each move contains linguistic characteristics, which function as markers. Furthermore, Several moves are considered as

very important moves or obligatory moves in the corpus, namely M2, M3, and M5. However, based on the findings and discussions, those English native speakers who become the authors of applied linguistics research article abstracts assume that M5 is more important than M1 as they prefer to discuss the research in the end of the abstract than giving background information of the abstract. Based on the findings of the use of tenses and voice, overall, the abstracts are

DISCOURSE PATTERNS OF APPLIED LINGUISTICS RESEARCH ARTICLE ABSTRACTS IN ENGLISH
Kamalatul Hafidzoh, Tofan Dwi Hardjanto

360

dominated by present tense and active voice, therefore, it supports Hardjanto' study (1997) and Hanidar's study (2016).

References

ANSI/NISO Z39.14. (2010). *Guidelines For Abstracts.* The National Strandards Organization: USA.

Bhatia, V.K. (1993). *Analysing Genre: Language Use in Professional Settings.* New York: Longman.

Cleveland, D. B. (1983). *Introduction to Indexing and Abstracting.* UK: Libraries Unlimited Inc.

Can, S., Karabacak, E., & Qin, J. (2016). Structure of moves in research article abstracts in applied linguistics. *Publications, 4*(23), 1-16.

Doro, K. (2013). The rhetoric structure of research article abstracts in English studies journals. *Prague Journal of English Studies, 2*(1), 119-139.

Farnia, M., & Barati, S. (2017). Writing introduction sections of research articles in applied linguistics, cross-linguistic study of native and non-native writers. *Indonesian Journal of Applied Linguistics, 7*(2), 486-494.

Hardjanto, T.D. (1997). Struktur wacana intisari artikel penelitian dalam jurnal ilmiah berbahasa Inggris. *Humaniora* V, 114-24.

Hardjanto, T.D. (2017). Common discourse patterns of cross-disclipinary research article abstracts in English. *Humaniora, 29*(1), 72-84.

Hanidar, S. (2016). Rethorical patterns, verb tense, and voice in cross disciplinary research article abstract. *Humaniora 28*(1), 12-27.

Hartley, J., & Cabanac, G. (2017). Thirteen ways to write an abstract. *Publications, 5*(11), 1-7.

Houghton, B. (1975). *Scientific periodicals: Their historical development, characters and controls*. Hamden, CT: Shoe String Press.

Hyland, K. (2000). Disciplinary Discourses. Social Interaction in Academic Writing. London: Longman.

McGirr, C. J. (1973). Guidelines for abstracting. *Tech. Commun., 25*(2), 2-5.

Loi, C.K. (2010). Research article introductions in Chinese and English: a comparative genre-based study. *Journal of English for Academic Purposes 9.* 267-279.

Pho, P.D. (2013). *Authorial Stance In Research Articles Examples from Applied Linguistics and Educational Technology*. UK: Palgrave Macmillan.

Samraj, B. (2005). An exploration of a genre set: research article abstracts and introductions in two disciplines. *English for Specific Purposes 24,* 141-156.

Swales, J.M. (1990). *Genre Analysis: English in Academic and Research Settings.* Cambridge: Cambridge University Press.

Swales, J.M. (1981). *Aspects of Article Introductions.* Aston ESP Research Report No. 1. Birmingham, UK: The University of Aston Language Studies Unit.

Swales, J.M., & Feak, C.B. (2000). *English in Today's Research World.* United States: University of Michigan.

UM Press. (2017). *Pedoman Penulisan Karya Ilmiah Tugas Akhir, Skripsi, Tesis, Disertasi, Artikel, Makalah, dan Laporan Penelitian.* Malang: Universitas Negeri Malang.