TÌM HIỂU BỐ CỤC TÓM TẮT CỦA CÁC NGHIÊN CỨU KHOA HỌC TRONG LĨNH VỰC NGÔN NGỮ HỌC ỨNG DỤNG

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Tóm tắt là phần đầu tiên của bài báo khoa học nhằm trình bày những nội dung chính của bài báo cũng như thu hút sự chú ý của người đọc. Nghiên cứu này phân tích bố cục của 30 tóm tắt trong các bài báo gần đây của tạp chí Ngôn ngữ học ứng dụng quốc tế dựa trên khung phân tích của Hyland (2004). Kết quả phân tích chỉ ra rằng Mục đích, Phương pháp nghiên cứu và Kết quả nghiên cứu là các phần phổ biến nhất. Ngoài ra, mặc dù được lấy từ cùng một tạp chí, nhưng các tóm tắt có sự khác biệt về bố cục. Nghiên cứu này cung cấp thêm thông tin cho giáo viên tiếng Anh về bố cục của một bài tóm tắt để giáo viên có thể hỗ trợ học viên viết bài báo khoa học tốt hơn.

Từ khoá: *tóm tắt, bố cục, bài báo khoa học.*

The abstract is the first part of a research paper which not only serves the purpose of briefing the significant results of the study, but also plays a role as the reader-catcher of the whole work. This study analyses the rhetorical move structures in 30 abstracts published in the International Applied Linguistics journal on the basis of Hyland's abstract move framework (2004). The findings show that Purpose, Method and Product are the most common moves. Additionally, despite being collected from the same journal, the structure of the moves varies in the corpus. Important insights about the features of rhetorical move structure in abstracts are also provided in order for teachers to help their learners improve their academic research papers.

Keywords: *abstract, rhetorical move, academic research paper.*

EXAMINING ABSTRACTS' RHETORICAL MOVE STRUCTURES IN APPLIED LINGUISTICS RESEARCH ARTICLES

INTRODUCTION

When searching for a research article which is of readers' needs and interests, an abstract tends to be the very first part that they find. Abstract is an independent discourse, a summary of the content and structure of the article or a representative of the whole text (Van Dijk, 1980, and

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Bazerman, 1984b, as cited in Hyland, 2004). In addition to these original functions, recent research has also discussed the commercial function of abstracts. According to Hyland (2004), the purpose of an abstract is to persuade people to read the article. Similarly, Pho (2008) stated that an abstract promotes the sale of an article and help readers save time when choosing what to read further. Previously, abstracts could mostly be found in English published articles only

(Swales, 1990). However, as being cited in Pho (2008), it is unlikely to find any journals that publish articles without abstracts nowadays (Martin-Martin, 2002) and even in the non-English journals, English written abstracts are also required (Lores, 2004; Ventola, 1994). Recognizing the importance of abstracts in research writing and publishing, Tankó (2017) stated that several cross-discipline and cross-culture research has focused on this feature of academic articles.

Rhetorical move structure of an abstract is a popular research topic discussed in numerous studies such as Hyland (2004), Pho (2008), Tseng (2011), Can et al. (2016) and Tankó (2017). To be more specific, Hyland (2004) proposed a five-category move structure which was used to analyse abstracts in both hard disciplines and soft disciplines. Additionally, Pho (2008) studied the metadiscourse features in abstracts which can be used to identify moves. However, as languages keep evolving and changing, further research on this topic should be conducted to update and report on any changes. Consequently, the main aim of this study is to investigate and insightfully discuss the rhetorical move structure of recent published research in Applied Linguistics discipline by addressing the following three questions:

• What are the frequency and size of moves in Applied Linguistics abstracts?

• How are moves organised in Applied Linguistics abstracts?

• What are the move embeddings found in the corpus?

LITERATURE REVIEW

Move, according to Swales (2004), as cited in Polio and Friedman (2017, p.131), is a "discoursal or rhetorical unit that performs a coherent communicative function in a written or spoken discourse". Introduced by Swales (1990), Create a Research Space (CARS) model, also known as Swalesian Genre Analysis, is one of the most popular models of identifying moves. In order to develop the CARS model, Swales altered his previous four-move model for article introduction proposed in 1981 consisting of (1) Establishing the field, (2) Summarizing previous research, (3) Preparing for present research, (4) Introducing present research and introduced a three-move model including (1) Establishing a territory, (2) Establishing a niche and (3) Occupying the niche (Swales, 1990). In spite of not building a move model for abstract in that book, Swales mentioned the lack of research on the move structure of abstracts and suggested further research on these features.

Since Swales' studies, the features of abstracts have gained more attention from linguistic researchers. Several studies have focused on the move structure of abstracts using the move analysis approach proposed by Swales (1990). Can et al. (2016) summarised four main aspects of moves studied by researchers so far namely range, amount, organisation and linguistic features. To be more

specific, the study of range focused on the necessity of moves. High occurrence of a specific move in the analysed section would make it conventional, or else, moves would be marked optional if it was less likely to occur. Next, studies on amount of moves in sections discovered the length or the proportion of move. For example, the abstracts written by Applied Linguistics students usually had a longer Introduction move comparing with other ones while Results move accounted for the highest percentage in those of research published papers. Organisation is another popular studied aspect of moves. Studies on organisation answered the question of how the categorised moves were organised and sequenced in the sections. It is believed by many researchers that studying organisation of moves may have several implications in material development for teaching. As for the final

features, the linguistics feature investigated the lexical and grammatical patterns of moves. Tense uses, for example, can be used to signalise a specific move in the section.

In terms of move structure and classification specially designed for abstracts, Hyland (2004) introduced a cross-discipline corpus-based study of 800 abstracts from ten different journals. Eight disciplines were involved in this research namely Philosophy, Social Science, Applied Linguistics, Marketing, Mechanical Engineering, Electronic Engineering, Physics and Biology. Text analysis and interview methods were used to examine the rhetorical moves of each studied discipline's research article. Findings revealed a five-category moves structure in the article abstracts as presented in Table 1 below.

Table 1. *A classification of rhetorical moves in article abstracts (Hyland, 2004, p.69)*

Move	Function
Introduction (I)	Establishes context of the paper and motivates the research or discussion.
Purpose (P)	Indicates purpose, thesis or hypothesis, outlines the intention behind the paper.
Method (M)	Provides information on design, procedures, assumptions, approach, data, etc.
Product (Pr)	States main finding or results, the argument, or what was accomplished
Conclusion (C)	Interprets or extends results beyond scope of paper, draws inferences, points to applications or wider implications.

In addition to examining the rhetorical move structure, Hyland (2004) also compared the occurrence of move sequences in cross-disciplined abstracts. It was found that the Purpose (P)-Method (M) - Product (P) sequence pattern was popular among Physics and Engineering disciplines while the model of

Introduction (I)-Purpose (P) – and Product (Pr) sequence was more preferable among Humanities and Social Science researchers. The finding suggested that writers of the soft disciplines tended to attach importance to the rationale for the studies while Method seemed to be the focus of the counterpart. Interestingly, by comparing the abstracts written in 1980 and 1997, it was also discovered the factors of promotion and membership in abstracts written in the latter year were not included in the former one (Hyland, 2004). However, previous studies did not clearly explain about which instruments or linguistics features were used to signal the moves. Therefore, Pho (2008), along with investigating the move structures of abstracts, identified the metadiscourse features signalling the moves. Based on the functions and content of the abstracts, 30 article abstracts from three high quality journals in the fields of Applied Linguistics and Educational Technology published between 2005 and 2006 were analysed using framework adopted in Santos (1996). This framework includes five moves namely (1) Situating the research, (2) Present the research, (3) Describing the methodology, (4) Summarizing the findings and (5) Discussing the research. Comparing the descriptions of each move in this framework, it can be observed that Santo's (1996) framework, shares some similarities to that of Hyland (2004). Santos's (1996) Move 4 – Summarising the findings, for example, is actually quite similar to Product move of Hyland's (2004) framework. However, Santos's framework added some questions to facilitate the identification of the moves, which was not the case in Hyland's. Details of this framework are presented in Table 2 below:

Table 2. *A framework for abstract analysis by Santos (1996),*
as cited in Pho (2008, p. 235)

Moves	Function/description	Question asked
Move 1: Situating the research <STR>	Setting the scene for the current research (topic generalization)	What has been known about the field/topic of research?
Move 2: Presenting the research <PTR>	Stating the purpose of the study, research questions and/or hypotheses	What is the study about?
Move 3: Describing the methodology <DTM>	Describing the materials, subjects, variables, procedures,...	How was the research done?
Move 4: Summarizing the findings <STF>	Reporting the main findings of the study	What did the researcher find?
Move 5: Discussing the research <DTR>	Interpreting the results findings and/or giving recommendations, implications/ applications of the study	What do the results mean? So what?

Pho's (2008) findings showed that across all the three journals' examined abstracts, Move 2 - Presenting the research, Move 3 - Describing the Methodology and Move 4 - Summarizing the findings were the most common. The findings, interestingly, were different from Hyland's (2004) three most frequently used moves of Introduction – Purpose - Product. To explain her results, Pho (2008) stated that since the data was collected from the empirical research, Describing the Methodology move would be preferable in this study.

Moreover, some similarities can be found between the findings in Pho's (2008) and Can et al.'s (2016) studies. In Can et al.'s (2016) research, 50 articles from the English for Specific Purposes (ESP) journals published from 2011 to 2013 were examined using Santos's (1996) framework. As indicated previously by Pho (2008), writers of empirical research tended to include the Describing method move in their abstract. Consequently, what can be assumed in Can et al's (2016) study is that the analysed articles in Can et al. (2016) would also be extracted from the empirical research since there was a high frequency of Describing the Methodology move in the studied corpus which took up for the largest proportion in the abstract. It was emphasised by the authors that with the purpose of triggering the curiosity of readers, writers might have probably avoided mentioning the detailed findings in abstracts. This feature of the recent research is apparently to serve the purpose

of promoting the consumption of the published articles as mentioned in the Introduction section.

In addition to the investigation into the move structure of abstracts, Pho (2008) observed the linguistic realisations of each move. In Move 1 - Situating the research, for example, in order to lead the audience to the study, authors tended to cite a relevant or popular research in the field. Another example is Move 2 - Presenting the research in which present simple and past simple tenses were the most frequently used. Similarly, Tseng (2011) also studied the verb tenses in each move of 90 research articles adopted from four Applied Linguistics journals. It was discovered that past tense frequently used in Method and Result moves while present tense was more preferred in the other moves. Tseng (2011) also highlighted the finding of present perfect tense in Background move in over half of the analysed abstracts. The identified linguistic realisations may probably help identify the moves easier.

Move embedding is another aspect of moves which has been discussed in previous studies. According to Pho (2008), Can et al. (2016), Tankó (2017), many embedded moves could be found in a single sentence or phrase which served different rhetorical functions of the section. Tankó (2017) examined the abstract section from 135 research papers of four international journals to study embedded moves, moves frequency and linguistics characteristics. It was concluded in this research that partially

embedded moves which consisted of two moves or even three moves were the most frequent. Among the analysed moves, Topic, Method, and Background tended to be included in most fully embedded moves. Similarly, Pho (2008) noted that Describing the Methodology was the most frequent embedded moves which were usually written with Presenting the research move or Summarising the findings move within one sentence.

METHODOLOGY

Constructing the corpus

The corpus contains 5239 words from 30 abstracts randomly selected from some Applied Linguistics journals' recently empirical research published in Applied Linguistics discipline from 2017 to 2018. Research Published within this period of time was not out-of-date, yet, easy to access. Table 3 below displays the details of the corpus's size.

Table 3. *The size of the corpus*

Number of abstracts	Total number of Words	Total number of sentences	The average length of abstracts in terms of words	The average length of abstracts in term of sentences
30	5,239	174	174.63	5.93

The average word count in each abstract was approximately 175 words and the number of sentences in each abstract ranged from three to nine. According to Can et al. (2016), the ESP journals' requirement for abstract size was between 100 and 200 words, which means only one abstract did not meet this requirement (93 words). Therefore, it was excluded from the later moves analysis.

Analysing 30 abstracts' rhetorical move structures

Hyland's (2004) framework was adopted to examine the rhetorical move structure of the collected abstracts with five types, namely (1) Introduction, (2) Purpose, (3) Methodology, (4) Product and (5) Conclusion. Although some other research by Pho (2008), Tseng (2011), Can et al. (2016) adapted Santo's (1996) model, the researchers of the current study decided to use Hyland's (2004) version

for two main reasons. Firstly, Hyland's (2004) framework was more updated and more concise. Secondly, he presented a short abbreviation for each move such as (I) for Introduction which has eased the data coding and presenting process. Secondly, as discussed in literature review, in fact, there are not many significant differences two frameworks. Consequently, Hyland's (2004) framework was adopted in this study.

To analyse the corpus, both bottom-up and top-down approach were used in which the former approach identified moves by linguistics signals while the latter one based on the content of the text (Pho, 2008). All the abstracts' moves were differently colour coded. According to Hyland (2004), using colour pens to highlight moves was an effective method if there were not many coders and technology was not used. Different moves

were marked and counted based on the coding colours. Regarding the adoption of the bottom-up approach to investigating the moves, the text was scanned for the linguistics signals in different parts such as conclusion, method, purposes, implications, suggestions, and results. With the top-down approach, each abstract was examined in detail for at least three times to understand the meaning of each sentence or phrase. Both phrases and sentences were under examination as previous research showed that they all presented moves (Pho, 2008). After that, Microsoft Office Word software was used to count the words of each abstract and moves, and then, the researchers manually counted the sentences. Next, all the data was transferred to the Microsoft Office Excel to process the calculation of numbers and percentages. Finally, frequencies between moves were compared to discover the common patterns of moves in this corpus.

The three research questions previously stated were answered using the following methods. Based on the data collected through Office Excel calculating process, the researchers aimed to examine the frequency and the size of each move in the corpus in order to answer Research Question 1 (write Question 1 here). Next, by recording the move sequences of colour-coded moves three times to reduce any possibilities of miscoding and then had them counted manually, the organisation of moves, as mentioned in the second question (write Question 2 here), was discovered. Finally, the examination of move embeddings was manually conducted to answer Research Question 3 (write Question 3 here). The findings and discussions surrounding them are presented in the next section.

FINDINGS AND DISCUSSION

Move frequencies and sizes

Table 4. *Type counts and sizes of the abstract moves*

Moves	Moves Count	Percentages	Words	Percentages
Introduction	16	53.33%	721	13.74%
Purpose	28	93.33%	1,144	21.82%
Method	28	93.33%	1,344	25.63%
Product	24	80%	1,519	28.97%
Conclusion	20	66.67%	517	9.85%

Table 4 presents the frequencies of the moves in the analysed abstracts. According to Hyland (2004), the type count was the number of texts which was counted in any occurrence of a move. As shown in Table 4, Purpose and Method moves had the highest frequency in this corpus. They were both written in 28 abstracts, having a massive occurrence, accounting for approximately 94% of the types coded. Ranked in the third place was Product move with 24 occurrences, taking up 80%. Next came the Conclusion move at nearly 67%. Introduction was at the bottom

of the list which only appeared in 16 abstracts, accounting for a half of the data.

However, when considering the sizes of these moves in the corpus, the ranking totally changes. The data showed that the Product move took up the largest size in the corpus, accounting for nearly 29%, followed by the Method move at over a fourth of the total words used. The Purpose and Introduction moves ranked the third and fourth place, accounting for around 22% and 14% respectively. The Conclusion move had the smallest size in the corpus which was nearly three times smaller than the Product move, approximately 10% of the word sum.

Overall, the analysed data indicates that some moves have higher frequency of occurrence than the others. Yet, it may not mean that these moves were written more thoroughly than the others. Surprisingly, in the previous research such as Pho (2008) or Hyland (2004), the researchers only focused on the move counts or token counts of the moves and neglected the sizes of the moves though examining the

sizes of moves may reveal the writers' aims and focus when writing abstract. This study found out that Purpose, Method and Product accounted for the largest proportion in the corpus in terms of both sizes and frequencies. This finding was in line with that in, Pho (2008), Tseng (2011), Tankó (2017) and Can et al (2016). Though the ranking of the three moves Purpose, Method and Product in those studies slightly differed from this one, in general, they still took up a huge percentage of the occurrence. The high frequency discussed above can be explained by the fact that all abstracts of this corpus were extracted from empirical research. On the other hand, Hyland (2004) observed that the most frequent move sequences in abstracts of Applied Linguistics research varied quite equally within different patterns. It means writers of the analysed articles might use the Purpose, Method and Product move to persuade readers read their papers.

Move Sequences

Table 5 *Frequencies of move sequences*

Move Sequence	Frequencies	Percentages	Move Sequence	Frequencies	Percentages
I-P-M-Pr-C	8	26.67%	P-M-P-M	1	3.33%
I-P-M-Pr	3	10%	P-M-Pr	3	10%
I-P-M	1	3.33%	P-M-Pr-C	6	20%
I-M-Pr-C	2	6.67%	P-M-C	1	3.33%
I-P-Pr	1	3.33%	P-M-P	1	3.33%
I-P-C	1	3.33%	M-P-C	1	3.33%
			M-P-Pr-C	1	3.33%
Introduction: I	**Purpose: P**	**Methodology: M**			
Product: Pr	**Conclusion: C**				

Table 5 provides information about move sequences and their occurrences in the corpus. As can be seen from the table, there were 13 move sequences in 30 abstracts analysed. Among 13 sequences, Introduction-Purpose-Method-Product-Conclusion was the most popular sequence, accounting for more than a quarter of the corpus. This means a huge percentage of around 73% of the corpus lacks at least one move proposed by Hyland (2004). Next came the Purpose-Method-Product-Conclusion move sequence which appeared in six abstracts, taking up a fifth of the corpus. The Introduction-Purpose-Method-Production and the Purpose-Method-Product move sequence both occurred three times in the corpus, accounting for 10%. This was followed by the Introduction-Method-Product-Conclusion move sequence which was used twice while other sequences only appeared once in the whole corpus.

Interestingly, there were also some strange move sequences which were not similar to the one proposed by Hyland (2004) such as the move sequence (1) Purpose-Method-Product

(1) <P> This article investigated Chinese EFL learners' use of evaluation and stance… <M> The data was drawn from the Chinese Longitudinal Learner Corpus (CLLC)… <Pr> In addition to the Chinese EFL learner's reliance on such deontic, contracting metaphors, this paper explored their preference for subjective realisations.

Even when the abstracts were chosen from the same journal, their move structures were quite different from each other. There are two possible explanations for this. Firstly, the move sequence would be affected by the writing styles and preference of the writers. They may choose their favourite parts in the research to introduce in the abstracts. Secondly, due to the commercial purposes of the research articles, it is possible that writers may want to write differently to prove that their research are interesting and worth reading. This purpose has been emphasised previously in Hyland (2004) due to the competitiveness of the recent researching environment.

Move embeddings

Normally, the moves in the corpus should be represented in the form of a sentence or a group of sentences. However, phrases which shared similar features with the moves were also identified as moves. In this corpus, seven move embedding cases of this type were discovered. Some examples for this may be listed as below.

(1) <M> This study investigated the lexical coverage and frequency of occurrence of 318 common science-specific technical word families in a corpus of science fiction-fantasy texts <P> in order to determine the potential for …

(2) <M> Based on a genre-based analytical framework and pertinent data elicited from specialist informants, <Pr> this paper reveals how language instructors…

(3) <P> This study explores how authorial identity is represented <M> through first person pronouns in 130 Sociology research articles (RAs)….

As being observed from these examples, the embedded move seemed to appear in a sentence which included the content of research methodology and purposes or stating the method first and then presenting the products. Similarly, Pho (2008), Tankó (2017) reckoned that the Method move was more likely to attach with another move. Pho (2008) explained that this was the compact nature of abstract and this move may play a role as a constituent element for the Purpose and Product move.

CONCLUSION

This study examined the rhetorical move structures of 30 abstracts randomly selected from recent Applied Linguistics journals' articles. Using the framework developed by Hyland (2004) for data analysis, the current research discovered that Purpose, Method and Product were the most common moves in the corpus. Moreover, there were significant differences in the distribution of moves in these abstracts which may be resulted from the writers' own writing preferences or the commercial purposes of the articles. The embedded move was also analysed and it appeared to be a natural feature of move. As for the implication of these findings, the study can be introduced in the academic writing teaching and learning materials to provide information about the move structure of the research abstracts in Applied Linguistics. Analysing academic register may help students understand the membership and the readership as discourse not only implies a sense of social belonging, but also aims at gaining rhetorical goals

(Swales, 1990). However, this research has limitation of small size. If the research had been conducted in a bigger corpus, the study might have drawn a more detailed picture of rhetorical move structures in the recently published Applied Linguistics research. Future research can investigate the reasons for the differences in the move sequences of the articles from the same journal.

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