

A Genre Analysis of English and Korean Research Paper Abstracts in Electronic Resource Management in Library and Information Science

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Abstract

This study aims to answer how the journal article abstract currently represents the main text of the journal article and what role the abstract plays. It also attempts to clarify how the structure of abstracts in Korean and English is different in the same academic area. In order to address this issue systematically, this study examines the textual organization of selected journal article abstracts in library and information science. Specifically, it focuses on the investigation of rhetorical structures and linguistic realizations based on the theoretical framework of “move analysis” as originally proposed by Swales (1990) and Hyland (2000). The results of this study clearly point out that there are differences in the frequency of the occurrence and distribution of five structural moves (introduction-purpose-method-results-conclusion). An abstract in English predominantly uses the introduction move, resulting in the preferred structure of “introduction-purpose-method,” while in Korean there is a predilection toward the results move means a likely “introduction-purpose-method-results” structure. Furthermore, whereas most journal articles allocate a small portion to the method part in the abstract, this research found that English language abstracts in library and information science allocate the longest portion to the method move part, which consists of 46 words on average. In contrast, in Korean language abstracts, the results move is the longest move, with an average of 40 words.

Key words: Genre Analysis, Journal Abstract, Move Analysis

บทคัดย่อ

จุดประสงค์ของการวิจัยในครั้งนี้คือการหาคำตอบที่ว่า ทฤษฎีของงานเขียนเชิงวารสารในปัจจุบันมีบทบาทและความสำคัญอย่างไรกับใจความหลัก รวมถึงความพยายามในการทำความเข้าใจความแตกต่างระหว่างโครงสร้างของบทคัดย่อหรือทฤษฎีงานวิจัย ที่เขียนด้วยภาษาอังกฤษและภาษาเกาหลีในขอบข่ายวิชาการเดียวกัน และเพื่อเป็นการหาคำตอบอย่างเป็นระบบงานวิจัยครั้งนี้จึงเลือกพิจารณาตัวอย่างองค์ประกอบการเขียนบทคัดย่อ ในบทความวารสารด้านบรรณารักษศาสตร์และสารนิเทศศาสตร์จำนวนหนึ่งซึ่งจะมุ่งเน้นการ

ตรวจสอบโครงสร้างเชิงสำนวนและความเข้าใจด้านภาษา โดยอ้างอิงจากงานวิจัยของ Swales (1990) และ Hyland (2000)

เรื่องการวิเคราะห์กระบวนการทางภาษาศาสตร์ หรือ “move analysis” โดยการวิจัยนี้พบว่า มีความแตกต่างอย่างชัดเจนของกระบวนการทั้ง 5 แบบในโครงสร้างระหว่าง 2 ภาษา (กล่าวคือ บทนำ จุดประสงค์ แนวทาง ผลลัพธ์ และข้อสรุป) ซึ่งเป็นที่ชัดเจนว่า ในการเขียนบทคัดย่อด้วยภาษาอังกฤษส่วนใหญ่จะเป็นเชิงกระบวนการกล่าวนำซึ่งจะส่งผลทำให้เกิดโครงสร้างแบบ “บทนำ-จุดประสงค์-แนวทาง” ในขณะที่บทคัดย่อที่เป็นภาษาไทยจะมีแนวโน้มเป็นแบบเน้นผลลัพธ์ ซึ่งก่อให้เกิดโครงสร้างแบบ “บทนำ-จุดประสงค์-แนวทาง-ผลลัพธ์” การวิจัยนี้ยังพบอีกว่าทุกความเชิงวารสารส่วนมากจะให้ความสำคัญเพียงเล็กน้อยเท่านั้นกับกระบวนการเชิงแนวทางภาษาในบทคัดย่อ แต่บทคัดย่อที่เป็นภาษาอังกฤษโดยเฉพาะด้านบรรณารักษศาสตร์ และสารนิเทศศาสตร์ จะประกอบไปด้วยกระบวนการนี้เป็นส่วนใหญ่ โดยคิดเป็นจำนวน 46 คำโดยประมาณ จากบทคัดย่อทั้งหมด ในขณะเดียวกันบทคัดย่อที่เป็นภาษาไทยลึกลับเน้นกระบวนการด้านผลลัพธ์ซึ่งมีความยาวถึง 40 คำโดยประมาณ

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1. Introduction

How do scholars that write journal articles utilize journal article abstracts that represent the entire article? Journal article abstract began to be used in order to help search journal articles. If true, in the current era of full text searching, and in order to discover how the journal article abstract is used and what role it plays, a systematic research on journal article abstracts needs to be performed.

Especially, the area of electronic resource management in library information science illustrates the different structures of abstracts written in Korean and English. From my research, it is found that Korean abstracts have a tendency to put the results of the research first, while English abstracts tend to describe the research methodology in a long and detailed way in order to share the authors' experience. In this sense, it is necessary to conduct research on the differences between the two types of abstracts and how those changes are structurally depicted.

1.1 Scope of the Study

This study examines the textual organization of journal article abstracts in the field of library and information science. Since Gibson's (1993) study in the area of information and library science, the discipline has not been involved in genre analysis. Hence, the present research was conducted in order to investigate the rhetorical structure of research article abstracts in the library management field written in English and

Korean. It focuses on the investigation of rhetorical structures and variations based on the theoretical framework of the move analysis as proposed by Swales (1990) and Hyland (2000). The classification of rhetorical moves in article abstracts was employed as a method for the identification of moves. In particular, the move of introduction in abstracts was also analyzed using the Create A Research Space (CARS) Model which is an attempt to define and clarify the organizational patterns of the introduction that take the role to diffuse the significance of research to readers (Hyland, 2000).

1.2 Research Questions

This study aims to explore two specific research questions:

- 1) What is the rhetorical structure of research article abstracts in electronic resource management in the field of library and information science, written in English and Korean?
- 2) What is the linguistic realization of each move in electronic resource management in the field of library and information science written in English and Korean?

1.3 Definitions of Key Terms

Journal abstract. “A term that signifies an abbreviated, accurate representation of the contents of a document” (The American National Standard Institute, 1979)

Discourse community. “A term that refers to a group of individuals bound by common interests, who communicate through approved channels and whose discourse is regulated” (Porter, 1986)

Discourse analysis. “A term that entails a more cognitive and social perspective on language use and communication exchanges and which includes spoken as well as written discourse” (Celce-Murcia & Olshtain, 2000)

Genre. “A use of language that conforms to certain schematic and textual conventions, as agreed by a particular discourse community” (Widdowson, 2007)

Genre analysis. “A term that refers to a branch of discourse analysis that explores specific uses of language” (Hyland, 2004)

Move. “A word or expression as the logic maneuver adopted by the communicators in written or spoken discourse” (Mirador, 2000)

Schema. “A mental construct of taken-for-granted assumptions about how reality is ordered(ideational schemata) and how communication is managed (interpersonal schemata)” (Widdowson, 2007)

Step. “A word that is a lower text unit than the move, which provides a detailed perspective on the options to the writer in organizing the moves of a text” (Dudley-Evans & St. John, 1998)

2. Literature Review

2.1 The Abstract as a Genre

According to Martín (2003), scientists communicate new knowledge with other members of the academic community through publications. Therefore, the essential knowledge that scholars should have concerns the discourse conventions of scientific writing. This norm is also applicable to the abstract of a research paper. Journal article abstracts have to reflect the discourse conventions in their well-structured abstracts for successful communication with the discourse community to which it belongs.

In addition to being a means of communication, a journal article can also be defined as “a codification of disciplinary knowledge, where writers seek to persuade their communities to accept their claims and certify them as recognized and legitimate knowledge.” Abstracts are regarded to “have both a more modest and more urgent purpose: to persuade readers that the article is worth reading. It is therefore a selective representation rather than an attempt to give the reader exact knowledge of an article’s content” (Hyland, 2000: 64). In sum, a journal article abstract has an important role in providing the information that will lead the reader to read the research article.

The American National Standard Institute’s (1979: 7) definition of a journal abstract is that it “signifies an abbreviated, accurate representation of the contents of a document. Such an abstract does not contain added interpretation or criticism.” Accuracy is the first element of the classical journal article abstract definition. Cross and Oppenheim (2006) undertook a study on whether their abstract samples followed such generally agreed abstracting guidelines of a journal abstract with reference to the following: brevity, exhaustivity, accuracy, density, clarity, and content.

There are different abstracts for other purposes. Most books have abstracts and their characteristics can be divided into three types: critical, indicative and information or journal abstracts (Maizell, Smith & Singer, 1971; Borko & Bernier, 1975; Rowley, 1988; Cleveland & Cleveland, 1990; Lancaster, 1991, as cited in Stein, 1997). Swales (1997) added a fourth type of abstract, a stand-alone abstract such as conference abstracts, which do not accompany the primary text. Stein (1997) argued that indicative abstracts are more regarded as previews than as objective summaries. Stein’s (1997) study also pointed out that the journal abstract provides more details and is more analytical than the indicative abstracts.

Beyond these definitions, from the perspective of linguists, what is an abstract and what kind of research focusing on abstracts has been studied? This question echoes the importance of the way in which abstracts are written and the function of abstracts,

but not the definition of an abstract itself. Bazerman (1984) proposed that the article's abstract enables the article to become an object as a preview step, so that the abstract can make a representation of the whole article. The author explained the mechanism of correlation between the abstract and the article. The growing perception and command of the text, which can be obtained from reading the abstract help to understand the gradual creation of the text.

Meanwhile, Salager-Meyer (1990: 367) has argued that abstracts "represent an elaboration of the title and a crystallization of the whole article." The author also suggested that the functions of abstracts serve as a time saving device, in the pre-reading phase. First, abstracts arouse readers' interest in the topic, and consequently indicate whether the text has merit. Second, abstracts provide key words and key concepts. Third, abstracts present the macropropositions of the article. Fourth, abstracts help the reader understand the purpose and structure of the article. Furthermore, abstracts help to consolidate what has been read during the post-reading phase. Interestingly, the author pointed out the difficulties when novice readers have to read scholarly paper abstracts as follows:

- Because abstracts represent the highest level of conceptual sophistication at which writers and readers communicate, viz., peer group writing at specialist level.
- Because of their communicative function, they strive for economy, avoid redundancy, show a high level of propositional density (a factor of difficulty which affects reading comprehension, cf. Kintsch & Keenan, 1973), and condense their informative content to the strict minimum (Graetz, 1985: 131).
- Because of space constraints, abstracts lack explicit structuring.

A highly sophisticated concept, a high-density proposition, and a lack of explicit structuring are barriers to non-experts. The author suggested the following qualifications in order for an abstract to be considered well-structured: 1) move selection, 2) move organization, and 3) paragraph structuring. A well-structured abstract should include four moves: purpose, methods, results, and conclusions. These moves should follow their logical or sequential order. The abstract should unify the research study coherently.

Swales (1990) indicated that the abstract is a kind of genre. The author introduced Huckin's (1987) study first. Huckin assumed that some readers will read the title, only some of them will read the abstract, and few will read the article itself. In this respect, abstracts perform as independent discourses (Van Dijk, 1980). Swales (1990: 179) defined the abstract and the essence of the genre as a distillation; its distilled quality makes the abstract easy to recognize.

Kaplan et al. (1994: 405) pointed out "the published abstracts serve really as a summary of the ensuing article, not a surrogate for it. The purpose of the published

abstract is to draw the reader into the article, rather like the lead paragraph in a newspaper story." The authors not only argued for the summary role of abstracts, but also emphasized the important function of abstracts as a genre in the world of scientific writing.

2.2 Previous Studies Related to the Genre Analysis of Abstracts

Gibson (1993) investigated what relates the success of different abstracts as perceived by judges to the linguistic features present in the texts in information and library science. For this, 42 abstracts were collected from 29 second-year library and information science students. Twenty-five abstracts obtained from general knowledge source texts, and 17 abstracts from information science (IS) source texts. The author found that the reasons for the judges' preferences were many and varied. Three linguistic phenomena perceived by the judges were investigated: lexical texture, grammatical intricacy and choice of theme. Counter-intuitively, the more successful abstracts exhibited lower levels of lexical density and clarity. The author hypothesized that the abstracts with more informational themes will be preferred, and analyzed three different types of topical themes: informational themes, discoursal themes, and interactional themes, which serve different functions.

Martín (2003) claimed that the study of the textual organization and linguistic features of scientific genres is a recent phenomenon. Scholars have conducted research on writing that has a specific objective in academic and research situations. This began with Swales' (1981, 1990) study on the introduction of research articles and other sections, such as discussions and results as investigated by researchers. Most of all, the author shed light on the abstract of journal articles, which should be effective texts, constituting textual organization and other key linguistic features. There have also been a few cross-cultural contrastive studies related to the textual features of the research paper genre. Studies of this genre tend to emphasize that English writing is at the very heart of the English-speaking background. However, Martín (2003) argued that the existence of different writing conventions might be recognized. The study investigated the rhetorical variation between the research article abstracts written in English and those written in Spanish. Martín (2003) revealed that Spanish abstracts have a strong tendency to omit the results section and to establish a niche move in the abstract interlocution.

Samraj (2005) studied systematically the relationships among articles' abstracts and introductions, which form a genre set, in different disciplines such as conservation biology and wildlife behavior. The author revealed that disciplinary variation in academic writing did not appear clearly in the usual structure or in the relationship between genres. However, the conservation biology abstracts generally had a problem-solution framework, with the introduction usually performing the persuasive function, whereas this was not the case with the abstracts from wildlife behavior.

In sum, there have been many studies on academic abstracts since the initial work of Graetz (1985): studies to analyze how well abstracts are structured in certain academic fields; comparative studies on abstracts of different academic fields;

comparative studies on abstracts in the same field but written in different languages; studies on the correlation between the abstract and introduction as a genre set; cross-cultural study of doctoral dissertations; and studies of the abstract, not about its general organization but certain specific rhetorical features.

3. Research Methodology

3.1 Data Collection

The selected journal article abstracts were gathered from aggregator e-journal databases and individual online databases related to the library and information science field. For finding relevant article abstracts, “electronic resource(s) management” key word searches were performed in terms of title and subject on the databases. However, according to the limited scope for research topics in electronic resource management in library and information science, consideration was given to increasing the number of related Korean journals. The time range was limited to 10 years (2005-2014). The list of e-journal databases and journals, from which the articles were selected, is as follows:

1) Web databases: Academic Search Complete, Business Source Complete, Education Research Complete, Emerald, Science Direct, Electronic Journals Service (EJS), National Digital Science Library (NDSL), ProQuest, Research Information Sharing Service (RISS), Sage Journals, Taylor & Francis Social Science and Humanities Online

2) Korean Journals: Archival Science Studies, Computer Aided Publishing Studies, Digital Library, Journal of information management, The Journal of the Korea Contents Association, Journal of the Korean BIBLIA Society for Library and Information Science, Journal of Korean Library and Information Science Society, Journal of Korean Society of Archives and Records Management, Journal of the Korean Society for Information Management, Journal of the Korean Society for Library and Information Science (total of 10 journals)

3) English Journals: The Acquisitions Librarian, The Journal of Academic Librarianship, Journal of Electronic Resources Librarianship, Journal of Librarianship and Information Science, Journal of Library Administration (total of five journals)

3.2 Research Corpus

A total of 100 research article abstracts written in English and Korean were used in this study. The corpus in English comprised 50 abstracts. The other corpus in Korean consisted of 50 abstracts. There were more than 50 abstracts in English, but I chose only 50 of them to constitute the corpus. This study used the word count in Microsoft Word to compare the length of the move by counting the number of words.

3.3 Theoretical Framework

3.3.1 A Classification of Rhetorical Moves in Article Abstracts

Hyland's (2000) classification from the analysis of 800 abstracts of 10 journals in each of eight disciplines was designed to be adapted to the universal disciplinary field.

Table 3.1 Classification of Rhetorical Moves in Article Abstracts

Move	Function
Introduction	Establishes the context of the paper and motivates the research or discussion
Purpose	Indicates the purpose or hypothesis, outlines the intention behind the paper
Method	Provides information on design, procedures, assumptions, approach, data, etc.
Results	States the main findings, the argument, or what was accomplished
Conclusion	Interprets or extends the results, draws inferences, points to wider implications

Source: Hyland, 2004, p. 204.

3.3.2 Create a Research Space (CARS) Model

According to Martín (2003: 31), the introduction unit of the abstracts is “the most complex unit in terms of rhetorical options”. He applied Swales's (1990) CARS model for the analysis of his comparative research article abstract study and found that all the samples analyzed were within the parameters of the CARS model. In the same vein, the present research adopted Swales' (1990) CARS model for the analysis of the introduction move of this study's corpus and described the classified move steps of the introduction move as well.

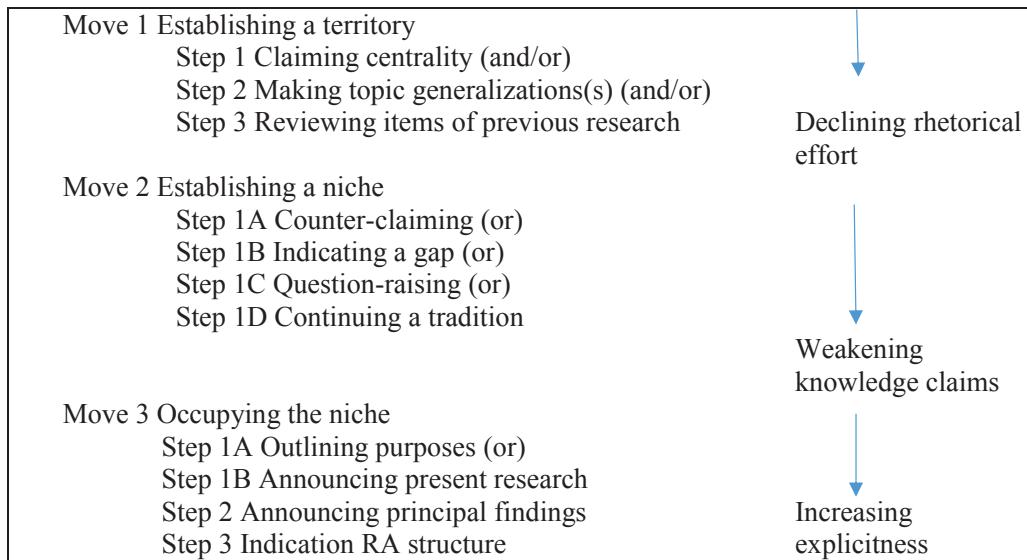


Figure 3.1 *Create A Research Space (CARS) Model*

Source: Swales, 1990, p.141.

Swales (1981) found that the structure used by the authors follows a series of moves that consist of several steps in a predictable order within the research article introduction. Swales (1981 as cited in Dudley-Evans & St. John, 1998) defines a “move” as a unit that relates to both the writer’s purpose and the content that they wish to communicate. A “step” refers to a lower text level, which offers options to a writer in the moves of the introduction. In 1990, Swales modified his original model, called the CARS model.

3.4 Procedures

The analysis of the data was conducted in two phases. First, the move analyses of the abstracts were conducted following Hyland’s (2000) move-structure classification of abstracts. Each abstract was coded on the coding sheet for identifying the moves. If it was difficult to determine the author’s purpose with the presented abstract, reading of the full text of the article was accompanied as well. In some Korean abstracts, an identical verb was determined using a different move. The decision depended on the meaning within the context rather than the linguistic features. After completion of the preliminary analysis, a cross-check was undertaken by two coders in order to validate the move analysis. The second phase was a linguistic realization analysis of the same move groups in both languages.

4. Data Analysis and Findings

4.1 Overall Results of the Macrostructure of Research Articles Abstracts

There are five rhetorical moves realized linguistically in the abstracts of both published English research articles and Korean research articles. However, it was found that there are differences in the way in which the moves are employed in English and Korean abstracts.

The results in Table 4.1 show that the method move was the most frequent and was an obligatory element in both groups of abstracts; also, the frequency of occurrence was quite similar in the two groups of abstracts analyzed. Apart from the introduction move, all of the other moves tended to be of a higher occurrence in the Korean abstracts. The analysis also revealed a strong tendency to omit the results move and the conclusion move in the English abstracts.

Table 4.1 Frequency of Occurrence and Distributions of Structural Moves in the Abstracts

	English (n=50)	Korean (n=50)
	Frequency/50 (%)	Frequency/50 (%)
Move 1: Introduction	33 (66%)	27 (54%)
Step 1: Claiming centrality	5	10
Step 2: Indicating a gap	19	11
Step 3: Making topic generalizations	5	5
Step 4: Question-raising	1	1
Step 5: Reviewing items of previous research	1	-
Step 6: Counter-claiming	1	-
Step 7: Announcing present research	3	-
Move 2: Purpose	31 (62%)	43 (86%)
Move 3: Method	41 (82%)	43 (86%)
Move 4: Results	21 (42%)	32 (64%)
Move 5: Conclusion	17 (34%)	24 (48%)

The results in Table 4.2 show that 42% of the Korean abstracts presented four moves, in contrast to 50% of the English abstracts presenting three moves, due mainly to the high incidence of omitting the results and conclusion moves.

Table 4.2 Number of Structural Moves in the Abstracts

	English (n=50)	Korean (n=50)
	Frequency/50 (%)	Frequency/50 (%)
5 units	1 (2%)	3 (6%)
4 units	8 (16%)	21 (42%)
3 units	25 (50%)	18 (36%)
2 units	15 (30%)	8 (16%)
1 unit	1 (2%)	0 (0%)

Note: The unit(s) means realized move(s) in the abstracts.

4.2 Linguistic Realization of Each Move

This part discusses the linguistic realization shown in each move. In order to do this, the vocabulary, which presented the distinguishing features of each move of abstracts in English and Korean, was extracted and listed below.

Table 4.3 Linguistically-realized words of English Abstracts

English abstract	Linguistically-realized word
Move 1 Introduction	challenge, changing, critical, develop, in a rapid, need(s), rapidly
Move 2: Purpose	addresses, describes, discusses, examines, explores, is about how, presents, proposes, recounts, reports, seeks to
Move 3: Method	checklists, criteria, evaluating, investigation, is presented, observations, observed, polled, progress, provided, reviewed, survey, task force, were tracked, were used
Move 4: Results	addresses, assessment, concludes, confirmed, demonstrated, describes, documents, examined, examines, exhibited, exists, found, highlights, observed, offers, outcome, provides, reported, results, shows, was used
Move 5: Conclusion	benefits, can be, can do, consider, could be used, further, helped, highlights, importance, learn, other, prompted, recommendations, still, stresses, suggestions, ultimately

Table 4.4 Linguistically-realized words of Korean Abstracts

Korean abstract	Linguistically-realized word (translation from Korean)
Move 1	문제점(problem), 변화(change), 새로운(new), 어려움(difficulty),
Introduction	오늘날(nowadays), 요구(demand), 제기(raise), 중요성(importance), 증가(increase), 최근(lately), 필요성(need), 필요하다(need)
Move 2:	구현(realization), 도출(draw), 모색(groping), 목적(purpose),
Purpose	문제점(problem), 수행(performance), 전망(prospect), 제공(offer), 제시(suggestion), 제안(proposal)
Move 3:	개발(development), 검증(verification), 대상(subject),
Method	대응방안(countermeasure), 면담(interview), 문제점(problem), 분석(analysis), 비교연구(comparative study), 선정(selection), 설문(survey), 수행(performance), 실시(implementation), 실태(actual condition), 이를 위하여(to this), 자료(data), 적용(application), 정리(arrangement), 정의(definition), 조사(verification), 차이점(difference), 취합(gathering), 파악(grasp), 평가(assessment), 현황(current state)
Move 4:	결과(result), 결론(conclusion), 구현(realization), 나타났다(appeared),
Results	다루다(deal with), 도출(draw), 모형제시(model present), 발견(discovery), 분석(analysis), 분석되었다(was analyzed), 설계(plan), 시스템구현(system implementation), 쟁점(issue), 제안(suggestion), 종합(synthesize), 파악(grasp)
Move 5:	고민해야 한다(must think), 고찰(consideration), 기대(expectation),
Conclusion	기여(contribution), 대응방안(counterplan), 도출(draw), 모색(groping), 반영(reflection), 방안(way), 새로운(new), 앞으로(in the future), 제안(suggestion), 제안(proposal), 향후(henceforth), 활용(application)

In general, the recurring vocabulary used in each move of abstracts in English and Korean was mostly similar: “changing, need(s) were found in move 1 (introduction);” “purpose in move 2 (purpose);” “survey, investigation in move 3

(method);” “concludes, results in move 4 (results);” “recommendations, consider in move 5 (conclusion).”

However, the difference in move 1 (introduction) was as follows. The English abstracts attempted to draw out some large changes from a different perspective by using vocabulary items such as “challenge” and “develop.” In the case of the Korean abstracts, it was observed that the authors utilized vocabulary items such as “problem” and “difficulty” in order to highlight the problems that motivated their study.

It was often observed in the English abstracts that lexicon such as “addresses,” “explores,” and “presents” was utilized in move 2 (purpose) in order to underline the purpose of the research. Korean abstracts utilize vocabulary of “draw(도출)” and “offer(제공)” to present a solution through research and such vocabulary was used frequently in the purpose move.

The words that were identified in move 3 (method) of the English abstracts were expressions with more specifics and a variety of research methods. Vocabulary such as “checklists,” “criteria,” “evaluating,” “polled,” and “survey” exemplified such types of expressions. The Korean abstracts used words depicting the process of the research such as “performance(수행),” “arrangement(정리),” and “assessment(평가),” and vocabulary designating the research subjects of the “actual condition(실태)” and “current state(현황).”

In move 4 (results), vocabulary items such as “confirmed,” “demonstrated,” “examined,” “exists,” and “observed” were frequently seen in the English abstracts to describe facts, whereas Korean abstracts used many more abstract expressions such as the words “analysis(분석),” “synthesize(종합).” Vocabulary items such as “draw(도출)” and “offer(제공),” which were utilized in move 2 (purpose), were also seen in move 4 (results). This fact implies the association between move 2 (purpose) and move 4 (results).

The difference in move 5 (conclusion) is that the English abstracts stated the usefulness of the research by using words such as “benefits,” while the Korean abstracts made use of words such as “utilization(활용)” to emphasize the direct promotion of the research results.

4.3 Description of Move 1: The Introduction Move

Hyland (2000) identified the introduction move that “establishes the context of the paper and motivates the research or discussion”. In this analysis, the introduction move was presented in 66% of the total of the English abstracts, while in 54% of the Korean abstracts.

4.3.1 Move 1 Step 1: Claiming Centrality

Swales (1990: 144) suggested that claiming centrality “is appeal to the discourse community whereby members are asked to accept that the research about to be reported is part of a lively, significant or well-established research area.” Martin (2003: 33) argues that the authors opt for a claiming centrality strategy to highlight the importance and interest of their work. In the English texts, 19 cases of this step were found, as opposed to 10 cases in the Korean texts.

4.3.2 Move 1 Step 2: Indicating a Gap

The most frequently realized step in the introduction move was “indicating a gap” in both groups of abstracts. Fifty-eight percent of the introduction in the English abstracts used this rhetorical option, whereas 41% of the introduction of Korean abstracts opted for this move in order to “point out the possible topic or areas that still need research in relation to previous work” (Martin, 2003 : 34).

The prominent signals of “indicating a gap” in an abstract were with the use of an adversative sentence-connector.

Many writers began their abstract with mentioning a problem which was caused by a changing environment, often digital layer-driven. They informed readers of a situation of contemporary libraries, and suggested their own proposal or solution. While the authors pointed out the critical point, they usually used adversative conjunctions. However, in some English abstracts, the authors only mentioned a changing circumstance, directly touching upon their contention, or specifying only a drawback.

4.3.3 Move 1 Step 3: Making Topic Generalization

The “making topic generalization” step was found in 19% of the total abstracts in Korean and 15% of the English abstracts. According to Swales (1990: 146), the authors write their knowledge in the “making topic generalization” step. This step was made in all of the English abstracts, whereas the Korean authors tended to express their knowledge in this way with only one exception.

Korean abstracts usually use the four major move steps of: claiming centrality, making topic generalizations, indicating a gap, and question-raising. In contrast, English abstracts use more varied steps than Korean abstracts. As illustrated in Table 4.5, after reviewing the items in previous research, the counter-claiming and announcing present research steps were seen less frequently than the three major steps (claiming centrality, making topic generalizations, and indicating a gap) in English abstracts, but they could not even be found in Korean abstracts. Thus, English authors may well have a good command of using the various communicative strategies.

Table 4.5 Frequency of Occurrence and Distributions of Realized Step in the Introduction Move of Abstracts

Steps	English (33 abstracts)	Korean (27 abstracts)
Move 1 Step 1 Claiming centrality	5 (15%)	10 (37%)
Move 1 Step 2 Indicating a gap	19 (58%)	11 (41%)
Move 1 Step 3 Making topic generalization	5 (15%)	5 (19%)
Move 1 Step 4 Question-raising	1 (3%)	1 (4%)
Move 1 Step 5 Reviewing items of previous research	1 (3%)	-
Move 1 Step 6 Counter-claiming	1 (3%)	-
Move 1 Step 7 Announcing present research	3 (9%)	-

Note: The total number was not 33 but 35 because there was a case where two steps were simultaneously generated from one move.

4.4 Description of Move 2: The Purpose Move

The purpose move was the shortest move, which used 16 words on average in both the English and Korean abstracts. Hyland (2000: 67) described the function of a purpose move as follows in his “A Classification of Rhetorical Moves in Article Abstracts”: “it indicates the purpose or hypothesis, outlines the intention behind the paper.” Swales (1990: 161) also defined the “outlining purposes” step as a “summary announcement of the principal findings.”

Actually, an obligatory move in Korean abstracts was found in the purpose move (86%) and the method move (86%), but not in the introduction move (54%). Moreover, a conspicuous feature of the purpose move in the Korean abstracts was the repetition of the research article’s title. With three exceptional cases, the 19 purpose move cases in the Korean abstracts contained the content of the title in its purpose move. Otherwise, the authors might have picked up their article’s title in the purpose move sentences so as to emphasize the necessity of the research.

However, only 5 out of 17 purpose move instances in the English abstracts matched the title. Instead of a restatement, the authors of the English abstracts seemed to prefer to tell the readers the purpose of the research using specific verbs such as *explores, presents, recounts, proposes, describes, seeks to, addresses, reports, is about how, examines, discusses, and purpose was to determine*.

4.4.1 Coalescence with Method Move

Swales (2004: 229) noted that "the word 'move' in genre analysis is better seen as flexible in terms of its linguistic realization. It can be realized by a clause; at the other by several sentences. It is a functional unit, not a formal one." The author (2004: 228) also argued that "move is a discoursal or rhetorical unit that performs a coherent communicative function in a written or spoken discourse."

In this sense, many move coalescences in the same sentence were found due to space constraints. Particularly, most coalescences occurred between the purpose move and the method move, as revealed in 22 cases of the Korean abstracts and 14 cases of the English abstracts.

4.5 Description of Move 3: The Method Move

As seen in the method move, 3 to 104 words of word distribution were used in the English abstracts with an average of 46 words, while between 2 to 28 words with an average of 26 words were used in the Korean abstracts. The most compelling finding of this study was probably that the majority of the authors of both abstracts included the long method move in their abstract structure. Indeed, the longest move in the 22 English abstracts was the method move. Above all, the topics that related to the electronic resource management of library management were mainly based on the library's and the librarian's experience. In other words, the library and information science discourse community members would expect to see how the study was conducted rather than discuss or define an issue (Hyland, 2000: 72).

On the other hand, the length of the Method move merely refers to the ways that show that the method move was rather shorter than the other moves. While the English writers focused more on establishing their experience with the method move, the Korean writers sought to suggest an ideal national policy model, analyzed the patron's use behavior, studied for improving efficient workflow, reported the present condition, and designed a new electronic resource management policy model, etc. as in the method move.

4.5.1 Coalescence with the Results Move

Some of the method moves coalesced with the results move (three cases in the Korean abstracts, one case in the English abstracts). The authors showed the method move in advance and then immediately described the outcome of the method. Especially in one example this rhetorical variation was used. It was used as if it was making use of a causal-relationship rhetorical pattern and then again in the same abstract.

4.6 Description of Move 4: The Results Move

In the results move, the English abstracts used 34 words on average, with a word range of 2 to 82 words; in the Korean abstracts, the average was 40 words, ranging from 5 to 138. Swales (2004: 226) indicated that researchers are prone not to allow their

results “to speak for themselves” in an abstract. Brett (1994: 55) concluded that instead of merely presenting numbers in the results move, sociologists prefer to establish meaningful statements in the abstract.

Interestingly, this analysis showed that the Korean authors had a strong tendency to expose the research results in the abstract. The Korean authors tended to show an outline of the output clearly, so the longest move in 36% of the abstracts in Korean was the results move. In the sample, it was found that some writers only touched the skeleton of outputs, while others mentioned all of the elements of a newly designed system, yet other writers reported the detailed findings of a survey, etc.

The Results move had an occurrence in 64% of all Korean abstracts and 42% of all English abstracts.

4.7 Description of Move 5: The Conclusion Move

The implications derived from the main findings of the present study may be an important function of this move. The findings indicated that the frequency of occurrence of this move was somewhat different in both languages. It was found in 48% of the Korean abstracts and in 34% of the English abstracts. However, these were the smallest proportions in both cases.

The most conspicuous function of this move might be to “draw the readers into the article rather than informing them about its actual content. The writers discuss the implications of the results or suggest for future research” (Martín, 2003: 40).

In sum, this data analysis and findings chapter compares the overall results of the macrostructure both in the English and Korean abstract in journal articles. Specifically, comparison was made between the English and Korean abstracts in order to show how differently each move looks, the extent to which each group followed the five moves, and this chapter was reviewed in practice in terms of the move structure. The opening move of abstract was also reviewed. After that, the examples of the five moves, which included linguistically realized words, were illustrated.

5. Discussion and conclusion

5.1 Summary of the Findings and Implications

The introduction-purpose-method, most frequently appeared in the abstracts written in English, where it was found in nine cases; the introduction-method pattern was found in four abstracts; and the purpose-method-results pattern in four. Regarding the abstracts written in Korean, the introduction-purpose-method-results pattern was found in six cases; the purpose-method-results-conclusion pattern in four; while the introduction-purpose-method-results-conclusion pattern, introduction-purpose-method pattern, and purpose-method-results pattern were found in three cases.

The introduction move can be further divided according to steps. Indicating a gap step was adopted in 58% of the English abstracts and 41% of the Korean abstracts, as the most preferred step of all. The claiming centrality step was the second most frequently used in 37% of the Korean abstracts, followed by making topic generalizations with 19% of the Korean abstracts. Meanwhile, a variety of steps were found in the abstracts written in English: claiming centrality, making topic generalizations, question-raising, reviewing items of previous research, counter-claiming, and announcing present research step.

Moreover, the longest move used in the Korean abstracts was the results move with an average of 40 words in 18 abstracts. It can be interpreted that this result was affected by the nature of the selected topics. The Korean abstracts had a tendency to use the results move as the longest move because the topic itself is one related to the idea of enlightenment and guiding someone/something in the right path such as a university library policy model on electronic resource management, research on building an electronic resource management system, and developing a reference model of a Korean record keeping system for integrated information resources management.

As illustrated in Figure 5.1, the method move, which emerged as the most frequently used in the abstracts written in English, was used in 82% of the time. Also, the second most frequently used selection was the introduction move, which was used in 66% of English abstracts; and the third one was the purpose move, which was used in 62% of the English abstracts. On the other hand, in the case of the abstracts written in Korean, the purpose move and the method move were used in 86% of the abstracts. Next was the results move, which showed a 64% usage in the Korean abstracts. In sum, the order of preferred moves used in the English abstracts was the introduction move (66%), the purpose move (62%), and the method move (82%). That of the Korean abstracts was the purpose move (86%), the method move (86%), and the results move (64%).

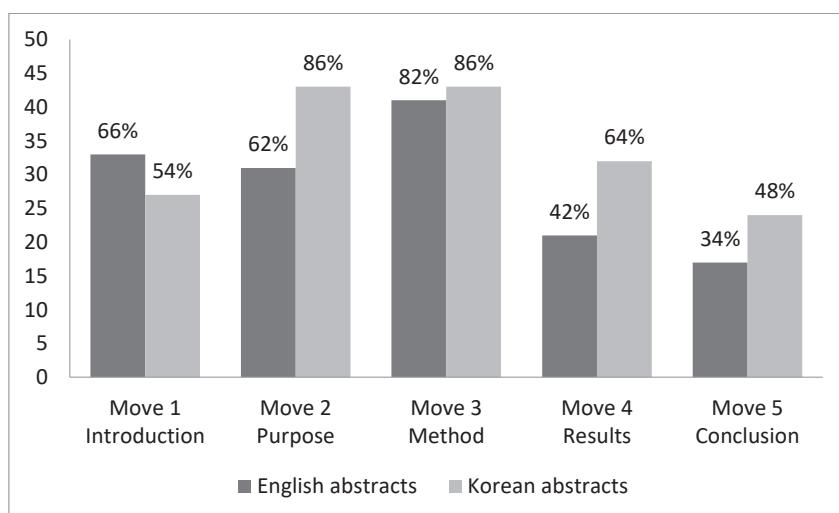


Figure 5.1 Frequency of Structural Moves and Steps in the Abstracts

The results of this research are in accord with those of Hyland (2000), which were used as an analyzing tool of this research. Hyland (2000) analyzed 800 article abstracts and interviewed authors in order to determine how the writers situated themselves and their research in certain ways in their disciplines through the genre of the article abstract, and to reveal how they displayed credibility and membership. According to the results of the research analysis, disciplinary variations were found in the move structuring of the abstracts. In other words, the purpose-method-product pattern was the most commonly used in the abstracts written by physicists and engineers (60% of all cases), while the introduction-purpose-product model accounted for 75% of the abstracts written by the humanities and social science writers (Hyland, 2000).

This study analyzed abstracts, selecting similar topics in the same discipline. In short, the English abstract authors preferred the introduction-purpose-method model, while the Korean abstract authors preferred the purpose-method-results model. This is because the English scholars in the library and information science regard it as a soft field, but a unique feature of the soft field abstract is that it skips the method move, allowing it to be considered as a hard field, whereas the Korean scholars in the same discipline consider it as a hard field.

Compared with previous studies on how to organize research paper abstracts in different disciplines and different languages, the results of this research add a cross-cultural factor to the research of Hyland (2000), demonstrating that the different perceptions between Korean and English writing authors in abstracts can lead to different patterns. Furthermore, this study may be of great use to Korean scholars in the library and information science field in terms of understanding the expectations of the international scientific community and applying this in writing effective English abstracts. For native English speaking scholars, this research can be used in order to comprehend the structure of abstracts written by Korean scholars.

5.2 Discussion of the Research Questions

First, what is the rhetorical structure of research article abstracts written in English and Korean in the electronic resource management in the field of library and information science? As discussed in 5.1 Summary of the Findings and Implications, the order of preferred moves in English abstracts was the introduction move, the purpose move, and the method move, and this study discovered that nine abstracts followed that exact sequence of composition. The order of preferred moves in the Korean abstract was the purpose move, the method move, and the results move, and this study indicated that the most frequent move structure sequence was the introduction, purpose, method, and results move structure (six cases), followed by the purpose, method, results, and conclusion (five cases).

The analysis of the abstracts of the English and Korean journal articles has shown the similarities and differences in the moves in both the English and Korean abstracts. A comparison of the English abstracts and Korean abstracts showed differences in the frequency of structural units, which was employed to articulate this genre. The introduction-purpose-method (I-P-M) move sequence was preferred in the

English abstracts, and the introduction-purpose-method-results (I-P-M-R) move sequence was preferred in the Korean abstracts. The finding that the most frequent and obligatory element was the method move in both groups of abstracts should be highlighted. In addition, more than half of the abstracts kept the assigned order (introduction-purpose-method-results-conclusion) in both groups. This means that following the sequential order was universal.

Second, what is the linguistic realization of each move in the research article abstracts in the electronic resource management in the field of library and information science written in English and Korean? The most prominent linguistic characteristic in categorizing the phases of the abstract was the repetition of specific vocabulary. In other words, the vocabulary commonly used in each category of moves could be observed. Some of those vocabulary was shown in common, while some other vocabulary stem from the uniqueness of the language. However, the vocabulary commonly found did not always form the move. This was just a necessary condition, not a necessary and sufficient condition to form the move.

5.3 Limitations of the Research

Due to the vastness of the field of library and information science, the scope of this research was limited to the topic of electronic resource management in 100 research abstracts (50 in English and 50 in Korean) during the period of 2005-2014. However, this result may not make an exact comparison in terms of pool size, given the fact that English abstracts were chosen from a larger pool of abstracts whereas the Korean abstracts were collected from all the relevant abstracts. Mainly, this research conducted a documentation analysis in this way due to time and resource limitations.

5.4 Recommendations for Future Research

In terms of research subjects, this study touched on electronic resource management, which can represent unique features of the journal abstract discipline in library and information science. However, future work can extend the scope of the corpus to library management and a comparative study can be undertaken on English abstracts written by English native speakers and Korean native speakers. In this way, the closest results regarding the representativeness of journal article abstracts can be found.

Studies in the past were performed on one specific area or comparative studies were conducted between two close disciplines. Considering the interdisciplinary trend today, the focus of abstracts should be also on interdisciplinary areas. It would be also interesting if a move structure of research results of abstract based on different studies were analyzed to see what kind of move structures they have.

Lastly, future study can conduct interviews with authors or surveys when analyzing the phases of abstracts in order to directly check the intention of authors. It is believed that this option could reduce a certain level of ambiguity in the phase analysis. Second, is the socio-cultural factor, which might underlie the rhetorical structure and

variation and could be developed further in follow-up research. In addition, the study of lexical features such as the verb tense used in the moves is also expected to make research much more synthetic.

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