



Analyzing Rhetorical Structure Development in Korean EAP Students from an Intercultural Rhetoric Perspective: A Corpus-based Genre Study*

Ji Yoon Hong · Hyunsook Yoon (Hankuk University of Foreign Studies)



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Ji Yoon Hong (First author)
Lecturer, Dept. of English Education, Hankuk University of Foreign Studies.
E-mail: my-sun6@hanmail.net

Hyunsook Yoon (corresponding author)
Professor, Dept. of English Education, Hankuk University of Foreign Studies.
E-mail: hsyoon3@hufs.ac.kr

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ABSTRACT

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This study examines the evolution of academic writing among Korean graduate students in terms of rhetorical structure from an intercultural rhetoric perspective. It analyzes four distinct corpora produced by Korean L1 experts, English L1 experts, and English L2 students at two different academic stages, aiming to identify differences in rhetorical structure between English and Korean using move analysis. Initially, it compares introductions in research articles (RAs) authored by experts in English and Korean. Subsequently, it investigates how writings by the same Korean graduate students at different academic levels compare to those produced by expert groups. The study employs quantitative analysis across these corpora and supplements this with qualitative insights drawn from interviews with Korean authors, rhetoric specialists, and Korean L2 students to ensure accurate interpretation. Results indicate that even lower-level Korean graduate students' writings, as L2 writers, exhibit a closer alignment with English rather than Korean rhetoric. The findings advance our understanding of how IR and EAP students' developmental processes unfold in terms of rhetorical structure, highlighting their hybrid nature. This study sheds light on the relatively unexplored area of English L2 writers' acquisition of rhetorical structure within the RA genre and suggests pedagogical implications for EAP genre-based writing.

KEYWORDS

Intercultural rhetoric (IR), English for Academic Purposes (EAP), move analysis, rhetorical structure, L2 development

1. Introduction

With its potential to elucidate cultural and cross-cultural writing, Intercultural Rhetoric (IR) (Connor 2004) advocates an understanding of social contexts and the interactive dynamics between readers and authors within texts (Atkinson and Connor 2008). The origins of IR can be traced back to Kaplan's (1966) pioneering study on Contrastive Rhetoric (CR), which argued that writers from diverse linguistic and cultural backgrounds organize texts in varying ways, occasionally resulting in linguistic challenges due to interference from their first language (L1). This long-standing argument of CR generated interest in connecting genre—structured patterns of communicative functions used by specific discourse communities—to rhetoric, perceived as identifiable text structures.

More recently, the CR approach has faced criticism from advocates of IR. They argue that previous research has often characterized culture as an encompassing system of all behavioral rules and has failed to elucidate the constantly evolving and diverse nature of culture (Atkinson 2004, Matsuda and Atkinson 2008). Building on this critique of CR, considerable research has been conducted comparing texts produced in English by both native and non-native authors in their L1 and second languages (L2) to explore cultural patterns or interferences in academic discourse (Kubota and Lehner 2004, Matsuda and Atkinson 2008). These studies have investigated whether variations in text among different languages can be explained by the influence of both "big culture" (e.g., national, ethnic) and "small culture" (e.g., genre, classroom) (Atkinson 2004), as well as have shed light on the extent to which L2 learners, writing in English, underuse, overuse, or misuse written language in comparison to L1 writers.

With the increasing demand among novice L2 writers to grasp specific genres, one area that stands out in IR research is genre analysis within English for Academic Purposes (EAP) contexts. This genre-based research has identified general and specific rhetorical purposes, employing corpus linguistics, which involves representative texts and computational tools to examine patterns across various discourse situations (e.g., Upton and Connor 2001). Additionally, the multi-faceted aspects of second language acquisition (SLA) have been explored through the corpus approach, particularly involving learner corpora (e.g., Meunier and Littré 2013, Verspoor et al. 2008). In line with the increased focus on IR and the development of L2 learners, recent studies have explored rhetorical similarities or differences among specific sections of research articles (RA) (e.g., Sheldon 2019) or PhD theses (e.g., Soler-Monreal 2015) written in English and other languages, particularly Spanish. They have utilized the same analytical framework without considering rhetorical distinctions between English and the respective languages. Additionally, much research has compared RA introductions authored in English by native versus non-native writers, expert versus novice writers (e.g., Dong and Lu 2020, Suárez and Moreno 2008), or expert writers in different languages (e.g., Moreno and Swales 2018). However, these studies still relied on frameworks that explain *English* rhetoric, such as Swales' (1990, 2004) "Create a Research Space" (CARS) model, comprising three moves for RA introductions, overlooking differences in rhetoric between English and other languages. Furthermore, to the best of our knowledge, no studies have utilized longitudinal learner corpora created by the same students at various academic levels to examine the rhetorical development of L2 EAP writers between their L1 and L2 or how IR hybridity is demonstrated in this process.

This study represents the first attempt to analyze two sets of English RA manuscripts authored by Korean graduate students at varying levels, comparing them with two expert groups of RAs—one in English and the other in Korean—in terms of rhetorical structure. It employs different frameworks across the four corpora. The Introduction section was chosen for analysis due to the substantial attention it has received in genre-based IR research. This section is also arguably the most crucial yet challenging part of RAs, demanding authors' capacity

to initially engage readers with academic writing conventions on their research topics. Longitudinal learner corpora, created by the same students at distinct academic levels, were used to explore how EAP students acquire rhetorical structure. Additionally, interviews were conducted with Korean authors, specialists in Korean rhetoric, and focal Korean graduate students to delve deeper into cultural, rhetorical aspects, and contextualized text analysis. This study offers insights into how Korean graduate students, as L2 writers, acquire rhetorical structures influenced by both English and Korean, a non-alphabetic language, positioned along an intercultural continuum. Thus, it carries implications for the application of genre-based instruction.

2. Literature review

2.1 IR and EAP writing research

Premised on Kaplan's (1966) insight, considerable research from the CR framework has tried to unravel the cultural hypotheses underlying each writing culture and to explore whether rhetorical components are intrinsic in the discourse of any language. More recently, this CR framework, however, has been criticized as an oversimplified account of cultural influence, aligning with concern about the alleged superiority of Western writing, the insensitivity to cultural differences leading to L1 transfer in the writing of L2 learners, and the practice of conceiving of culture as static, relatively unchanging and homogenous (Connor 2002). To address these critiques, the concept of IR has been proposed (Connor 2004, 2008, 2011, Kubota and Lehner 2004).

The evolution of IR signaled a move toward viewing writing as negotiations within and between cultures, not as culturally and rhetorically disparate (McIntosh et al. 2017). IR establishes three tenets for English for Specific Purposes (ESP) (Connor 2008). The first tenet of IR turns its attention towards texts as part of the social contexts where they were produced. The tenet emphasizes the significance of carefully examining social situations and practices, including political or economic conditions, target audience, or competitiveness, before making claims about fundamental cultural factors (e.g., Feng 2008, Mur Dueñas 2011). The feature of culture as complex, dynamic and multidimensional is closely related to the second tenet of IR, which maintains that intersecting forces of "large cultures" (e.g., national, ethnic) and "small cultures" (e.g., genre, discipline, corporate, classroom, university, educational institution) emerge in a given context. This tenet is particularly noticeable in EAP/ESP classrooms in which students of different age, gender, language background, academic levels, fields of study, and socioeconomic status are gathered. Awareness of the goals and expectations which characterize specific genres is also needed to capture fluidity and hybridity of intercultural interaction, even not to the full extent. The third tenet of IR maintains that the description of non-Western writing practice requires negotiation and accommodation of both Western and local frames. It emphasizes identifying preferred writing structures from comparable genres across languages and provides social and cultural explanations for such preferences (Connor 2011). This conceptual shift with these three tenets has seriously questioned the failure to explain the complications of the cultural, social, and contextual elements affecting writing and favored IR research (e.g., Baker 2013, Canagarajah 2013, Connor 2008, 2011, Kubota 2010, Kubota and Lehner 2004, Xu et al. 2016, You 2013). As these established IR tenets and studies suggest, IR research has the potential to move toward practice-based instruction by analyzing the rhetorical features of texts from comparable genres across languages and cultures in the writing process (McIntosh et al. 2017).

When married to corpus linguistic methods, qualitative approaches have been considered suitable for IR research to identify and elucidate intercultural differences and similarities from RA writers' viewpoints (Connor

2011). In line with ever-changing conceptualizations of writing as a socially constructed activity and process, these qualitative methods, including interviews, have been used to look beyond the texts themselves into their contexts and cultures and obtain sociocultural information (Moreno 2013).

Numerous studies have concluded that RA introductions are influenced by linguistic and cultural features of the writer's L1 by exploring their rhetorical structure (Hirano 2009, Loi 2010, Mur-Dueñas 2007, Sheldon 2011). Remarkably, recent research has paid attention to a cross-cultural perspective on the rhetorical strategies used in RAs or PhD theses. The research responds to the interest in discovering what rhetorical features affected by both English and Spanish can be identified in the texts written by English L2 writers. Soler-Monreal (2015) explored cross-linguistic rhetorical variation in the literature review chapters of PhD theses written by English L1, English L2, and Spanish L1 writers. The results showed that the English L2 writers used more rhetorical strategies, made themselves present in their texts by using more first-person pronouns, and refrained from using evaluative markers than the Spanish L1 writers. In Sheldon's (2019) study, which analyzed the discussion/conclusion sections of RAs written by English L1, English L2, and Spanish L1 writers, the English L2 writers displayed hybridity in rhetorical complexity by occupying rhetorical moves mostly in a mid-position. The previous studies' findings confirmed that the English L2 writers displayed the hybridity in their writing, which can be influenced by their L1 culture and genre's rhetorical practices. By comparing the generic structure of RAs written in English L1 and Spanish L1 writers, Moreno and Swales (2018) suggest manual annotating from the step level for "bridging the function-form gap" to solve several concerns about segmentation and labeling procedure in IR research.

It is important to note that despite considerable research interest in IR, these prior studies have not employed a framework considering rhetorical differences between English and their language. That is, they overlooked the possibility that Swales' (1990, 2004) schema, which is the representative framework for explaining the rhetorical structure of RA introductions in *English*, might not apply to other languages. Thus, the present study works from the basic assumption that different languages can differ in rhetoric from an IR perspective. Thus, our first major challenge is to investigate how the rhetorical structure of RAs written by experts in English is different from that of RAs written by experts in Korean, non-alphabetic language, by employing different frameworks for analysis.

Since Kaplan's (1966) famous doodles that characterize CR's apparent interplay of oppositional thought pattern in writing, investigations of Korean writing have mainly provided general features of Korean rhetoric: *ki-sung-chon-kyul* pattern, quasi-inductive structure marked by a delayed statement of purpose, and reader-responsible language (Hinds 1983, 1990). This tendency of communicating in implicit ways in Korean rhetoric was also explained by the tendency in Korean culture to avoid face-threatening acts (Choi 1988, Eggington 1987). As Moreno (2013) pointed cross-cultural differences in multilingual writers, Korean EAP students who are likely to be influenced by these general features of Korean rhetoric tend to make nonstandard academic writing choices, leading to rhetorical inefficiency with consequences such as the greater need for revision. Thus, being aware of the rhetorical differences between English and Korean can be conducive to Korean EAP students.

2.2 Corpus-based research on genre

In line with L2 students' need to understand their respective academic discourses' communicative purposes in disciplinarily approved ways, genre analysis has attempted to explicate how language experts employ generic practice to fulfill various goals associated with their specialized disciplines. ESP approach to investigate genre has recently focused on rhetorical and disciplinary discourse contexts where the genre is interpreted as a multifaceted construct featured by social actions, community conventions, power relationships, texts, and the interactions across texts. In genre analysis, specific language is demarcated into obligatory or optional smaller units called moves,

defined as a series of semantic and functional units of texts that signal a particular discourse (Swales 1981, 1990). The examination of specific moves within a text concerning their proper move order, move structure, and linguistic features through this genre analysis allows for greater recognition of regularities and specific disciplinary factors.

A corpus approach for the study of genre analysis has gotten the spotlight for providing detailed information about how different communicative purposes are realized with specific linguistic features and what prototypical patterns of move type are identified (Upton and Cohen 2009). With this need to combine genre analysis with a corpus-based approach, numerous studies have thrown light on the complex nature of the genre by delineating the rhetorical structure of various sections of RAs drawing on Swales' (2004) move analysis model (e.g., Kanoksilapatham 2015, Lim 2017, Lin and Evans 2012, Wang and Yang 2015). Pedagogical research in academic writing instruction (e.g., Chen and Flowerdew 2018, Cotos et al. 2017) has also noted that teaching rhetorical structures is most effective when catered to a specific target genre (Dong and Lu 2020, Lu et al. 2020).

2.3 Corpus-based research on language development

Despite the difficulty of describing its nonlinear and complex dynamics (de Bot et al. 2011), SLA research has turned to learner corpora's previously underexplored possibilities by focusing on revealing the systematized and evolutionary L2 learners' developmental process. The integration of SLA and learner corpora has involved interpreting L2 developmental patterns guided by SLA theories and efficiently utilizing computer-assisted methods for processing and analyzing learner corpora. Recently, pedagogically oriented products of learner corpus research have started to merge with research into the multidimensional developmental process of SLA. They attempted to measure accuracy and intricacy as well as lexical and syntactic development and analyze linguistic domains, proficiency levels, interlanguages of learners who have various L1 backgrounds and kinds of variability (e.g., Meunier and Littré 2013, Thewissen 2013, Vyatkina 2013, Yuldashev et al. 2013, Zhang and Lu 2013). These studies create a shared and mutually enriching foundation, serving as a collaborative and dynamic intersection between SLA and learner corpus research to explore the intricate developmental processes of L2 learning over time. However, little corpus-based research to date has examined the process through which L2 learners form their rhetorical structure. In this regard, this genre-based study on analyzing learner corpora produced by the same students at two different academic levels is called for with critical significance. Thus, our second challenge is to examine how Korean EAP students experience rhetorical development between L1 and L2 and how this IR hybridity is manifested in language and genre. The present study has the following two research questions:

- (1) What rhetorical moves/steps occur in the two L1 expert corpora in terms of rhetorical structure, and how do the RAs written in Korean by experts differ from those written in English by experts?
- (2) What are the characteristics of the process through which writing in the L2 student longitudinal corpora compiled at two different levels develops in terms of the rhetorical structure compared to the two L1 expert corpora?

3. Methodology

3.1. Description of the corpora

Introduction sections were chosen for analysis since previous research concluded that they are affected by the linguistic and cultural features of the writer's L1 (Sheldon 2019) and have a definite purpose and entire

organization (Swales 1990). For the selection of comparable corpora in this cross-cultural study, particular criteria of comparability that may affect the content and shape of discourse, known as *terms of the readership*, were considered (Moreno 2008, 2013): (1) a single discipline, i.e., applied linguistics, (2) genre, i.e., RAs and term papers in RA format, and (3) time frame, i.e., published or submitted from 2011 to 2016. Even though term papers are different genre from RAs in obvious senses, the term papers written by the graduate students in this study were judged to be comparable with RAs written by experts since the graduate students' ultimate goal required in the courses was to write manuscripts that follow the format and length of RA with the same readership and thus are publishable in the major journals. The two sets of L2 corpora written by the identical students with comparable English proficiency and L2 writing experience were selected to allow for a more plausible account of the developmental process by which the Korean students acquire rhetorical structure throughout the three-semester training of academic writing. The Korean graduate students who produced the two L2 corpora were majoring in English education at various graduate schools in Korea. Their department required them to write their term papers and theses in English. Due to this requirement, acquiring proficient academic writing skills in English presented an immediate hurdle for them. Among the students, 8 were male students, and 38 were female students, ranging from 23 to 35. According to the standardized test scores they provided when applying for a graduate school, their levels of proficiency in English approximately aligned with the B2 to C1 range of the Common European Framework of Reference for Languages. The interviews with them confirmed that they had no experience taking an introductory or explicit academic writing course. The students were provided with guidance and feedback on their term papers from course instructors or their advisors throughout graduate studies. As for the two L1 corpora, the authors' native language was confirmed as either English or Korean, given that the rhetorical structures used by non-native speakers may be influenced by different cultural factors.

Table 1 presents descriptions of the four corpora consisting of RA introductions employed in this study. The four corpora consist of a combined total of 295 RA introductions that directly address theoretical and practical aspects linked to English Education. These encompass various areas such as second language acquisition, teaching and learning language skills, instructional methods, materials, and techniques: (1) 100 introductions from three prestigious international journals, i.e., TESOL Quarterly, Language Learning, and Applied Linguistics, written in English by experts (hereafter English L1); (2) 100 introductions from three prestigious domestic journals, i.e., Korean Education, Korean Language Education Research, and New Korean Education, written in Korean by experts (hereafter Korean L1); (3) 46 introductions to term papers produced in English by Korean graduate students majoring in English Education at their first-semester (hereafter English L2-1); (4) 49 introductions to term papers produced in English by the same groups of students during their fourth-semester (hereafter English L2-2). Among the 49 English L2-1 term paper introductions gathered, 3 were excluded from the analysis because they were incomplete.

Table 1. The composition of the four corpora

Corpus	No. of texts	No. of tokens	Average words per text	No. of types	Type/token ratio (TTR)	No. of sentences
Korean L1	100	62,374	624	6,913	0.11	21.7
English L1	100	57,904	579	6,345	0.11	16.8
English L2-1	46	25,777	560	3,354	0.13	19.8
English L2-2	49	31,296	639	3,530	0.11	23.3

3.2. Move analysis

Move analysis (Swales 1981, 1990) was applied to each of the four corpora to identify prototypical communicative functions. The first step was to analyze the Korean L1 corpus and two English L2 corpora inductively to determine the possible communicative/functional categories with a corpus-driven approach (McEnery et al. 2006) since no existing framework was used based on the assumption that their rhetorics are different from English rhetoric. The English L1 corpus did not require this step, as it employed a revised framework with a corpus-based approach, based on Swales' (1990, 2004) CARS model. The revised CARS framework was developed with reference to frameworks presented in several genre-based intercultural studies that analyzed rhetorical differences in RA introductions written either by two L1 groups or by two L1 groups and one L2 group (Loi 2010, Shehzad 2008, Sheldon 2011). The English L1 corpus' final framework comprises three moves: Move 1 (*Establishing a Territory*), Move 2 (*Establishing a Niche*), and Move 3 (*Occupying the Niche*).

For the analysis, move/step coding was done manually by two human coders, i.e., the first author and the second coder, who took courses in corpus linguistics and genre analysis and gained training in annotating texts according to the Swales' (2004) framework as doctoral students in TESOL. The two coders read the text closely, discriminating segments based on their local and global rhetorical functions into steps and moves that consist of steps. Thus, to develop a preliminary move/step schema, the two coders classified them into functional and/or semantic discourse units, while also streamlining the categories considering the issue of duplication. Following the suggestion of recent RA studies that the step is a more appropriate level for obtaining more revealing results of rhetorical structure than is the move (Cotos et al. 2017, Moreno and Swales 2018, Yang and Allison 2003), they segmented the corpora into multiple steps which primarily perform the function of the move to which they belong. In this way, moves are considered rhetorical units performing overall communicative functions in texts, whose linguistic forms are very variable in some ways (Swales 2004). A move can be further divided into steps which realize the communicative purposes of the move. That is, steps are the subdivisions of the moves. After conducting pilot-coding to testify and adjust definitions of move functions, a final framework with distinct definitions and illustrations of moves/steps was developed (see Appendix A). To validate the constructed framework for analyzing the Korean L1 corpus, we referenced suggestions from Lee (2001), Park (2006), and Kim and Lee (2008) regarding the analytical framework of RA introductions written in Korean.

The second step of the analysis involved concurrent segmentation and classification. To apply the segmentation consistently, a step was redefined to have a new propositional meaning essential to the text movement and thus contain at least one verb, whether finite, non-finite, or elliptical, or a nominalization (Moreno and Swales 2018). After the two coders' separate coding for all data, intercoder reliability procedures were performed using Cohen's Kappa coefficient (Cotos et al. 2015) to identify boundaries between moves and comprehend how moves/steps are realized in texts (Kanoksilapatham 2007). The process of annotating and refining a developed framework was also consistently informed by repetitive computations of intercoder reliability on moves/steps, and the remaining problematic cases of disagreement, along with any newly discovered moves or steps, were addressed through discussion, clarification and criteria checking. Reliability among the two coders was relatively high, with .84 for moves and .80 for steps.

Some steps caused this annotation process to be more complicated due to different rhetorical contexts' functions despite the same linguistic forms. This problem was solved by considering the rhetorical context in which the step occurred after several closer reading of the wording in the steps. Each excerpt was categorized according to the step that was considered to best represent its rhetorical function. Excerpts from the Korean L1 corpus were translated verbatim into English. For instance, Excerpt 1 looked like the step of *presenting and explaining research*

topics and clarifying terms related to them due to the previous sentence explaining summary activities. However, it was interpreted as the step of *drawing the necessity of research area from the educational situation or features*, as indicated by the following linguistic item “in most Korean public schools.”

Excerpt 1: Summary activities are mostly processed in the way that students talk or write about them after reading and summarizing specific texts or paragraphs. However, the various cognitive activities underlying summary activities are not being appropriately considered. *In most Korean public schools*, these summary activities have been conducted...

Another problematic annotation resulted from several functions that coincided. It was solved by coding into one more main function through several careful readings of the steps' linguistic forms. For example, the fragment in Excerpt 2 was difficult to discern since it could be the step of *reviewing previous research*, as the preceding sentence. However, it was interpreted as the step of *presenting limitations of previous research* due to the linguistic item, *be unsuitable for*.

Excerpt 2: The nature and characteristics of language that is used during classroom conversation have been investigated. Previous research has reported that classroom conversation is regarded to *be unsuitable for* the content of teacher education.

After performing the move analysis, the count of each step identified in each corpus was calculated, along with the percentage that each step represented out of all the identified steps in each corpus. Subsequently, comparisons were made to examine the sequence and frequency of moves or steps used to broadly achieve similar communicative functions across both L1 corpora and the four corpora.

3.3. Interviews

Interviews with three Korean authors who contributed to the Korean L1 corpus, two Korean rhetoric specialists, and two focal Korean graduate students who wrote L2 corpora were conducted to confirm the plausibility of developing frameworks and corroborate the outcomes of move analysis that would otherwise be interpreted and described more arbitrarily. For this IR research, multi-method triangulation was a worthwhile procedure to integrate more qualitative data and determine which aspects are culturally influenced by general Korean rhetoric or specific genre of RAs in terms of rhetorical structure. Three authors of the Korean L1 corpus and two specialists on Korean rhetoric, who are professors specializing in Korean education, were interviewed face-to-face for consultation. Their primary research interests include Korean reading education, Korean writing education, and Korean discourse analysis. The interviews were conducted between 30 and 60 minutes in length per interviewee. They were tape-recorded, transcribed verbatim in Korean, and then translated into English for analysis. Thematic analysis procedures were followed to analyze the interviews (Braun and Clarke 2006). The interview transcripts underwent inductive coding to segment longer stretches of discourse into parts for further comparison and search for recurring themes in an iterative manner (Johnstone 2008). After comparing and fine-tuning the categorization, validation of the coding was conducted through both inter-rater analysis and intra-rater analysis to address potential bias. Disagreements were resolved through a follow-up discussion. Interview protocols are presented in Appendix B.

4. Results and Discussion

4.1. Comparison of Korean L1 corpus with English L1 corpus

4.1.1. Developing a framework for analyzing Korean L1 corpus

In order to construct a framework for analyzing the Korean L1 corpus, first, the function of each text segment and its overall rhetorical function were evaluated. The researcher read all 100 introduction sections and named each proposition that expressed a common idea or function of a step. The occurrence at least once in 10% of the RAs, i.e., 10 RAs in this study, was established as the cutoff for defining a step to deal with the driven steps, including several steps that contained overlapping propositions. Thus, the driven steps, such as *presenting limitations of the research* and *presenting the structure of research*, were excluded from a complete framework since they occurred in fewer than 10 RAs. Also, several steps that used different ways for almost the same function were assigned as options (e.g., Move 2 – Step 1A~1D), not individual steps (e.g., Move 2 – Step 2). Their sequences were determined based on the frequency of their presence in research articles. The steps that include common functional and/or semantic themes are grouped in a move. For the establishment of validation of a framework, the occurrence of at least once in 90% of the RAs, i.e., 90 RAs in this study, was established as the cutoff for being categorized as a move in reference to Upton and Cohen's (2009) study. Through this process, three clear move types were found: Move 1, *Topics or Purposes of the Research*; Move 2, *Necessity or Background of the Research*; and Move 3, *The Present Study*. In general, while the cutoff frequency of each move/step is set as 60% to assess its degree of conventionality, often referred to as “move stability” (Kanoksilapatham 2007), considering the relatively small corpus size of this study, we decided to set the conventionality cutoff as 50% or higher, i.e., occurring in more than 50 RAs in this study. It was set optional otherwise, i.e., occurring in fewer than 50 RAs in this study. Finally, The Korean introductions to RAs model (hereafter K-IRA) was developed to analyze the Korean L1 corpus (see Appendix C).

4.1.2. Comparison in the sequence of steps

Subsequently, a comparison was made between the sequence and frequency of moves-steps employed in the two L1 corpora. As illustrated with color-coding in Figure 1, the total count of identified steps varied across each corpus and the steps were categorized into five groups representing common communicative functions. The two L1 corpora clearly showed different overall rhetorical structures in sequence and frequency of steps used.

As for the *sequence* of steps used, the most noticeable difference between the two L1 corpora from an IR perspective was found in the location of presenting purposes of the research. The English experts tended to state in the sequence of introducing the general topic of research, identifying the more specific areas of research that demand further investigation, and then introducing the current study in the context of the prior research described in the Move 1 and Move 2. On the other hand, the Korean experts tended to present the current research's purpose first, describe the research's necessity or background, and then explain the current research.

As seen in the detailed five color-coding categories, the two L1 corpora also showed substantial differences in other aspects. Notably, the exciting difference was found in the steps for presenting the necessity of the research. Both expert groups used the steps for explaining the background, necessity, and significance of research in Move 1 and Move 2, indicated in gray. However, while the English experts separately used the four options of Move 2, the Korean experts used Move 2-step 1A~1D, combining the research's necessity with the research background

through educational situations or features, investigation, narrowed research topics, or historical facts. Korean authors' answers corroborated the location and content of the Move 2-step 1 regarding whether they have their way to write RA introductions in Korean. Most of them stated that they usually establish connections between research topics/issues and the background of the research using examples, episodes, historical facts, or educational or social problems to

draw readers' attention and interest and emphasize the necessity for the research afterward. For instance, Korean author (KA) 1 said, "I often try to start from some examples or episodes to attract researchers' interest in the academic community. And then, I continue to emphasize the necessity for and significance of the research." The manifestation also shows that Korean authors are culturally affected by general Korean writings even when writing academic RAs. This pattern reveals indirect features represented in general Korean writing, which appears similar to *chon* part of *Ki-sung-chon-kyul* (Hinds 1983, 1990). In the *Ki-sung-chon-kyul* framework, *ki* begins the argument, *sung* develops the argument, *chon* abruptly changes the direction of the argument towards an indirectly connected sub-theme immediately after finishing the argument, and *kyul* concludes. In this framework, a trail that leads to the statement of purpose of the writing is often traced from the previous paragraphs while not appearing until the final paragraph in Korean writing. This tracing process is called quasi-inductive or delayed purpose statement writing, which was confirmed in Eggington's (1987) research, showing Koreans could recall more from the text whose structure was indirect. This rhetorical pattern is addressed in recent research, which developed analytical frameworks of RA introductions written in Korean. Lee (2001) found "*the un-identifiable move*" step and "*weak version of Move 2*" step in the introductions of RAs written in Korean based on Swales' (1990, 2004) model. The steps respectively explain the research background through general or historical facts and draw the necessity of research explaining the Korean educational situation. The steps were also found in the K-CARS model for analyzing introductions of theses written in Korean (Park 2006) and in the revised K-CARS model for analyzing RA introductions written in Korean with a focus on content analysis (Kim and Lee 2008).

This rhetorical pattern rarely occurs in RAs written in English and is regarded discursive and irrelevant to English readers due to its location after presenting the research purpose. As indicated in blue, while the English experts presented the study's purposes in the later section of the introduction (Move 3-step 1), the Korean experts employed the step for the function in the earlier section (Move 1-step 2). As to the different way of writing RAs from general writings that have culturally affected features, Korean rhetoric specialist (KS) 2, for example, emphasized their experience of awareness of the academic RAs as a specific genre:

I had received little explicit teaching on the organization and the essential components of Korean RAs at high school and university. I just read several types of writing, such as expository, argumentative, or summary writing. Through this, I realized that academic writings should be written differently from other types of writings. The purposes, backgrounds, direction, necessities, and significance of the research are first presented, and then the research methods are described.

The answers to the interview question about the differences between RA writing and general writing in Korean also indicated that the most noticeable difference is whether the writer's argument or purpose is directed toward a conclusion. For example, KA 2 stated:

In the middle of general writings, I tend to include sub-themes indirectly linked to the argument in order to provide background knowledge to readers. But, as for the introductions to academic RAs, I try to clarify the topic

or the purpose of research first in a direct way and afterward provide background knowledge with details related to the necessity of research.

Most Korean authors and Korean rhetoric specialists stated that they try to clarify research purposes initially in a direct manner and subsequently impart background knowledge with details about the necessity of the research. The Korean authors' writing style is distinguished from the typical delayed-purpose statement found in general Korean writings. Authors in general Korean writing provide prior background knowledge in the middle of their writings by injecting sub-themes indirectly linked to the argument or its purpose. The tendency to initially clarify the research purpose in a direct way aligns with the genre-specific features of RAs written in Korean.

As indicated in orange, while the English L1 corpus contained the step for reviewing previous research at the outset of the introduction sections (Move 1-step 3), the step was found towards the middle part of the introduction (Move 2-step 3) in the Korean L1 corpus. Similarly, the step for addressing the limitations of prior research and indicating a research gap was used at an earlier point in the introductions of the English L1 corpus (Move 2-Step 1B), while it was found in a later section (Move 2-step 4) in the Korean L1 corpus indicated in yellow. On the other hand, both groups of experts employed the steps for introducing the current research to be conducted in the later section of the introduction, indicated in green.

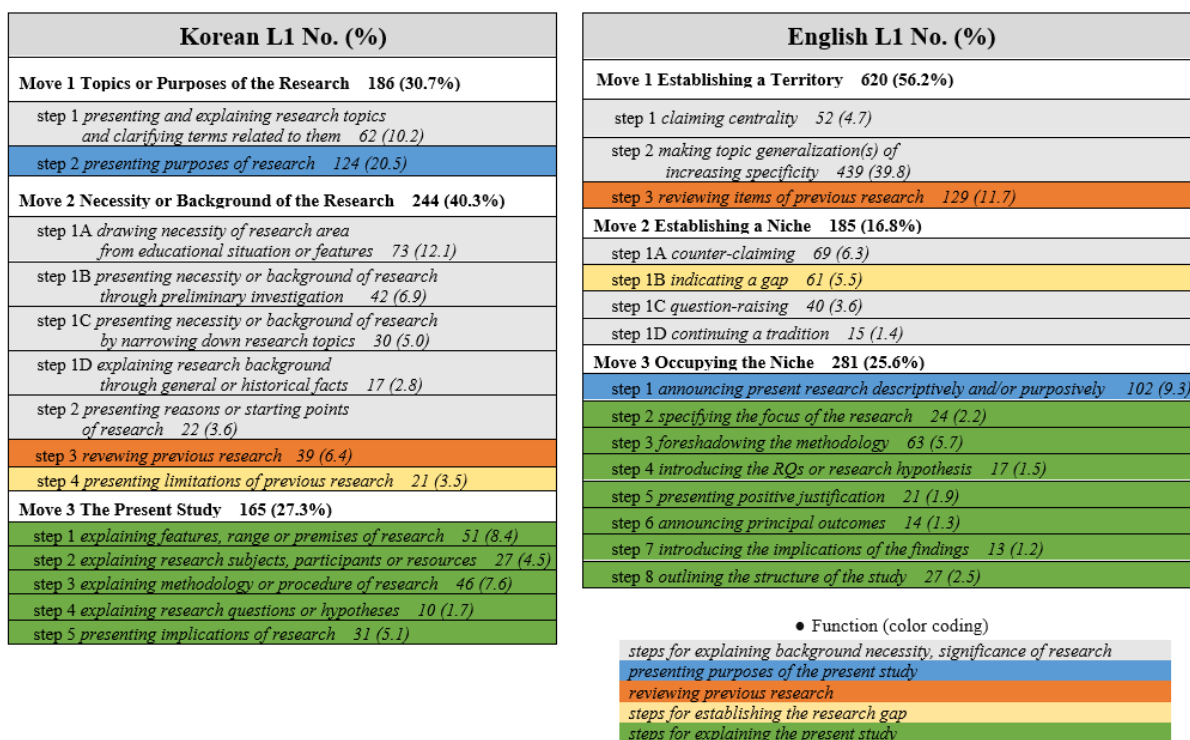


Figure 1. Frequencies and Distribution of Moves-steps in Korean L1 Expert Corpus and English L1 Expert Corpus

4.1.3. Comparison in the frequency of steps

As for the *frequency* of steps used, the two L1 corpora also showed considerable differences. Table 2 represents the frequencies of steps for functions used in the two L1 expert corpora in five color-coded categories.

Table 2. Frequencies of steps in two L1 expert corpora

Function of steps	Korean L1 No. (%)	English L1 No. (%)
<i>steps for explaining the background, necessity, significance of research</i>	246 (44.1)	615 (55.8)
<i>presenting purposes of the present study</i>	124 (20.5)	102 (9.3)
<i>reviewing previous research</i>	39 (6.4)	129 (11.7)
<i>steps for establishing the research gap</i>	21 (3.5)	61 (5.5)
<i>steps for explaining the present study</i>	165 (27.3)	179 (16.3)

Both groups took up the most space explaining the background, necessity, and significance of the research, indicated in gray. While Korean experts used the steps with 44.1%, English experts showed 55.8%. Next, the frequency of the steps for presenting the study’s purposes indicated in blue showed the most notable difference between the two corpora. They account for only 9.3% of the English L1 corpus, but the Korean experts employed much more steps for the function with 20.5%. On the other hand, while the English L1 corpus contained more steps for reviewing previous research indicated in orange with 11.7%, the Korean experts occupied less space at lower rates of 6.4%. During interviews, KA 3 stated, “I usually indicated the necessity for the research by using examples of educational problems, rather than through a literature review.” The steps for addressing the limitations of prior research and indicating a research gap were used with 5.5% in the English L1 corpus, while the Korean L1 corpus devoted 3.5%, indicated in yellow. Lastly, as indicated in green, the Korean experts used a greater number of steps for the current study (27.3%) than the English experts (16.3%), which showed another remarkable difference between the two corpora. KS 2 also emphasized:

What should be examined in the study should be presented clearly as both one of the most crucial elements to the introductions of RAs and one of the differences between how to write introductions of RAs and general writings in Korean.

While English experts often engaged in counter-claiming in Move 2-step 1A after reviewing prior research in Move 1-step 3, Korean experts rarely counter-claimed previous research. This pattern can be viewed as a rhetorical characteristic influenced by the cultural context of general Korean writings. This result is in line with Choi’s (1988) research, in which Korean students delayed the introduction of the problem until the second part of the text by using *situation-problem-solution-conclusion* (SPSC) text structure instead of *problem-solution-conclusion* (PSC). The Korean students’ rhetorical preference provided evidence that direct confrontation with other people’s viewpoints and direct representation of one’s own opinions are considered face-threatening acts in Korean culture. Most interviewees also felt that it was burdensome to make counter-claims on previous research.

4.2. Developmental characteristics of the rhetorical structure of two L2 learner corpora in comparison with two L1 expert corpora

To identify the characteristics of the process through which Korean graduate students’ writings develop over time from an intercultural perspective, we compared the two L1 corpora and the two L2 learner corpora in rhetorical structure. Based on the underlying idea that the rhetoric can differ in cultural and language backgrounds and comparing the four corpora with a single categorization is impossible, *different* frameworks were employed for analysis. The English L1 corpus was analyzed using a revised framework based on Swales’ (1990, 2004) model

with a corpus-based approach, while the two L2 learner corpora were analyzed with developed frameworks in the same way as the Korean L1 expert corpus with a corpus-driven approach. Three distinct move types were found in both L2 corpora despite some differences in the frequency, sequence, and distribution of steps employed between the two corpora: Move 1, *Explaining Topics and Background of the Research*; Move 2, *Necessity of Research*; and Move 3, *The Present Study*.

4.2.1. Developmental characteristics in the sequence of steps

Figure 2 illustrates the frequencies and distribution of steps that broadly achieve the same functions, categorized into five color-coded groups in the four corpora.

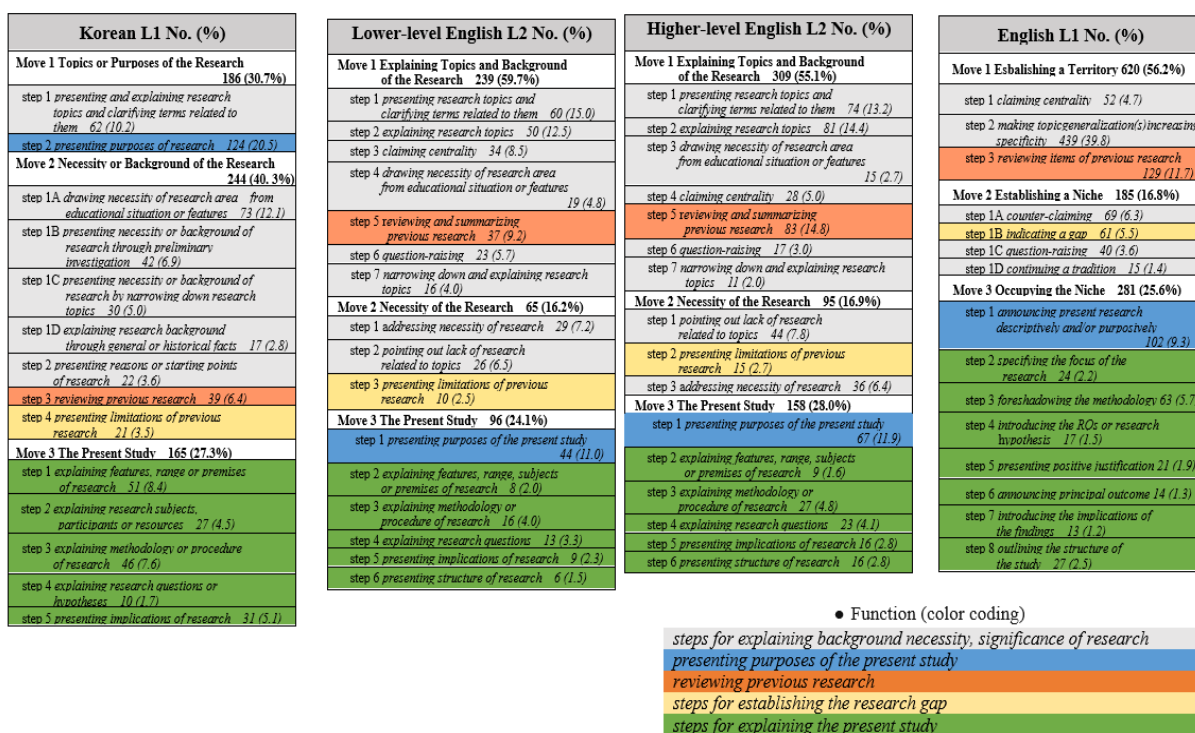


Figure 2. Frequencies and Distribution of Moves-steps in English and Korean L1 Expert Corpora and Two English L2 Student Corpora

As for the *sequence* of steps used, the overlapping steps for explaining the background, necessity, and significance of the research were commonly found in Move 1 and Move 2 in the four corpora, indicated in gray. Similar to *chon* part of *Ki-sung-chon-kyul* (Hinds 1983, 1990), the steps found in the two L2 corpora are mainly considered the feature affected by general Korean writing in that the direction of the argument is abruptly changed towards an indirectly connected sub-themes such as educational situations or features and narrowed research topics immediately after explaining research topics. This IR feature was also found in Ryu's (2006) research in which several Korean EAP students showed a non-deductive approach in terms of addressing topics and developing text structure. By discussing the writing with different topics instead of starting with an explicit thesis statement or elaborating the thesis statement with *Ki-sung-chon-kyul* framework (Hinds 1983, 1990), the Korean EAP students showed that their English expository writings were considerably influenced by general Korean rhetoric. The IR

aspect was also found in the Korean students' use of steps for *claiming centrality* again after *explaining research topics* in this study. This sequence of steps was noticeable in the writings produced by the lower-level students. The result can be explained by the Korean EAP context in which students intentionally refer to RAs written by English experts in the repetitive writing processes and try to emphasize explaining the research. The students' responses to the interviews supported the tendency to use these steps frequently. For example, student 2 (S2) said, "I usually presented the research topic and its significance by quoting the claims of previous researchers and intended to emphasize the significance of the research topic once again by explaining the educational situation." S1 also added, "I think it is effective to explain educational problems and the reasons behind these problems with examples to emphasize the necessity for the research."

Notably, while the Korean experts used the step for presenting the purpose of the research indicated in blue in the earlier section (Move 1-step 2), the Korean students and the English experts used the step in the later section (Move 3-step 1). The Korean students' tendency to present research purposes in the latter part of their introductions shows that they are gaining proximity to the genre-specific feature of RA introductions in English. Also, compared to the Korean experts, who used the step for reviewing previous research indicated in orange in the middle section (Move 2-step 3), the Korean graduate students used this step in the earlier section (Move 1-step 5), which is similar to the use by the English experts (Move 1-step 3). This pattern also reveals the Korean students' increase in proximity to the English expert in reviewing previous research in RA introductions in English.

In the four corpora, a similar sequence was found in some steps indicated in yellow and green. The step for presenting limitations of previous research indicated in yellow was employed in Move 2 in all the four corpora. Also, as indicated in green, both experts and Korean students explained the research at hand in Move 3. However, the overall findings revealed that the two groups of Korean graduate students at different academic levels adopted a similar pattern of use in rhetorical structure and that the rhetorical structure used by even the lower-level students was closer to that of the English experts than to that of the Korean experts. Furthermore, as their academic level advanced, their rhetorical structure grew closer to the English experts while shying away from Korean experts.

4.2.2. Developmental characteristics in the frequency of steps

Table 3 and Figure 3 demonstrate the frequency of steps for functions used in the four corpora in five color-coded categories.

Table 3. Frequencies of steps in two L1 experts and two L2 learner corpora

Function of steps	Korean L1 No. (%)	English L2-1 No. (%)	English L2-2 No. (%)	English L1 No. (%)
<i>steps for explaining the background, necessity, significance of research</i>	246 (44.1)	257 (64.2)	306 (54.5)	615 (55.8)
<i>presenting purposes of the present study</i>	124 (20.5)	44 (11.0)	67 (11.9)	102 (9.3)
<i>reviewing previous research</i>	39 (6.4)	37 (9.2)	83 (14.8)	129 (11.7)
<i>steps for establishing the research gap</i>	21 (3.5)	10 (2.5)	15 (2.7)	61 (5.5)
<i>steps for explaining the present study</i>	165 (27.3)	52 (13.1)	91 (16.1)	179 (16.3)

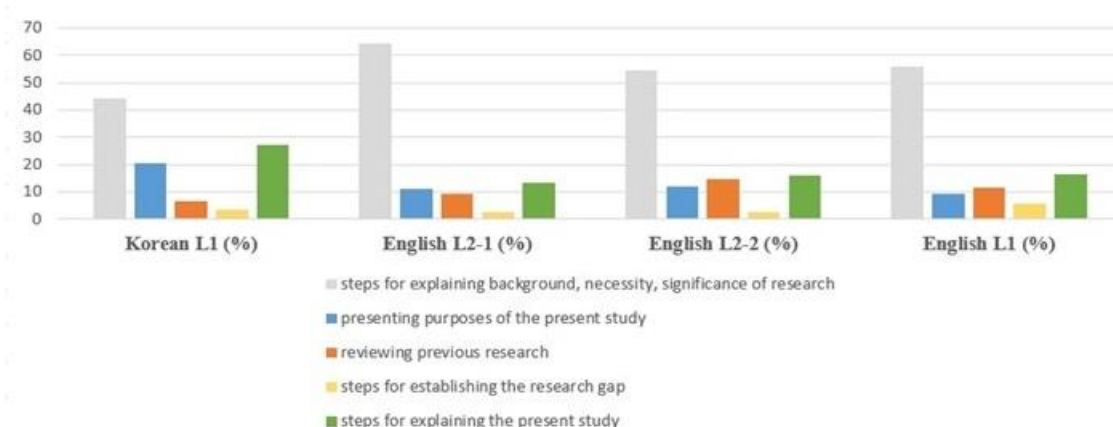


Figure 3. Frequencies and Distribution of Steps in Two L1 Expert and Two L2 Learner Corpora

As for the *frequency* of steps used, the overlapping steps for explaining the background, necessity, and significance of the research commonly occupy the most space in each of the four corpora, indicated in gray, despite a difference in the degree. While the Korean L1 corpus devoted less than half of the whole functions to these steps (44.1%), the two L2 corpora and the English L1 corpus employed more with 64.2%, 54.5%, and 55.8%, respectively. On the other hand, the Korean experts occupied ample space to present the purpose of the research indicated in blue with 20.5%, but the Korean students and the English experts used less space with 11.0%, 11.9%, and 9.3%, respectively. Compared to the Korean experts who used the step for reviewing previous research indicated in orange at a proportion of 6.4%, the Korean graduate students showed increased use of this step as their academic level advanced with 9.2% and 14.8% for the lower and higher levels, respectively. The English experts used this step at 11.7%. The interviews with the higher-level students confirmed their preference for reviewing or summarizing previous research. Both students stated, “I usually review and summarize previous research to elaborate on the focused research topics and provide background information from reliable previous literature or highlight the significance and popularity of the research area.” Regarding presenting limitations of previous research indicated in yellow, the English experts occupied a little more space for this step with 5.5% than the Korean experts (3.5%) and the two groups of students (2.5% and 2.7%). Lastly, while the Korean experts occupied 27.3% for explaining the present study indicated in green, the English L1 experts and the Korean students occupied less space with 13.1%, 16.1%, and 16.3%, respectively.

Overall, the findings of the frequency of steps used revealed the similarity of the two student corpora. They also found that even the lower-level students’ use of rhetoric structures was closer to that of the English experts than the Korean experts and that as their academic level advanced, the Korean graduate students grew closer in proximity to the English experts while shying away from the Korean experts. In line with the results found in the sequence of steps used, these findings suggest that Korean EAP students develop their rhetorical skills in RA as a specific genre, becoming familiar with the English rhetoric. Their academic culture can explain the Korean graduate students’ early acquisition of rhetorical structure characteristic of English RAs at graduate school. The interviews with students also corroborated their practice-based EAP culture. S1 stated, “I have never been provided with direct genre-based writing instruction on how to compose RA introductions in English, including predefined frameworks or templates.” Moreover, the students rarely practiced activities for determining the reader/writer relationship, purposes, or linguistic features in RAs to promote their awareness of the rhetorical dimensions of the genre (Cheng 2007). S2 also confirmed this, adding:

I usually review the literature on my research interest, exposing myself to RA examples or templates. And then, I try to write term papers in the format of RA. After that, I receive individual guidance from my advisor regarding its organization and content and revise it. And then, I resubmit it.

Despite this Korean EAP culture where implicit genre learning occurs (Peters 2011, Thomson 2013), the Korean graduate students have built up rhetorical acquisition characteristics of English RAs and raised genre awareness for their discipline at the early level graduate studies.

5. Conclusion

The present study investigated the features of the process through which writings produced by Korean graduate students at two different levels have been developed with regards to the rhetorical structure compared to RAs produced in English by experts and RAs produced in Korean by experts, when examining RAs as a specific genre. We found that the most noticeable IR difference across the two L1 corpora occurs in the step for presenting the purposes of the research. While the English experts presented the study's purposes in the later section of the introduction, the Korean experts employed many more steps to this function in the earlier section. The result shows a difference between general Korean writing and academic RAs written in Korean, supporting a genre-specific feature of RAs. IR differences were also identified in presenting the necessity of the research and counter-claiming between the two L1 corpora. The Korean L1 corpus revealed general Korean writing features by describing research background with the educational context, investigation, narrowed research topics or historical facts, and rarely using counter-claiming. The findings show that even when writing academic RAs, the Korean experts are influenced by traditional Korean writing styles along an intercultural linguistic continuum.

These IR aspects are noticeably evidenced in explaining the background, necessity, and significance of the research in the two L2 corpora. The Korean graduate students inserted educational situations or features and narrowed research topics related to the research topic, which features general Korean writing. They also showed the feature of the RA genre by claiming centrality after explaining research topics. These results emphasize dynamic and hybrid IR features found in the two L2 corpora. A comparative exploration of the two L1 corpora and the two L2 corpora also revealed that as the Korean graduate students' academic level advanced, their rhetorical structure gradually moved nearer to that of the English experts while shying away from that of the Korean experts. The findings also confirm the dynamicity and hybridity of IR showing features of both general Korean writing and RA genre in English.

This research employed four different frameworks based on the assumption that the four corpora are different in rhetoric and compared the two L2 corpora written by the same Korean EAP students with two L1 corpora written by experts as norms. This approach allowed us to examine the sociocultural contexts for this IR research. Texts need to be understood within the social contexts where they were written that considers the complex and dynamic culture from an IR perspective (Connor 2011). Thus, we employed interviews with authors who wrote Korean L1 corpus, specialists on Korean rhetoric, and focal Korean graduate students who wrote L2 corpora to fully grasp the variation and developmental processes of EAP student writing. In the process of writing of two groups of L2 corpora at the different academic levels, the EAP students encounter writing practice as a “small culture” (Atkinson 2004), in which while being influenced by general Korean rhetoric, they pay attention to the academic writing practices or norms according to purposes of the genre, employ increasingly rigorous research designs, and require varying amounts of revision through student-teacher interaction (Connor 2004, 2011).

Significantly, the writings of the lower-level Korean graduate students *qua* L2 writers were located closer to English than Korean rhetoric. This finding reveals that Korean graduate students have initiated the process of acquiring English rhetorical structures at the early academic level of graduate training due to their academic

cultures where genre awareness of RA in rhetorical structure implicitly arises. Their practice-based academic culture can explain this tendency at graduate school, where the students have few chances of receiving explicit genre-based writing instruction (Cheng 2007). This finding also lay a tribute to the strong EAP pedagogical influences in Korean graduate student writing programs. Thus, this study provides pedagogical approaches with critical pragmatic orientations by bringing in explanatory results based on IR (Harwood and Hadley 2004, Moreno 2013). It also lays the groundwork for the possibility for English L2 writers to acquire rhetorical patterns in academic writing.

We conclude with some implications for L2 EAP writing instruction. Based on our findings, we argue that L2 EAP writing teachers must be more sensitive to IR's dynamic and hybrid aspects, where concrete examples disclose the origins of students' rhetorical difficulties. Moreover, instructors must consider student writing levels and raise students' genre awareness of their rhetorical choices in RAs and how they are used in their specific cultural contexts (Hyland 2007, Jou 2017, Yayli 2011). Culture is more than a superfluous adjunct to understanding academic writing processes. It is at the vibrant core of the student's transitional operations. The most effective pathway to get there will employ genre-based instruction using appropriate genre-oriented tasks and systematic instructional stages along with students' practice-based acquisition. Finally, genre-based writing instruction must be differentiated according to moves/steps appropriate to students' different academic levels.

In conclusion, this research calls for the vigorous application of qualitative methods to accurately investigate the variable and nonlinear *qua* cultural developmental processes of L2 writers. In future research, comparing Korean students' findings with students from other mother tongue backgrounds could provide more general developmental patterns. We also call for more in-depth interviews to reveal further insights into IR aspects and longitudinal designs to examine additional language proficiency levels or move variation.

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Examples in: English

Applicable Languages: English

Applicable Level: All

Appendix A: Extract for the Definitions and Examples of Final Frameworks

Move 2: Necessity or Background of the Research

This move serves the general function of presenting the necessity or background of the research before explaining the present study. It is realized through one or more of the following four steps:

Step 1A drawing the necessity of research area from educational situations or features: In this optional step, the necessity of the research area is drawn by explaining the educational situation or features surrounding Korea. The direct correlation between the educational reality and the necessity of the research area is argued in this step.

[Example] A number of universities in Korea are currently asking students to take liberal arts requirements such as ‘College Composition’ or ‘University Writing’. The reason why many universities are implementing writing instruction for freshmen may generally be **due to the demand for** enhancing their writing skills needed for academic activities at university. (KorL1_22)

Step 1B presenting necessity or background of research through preliminary investigation: Information through a preliminary investigation through the newspaper, statistical data, or press releases instead of the literature review is related to necessity or background of research in this optional step.

[Example] ‘Speech’, ‘Reading’, ‘Composition’, ‘Literature’, and ‘Media Language’ were assigned as elective subjects in the 2007 Korean language curriculum of high school. **After the announcement of the** future curriculum in September 2009, ‘Speech and Composition I·II’, ‘Reading and Grammar I·II’, and ‘Literature I·II’ was assigned as elective subjects in high school in December 2009. The corresponding textbooks to the elective subjects are expected to be employed in the high school classrooms in March 2012. ‘Reading and Grammar’ curriculum was presented in an integrated way, and thus, the corresponding textbooks appeared by an external force, not by the Korean education field itself. (KorL1_70)

Step 1C presenting the necessity or background of research by narrowing down research topics: This optional step narrows down research topics that are explained before and details them relating to the necessity or background of research.

[Example] **Two properties of** cultural content related to Korean education can be considered. That is, one is that it is enjoyed as a digital medium, and the other is that it is a cultural product. First, let’s consider digital media. They do not just mean specific media such as cell phones, online games, animation, etc. They include a number of media such as printed material that can be interlocked with or converted to digital media, oral language, movies, TV, etc. Korean education has investigated changes in adjusting to these digital media as a new environment. (KorL1_28)

Step 1D explaining research background through general or historical facts: This optional step encompasses general or historical facts accepted as established even though their source is not explicitly revealed to explain the research background.

[Example] Rapid growth of science and technology, **which is a noticeable feature of modern society,** is demanding active embracement of concrete knowledge and information for leading amicable lives as human beings from personal lifestyle to the community. At this time, steady learning is essential appropriately to accept new information. (KorL1_12)

Appendix B: Interview Protocols

Interview	Interview protocol
Interview with author of Korean L1	- knowledge of rhetorical functions/strategies of Korean that are different from those of other languages - knowledge of traditional Korean writing style

corpus and specialist in Korean rhetoric	<ul style="list-style-type: none"> - experiences of receiving explicit teaching/instruction on academic writing in Korean - experiences of learning on features of Korean general writing - information on raising genre awareness of RAs in Korean - knowledge of how to write introductions to RAs in Korean - knowledge of frameworks for writing introductions to RAs in Korean - important components in writing introductions to RAs in Korean - own individual ways to write introductions to RAs in Korean - difference between RA writing and general writing in Korean in terms of components - difference between RA writing and general writing in Korean in terms of sequencing - whether the discipline of a RA affects the way its introduction is written in Korean
focal student interview	<ul style="list-style-type: none"> - familiarity with the CARS model - important issues to consider when writing introductions to RAs in English - individual styles in the writing of introductions to RAs in English - motivation for using particular moves/steps - stances during the writing

Appendix C: K-IRA Model

Moves	Frequency (%)	Conventionality
Move 1 Topics of Purposes of the Research	98	conventional
Move 1 – Step 1 presenting and explaining research topics and clarifying related terms related to them	55	conventional
Move 1 – Step 2 presenting purposes of research	94	conventional
Move 2 Necessity or Background of the Research	97	conventional
Move 2 – Step 1A drawing necessity of research area from the educational situation or features	54	conventional
Move 2 – Step 1B presenting necessity or background of research through preliminary investigation	38	optional
Move 2 – Step 1C presenting necessity or background of research by narrowing down research topics	29	optional
Move 2 – Step 1D explaining research background through general or historical facts	13	optional
Move 2 – Step 2 presenting reasons or starting points of research	18	optional
Move 2 – Step 3 reviewing previous research	38	optional
Move 2 – Step 4 presenting limitations of previous research	37	optional
Move 3 The Present Study	90	conventional
Move 3 – Step 1 explaining features, range, or premises of research	41	optional
Move 3 – Step 2 explaining research subjects, participants or resources	22	optional
Move 3 – Step 3 explaining methodology or procedure of research	40	optional
Move 3 – Step 4 explaining research questions or hypotheses	10	optional
Move 3 – Step 5 presenting implications of research	27	optional

Frequency = Number of RAs where each move/step is present