

A CONTRASTIVE RHETORIC STUDY OF ARABIC
AND ENGLISH RESEARCH ARTICLE
INTRODUCTIONS

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Chapter I

Introduction

Studies on the research article (henceforth RA) rhetorical organization have been gaining momentum in the fields of genre analysis and contrastive rhetoric. Such importance is gained from the fact that the RA genre is increasingly used as a means of disseminating specialized knowledge that is needed in modern day businesses and industries. In the previous literature, there are two trends of research on the rhetorical organizations of the RA. First, there are those studies that dealt with issues in the English RA (e.g. Swales, 1981; Crookes, 1986; Swales and Najjar, 1987; Anthony, 1999). The other trend is represented by studies conducted on different languages to investigate cross-cultural issues and possible influences from English speaking cultures on writers of those other cultures (e.g. Lopez, 1982; Duszak, 1994; Cmejrkova, 1996).

Most of the previous research on the RA genre was conducted on the English RA (Swales, 1990) which belongs to the first trend presented above. As a matter of fact, the known research on RA was first initiated in the English speaking cultures from the early 1970s (e.g. Lackstorm et al., 1972; Lackstorm et al., 1973; Inman, 1978; Ewer, 1979). The early research on English RAs was mainly directed to linguistic exponents and devices such as the models, tense, and type of lexis. In the 1980s, however, the focus moved to the rhetorical organization of the RA. The early work of Swales and others,

e.g. Zappen (1983, 1985), in the early 1980s focused on the general organization of certain sections of the English RA.

Thus, the major thrust in this trend since the 1980s was to recognize the acceptable rhetorical organization of different parts of the RA. This recognized pattern of organization was wanted because of its pedagogical implications. Hill et al. (1982) and Swales (1984) identify the pedagogical need for recognizing the RA structure to teach researchers who were non-native speakers of English how to write acceptable RAs in English. Researchers, therefore, set out to analyze all the recognized sections of the English RA. Some researchers concentrated on the introductory section of the RA (e.g. Anthony, 1999; Samraj, 2002), some on the method (e.g. Weissberg, 1984), some on the results and the discussion section (e.g. Hopkins & Dudley-Evans, 1988).

The RA introduction section received the most attention by researchers compared to the other three sections of the English RA. Researchers observed that the introduction section is more difficult to write than the other sections. Thus, a good number of previous studies were devoted to analyzing RA introductions. Further, due to the increasing number of studies on the RA introduction, it was used as a window to reflect on the RA issues at large (Swales, 1990). For example, Crookes (1986), Anthony (1999), Samraj (2002), and others analyzed RA introductions as a means to explore disciplinary and sub-disciplinary variations in RAs.

The other trend of research is concerned with analyzing RA introductions in order to detect cross-cultural variations and the possible influence of English RAs on RA writing schemata of authors of other cultures. This trend of research has been pursued mainly by contrastive rhetoricians for both exploratory and pedagogical purposes.

Researchers in this domain wanted to explore how RA introductions were written in their languages and to see whether the dominating English RA has had effect on their respective writing traditions. For example, Cmejrkova (1996), Ahmad (1997), Lee (2001), Arvay and Tanko (2004), and Shim (2005) analyzed RA introductions produced by native speakers of other than English languages to explore the influence of the English RA, the pedagogical agenda, and the actual organization of the RA introduction in a given language.

The successes that were accomplished by researchers from different languages inspired other researchers from yet unexplored languages to pursue the same trend of research in their respective contexts. Two interesting observations have been noticed from previous studies; one is the diversity and the uniqueness of each culture as authors approach RA introduction writing. This observation is well supported by the accumulating research in the field of contrastive rhetoric (Kaplan, 1966; Hinds, 1983; Kubota, 1992). The second observation is the variant degree to which different cultures were influenced by the norms of English RA writing traditions. Some cultures exhibited more influence of the norms of the English RA such as the Czech (Cmejrkova, 1996) and Korean (Lee, 2001), and some other cultures were less influenced by English norms such as the Chinese culture (Taylor & Tingguang, 1991).

Though researchers set out to discover rhetorical organization issues in many of the world languages, the need to conduct more research in this area is still great. Since each language and culture is different in and outside of itself, the findings of previous research cannot be generalized to other languages and cultures. Thus, each language and culture has to be studied in its own right. The present study, therefore, aspires to explore

the same trend in the Arabic context. First, the study seeks to recognize the general structure of the Arabic RA introduction. Second, the study wants to discover whether English RA norms have actually influenced the way Arab scholars write their RA introductions.

Rationale of the study

To the best of our knowledge and except for Najjar (1990), the Arabic RA rhetorical structure has not been studied. Najjar's study was meant to answer the main question of whether the Arabic language could be used in disseminating specialized scientific knowledge in an RA format. He, therefore, studied the scientific Arabic RA as a whole. In only one of Najjar's dissertation sections, he addressed the Arabic RA introductions. The main purpose of that section was to see if the Arabic writers would prefer one of the two known models of RA introduction organization known in English over the other, the problem solution model and the *create a research space model* (the CARS model). The study found that the Arab writers employed both models of organization. Thus, the study did not explore whether the writers were actually different in their approaches to writing RA introductions. Also, Najjar's study corpus was composed of different fields that might have their specific/unique writing conventions, as I have mentioned in the previous section.

The serious lack of information about Arabic RA organization calls for immediate attention of contrastive rhetoricians and discourse analysts to prepare a research agenda to get to the bottom of this issue. Unfortunately, one apparent reason for neglecting this matter was the open possibility for Arab scholars to publish their work in English and

possibly in other languages instead of their mother tongue. As a matter of fact, many scientific research institutions in the Arab world sponsor or publish their work solely in English such as medical and engineering research institutions (Najjar, 1990).

The present study, therefore, aims to explore the rhetorical organization of the Arabic RA introductions. Since it is the second study on this topic, much of the basic information about Arabic RA is largely unknown. The study comes to fill part of the huge vacancy of knowledge about Arabic RA rhetorical organization. Since the Arabic RA consists of a number of sections that might have special organizations in their own right as a result of different communicative purposes of each section, this study explores only the introduction section since it was found to be the most researched section of the RA in English and other languages due to its importance and difficulty.

The study plans, first and foremost, to explore whether Arabic RA scholars/researchers write their RA introductions differently from their American counterparts. It was observed that the majority of Arab scholars have had their education in different parts of the world especially Western Europe, North America, the former USSR, and the Far East in addition to local scholars who had their education in the Arab world. This huge diversity of education raises the question whether these researchers would write their RA introductions differently. In the case of the scholars of the Arabian Peninsula especially the Arabian Gulf States, the majority of these researchers earned their degrees in Britain and in the United States of America. Actually, the numbers of scholars who earned their degrees in the USA is much greater than the number of scholars who had their education in Britain or anywhere else. Therefore, the population

of this study was restricted to scholars who had their education in the USA and those who had earned their degrees in the Arab world.

The second basic interest of this study is to explore if there were actual differences in the rhetorical organization of Arabic RA introductions due to the difference in educational background. In such a case, a need to identify the rhetorical structure of each group would be of paramount importance and would have implications to the readership of these scholars' production and to writing practices.

The third issue that this study is trying to explore is the question of whether the Arabic RA introductions differ from the English RA introductions. The RA introduction section was chosen for this study because it is the most researched section in the previous literature particularly in the English context and thus has acquired a degree of consensus of how it should be written. And since one group of the population of this study had their education in the USA the similarities and differences carry more significance as they indicate the cross-cultural influence of one linguistic system on another.

The research questions

The questions of this study were formulated based on the rationale outlined above. Thus, the rationale can be summed up in the following three main questions which are as follows:

- 1) Do Arab scholars who had earned their graduate degrees from the USA employ the same rhetorical/organizational moves when they write Arabic RA introductions as Arabs who earned their degrees from the Arab world?

- 2) What is/are the macrostructure(s) of the selected Arabic RA introductions?
- 3) What are the differences and/or similarities between RA introductions written by Arab scholars and US scholars (native English speakers)?

The first and the second questions were answered by identifying two main groups of authors who were recognized based on their educational backgrounds. One group consisted of Arab authors who had earned their graduate degrees in the Arab world. This group is the second largest group of researchers/scholars in the Arab world. The other group comprised authors who had earned their graduate degrees in the USA which is the largest group in the research communities in the Arab world. The two groups' RA introductions were analyzed using the CARS model. The answer to the second question was based on the first one. Two different rhetorical organizations were identified and described.

The answer to the third question was accomplished when a third group of USA authors who were English native speakers was analyzed using the CARS model and then was compared to the other two Arabic groups. Each Arabic group was compared to the USA group individually due to the inherent differences between the two Arabic groups. Thus, the differences and similarities between each Arabic group and the USA group were identified and explained.

Organization of the dissertation

Following this introduction is Chapter II, the literature review chapter. The chapter presents general and specific background information about the topic of this

study. It moves from presenting general knowledge about the field of contrastive rhetoric to more specific knowledge about the Arabic context. Then, the chapter limits its scope to consider the specific area of contrastive rhetoric in which this study is located (genre-specific contrastive rhetoric domain). After that, the scope was further narrowed to review previous studies that were conducted using the same tool of analysis and for more or less the same purposes as the present study. The last section provides a summary of the chapter and introduces the following chapter.

Chapter III is devoted to presenting the methodology that was employed in this study. It starts with the questions and the reasons for conducting the study followed by a description of the study's corpora: the chapter announces the specific criteria for selecting the corpora. Then, it provides a description of the instrument that was used for the analyses of the corpora. Following this, the coding and analysis procedures were presented: two raters were identified, and the way in which they came about their decisions was presented in this section. Then the problematic areas identified by the two raters in the analyses were outlined. The last section summarizes the chapter and introduces the following chapter.

Chapter IV presents the results and discussions of the three questions of this study. The first section presents the analyses of the first Arabic corpus and ends with a summary of general findings and observations about that corpus. The second section presents the analyses of the second Arabic corpus and also ends with a general summary of the findings and observations about this corpus. This is followed by a general comparison and discussion in order to present the answer to the first question. After that

and based on the results and discussion of the first question, the next section is devoted to answer the second research question.

The following section presents the analyses of the third corpus which was considered for this study. That section ends with a summary of the general findings and observations about the results of the third corpus. Then, the subsequent two sections contain comparisons and a discussion of the findings of the third corpus with the two other corpora. The chapter ends with a general summary of the chapter and with introductory statements about the concluding chapter.

Chapter V, the conclusion chapter, is divided into two main sections: a brief summary of the findings and an implications and further research section. The brief summary of the findings section presents the summary of the findings based on the three questions which were put under three separate subsections (one section per question). Following the summary section, the implications of the study findings and further research ideas are provided in the last section.

Chapter II

Literature Review

Introduction

The present study was designed to add to the current state of knowledge about Arabic RA introductions compared to their English counterpart. It was also intended to explore possible effects of different educational experiences of one language to the production of written texts in another. Specifically, the study tries to trace possible evidence of the impact of learning experiences acquired by Arab scholars who earned their graduate degrees from American universities. In this chapter, I will present a review of related theoretical and empirical studies that underlies the main assumptions of the field of contrastive rhetoric and specifically the parts of the field concerning contrasting RA introductions.

Thus, the chapter is divided into a number of sections. The first section provides background information about the field of contrastive rhetoric: definition and theoretical framework and the development of the field over the years. The first section will also include the four major areas of research in this field; the last one of which will be the area considered in this study (the genre-specific domain). The following section will review contrastive rhetoric research in Arabic. Then the genre-specific domain will be discussed including the definition of genre as it is used in contrastive rhetoric studies. Following this, a review of Arabic rhetoric and writing instruction practices in Arabia will be

presented including issues about Arabic the RA. After that the English RA introduction will be reviewed: writing manuals, the two models of analysis and their developments. After that a review of previous studies on RA introductions will be presented. The last section will conclude the chapter and introduce an outline of chapter three.

Contrastive rhetoric: beginning and development

Contrastive rhetoric is defined as “ an area of research in second language acquisition that identifies problems in composition encountered by second language writers and, by referring to the rhetorical strategies of the first language, attempts to explain them” (Connor, 1996, p. 5). The field considers language and writing to be cultural phenomena (Kaplan, 1966, 1986, 1987; Connor, 1996, 1997, 2004). It was initiated by a seminal study conducted by Kaplan (1966) in which he observed that certain ESL students from diverse linguistic backgrounds employed recognizable rhetorical movements when they wrote the English paragraph. He identified five different movements for five language families: English, Romance, Russian, Oriental, and Semitic. That study marked the beginning of the field of contrastive rhetoric. Though the underlying theoretical framework (the Whorfian Hypothesis) had proven to be problematic, the main assumptions about transfer and influence of L1 on L2 writing still hold.

Kaplan’s study was pioneering at all levels, an eye opener to the practices of teachers and ESL students; yet it was criticized by many researchers who followed him in this field. First, Connor (1996, 1997, 2002) and Hinds (1987) observed that the theoretical framework on which Kaplan (1966) justified his study was based on the

theory of linguistic relativity which came under strong attack and was almost proven void (the weak version has reclaimed grounds recently as Hunt & Agnoly (1991) claim). The theory is also called the Sapir-Whorf Hypothesis of linguistic relativity. This hypothesis had two versions: a strong and a weak one. The strong version stipulates that language controls thoughts and perceptions of reality; and thus, different languages dictate thoughts in different ways.

The assumption of the strong version had been proven wrong by psychologists and linguists. To apply Kaplan's assumption on Chinese versus English, for example, the Chinese people's thoughts should move indirectly and move in circles as was reflected in their paragraph writing. By contrast, since English speakers develop their writing in a direct manner their thought must have been direct and to-the-point. The strong version, therefore, was found to be void by psychologists and linguists (e.g. Pinker, 1994; Fishman, 1977; and Clark and Clark, 1977). The weaker version, however, suggests that language merely influences thought rather than controlling it. Many found this version was hard to prove. However, Connor (1996) cited a study by Hunt and Agnoly (1991) in which they suggested that the weak version should be seen as a stance of language performance rather than language competence. The two researchers observed that every language is translatable but with some loss. They provided the counterfactual expression in English (if/then structure) as an example; the structure is absent in Chinese. They observed that since the expression is not available in Chinese, then its absence in Chinese English writings is justified; therefore, language does actually influence thought. Also, Cmejrkova (1996) contends that though there is not enough evidence of strong influence of language on thought, it kept surfacing in the literature every now and then.

In addition to the poor theoretical grounds of Kaplan's study, Hinds (1983) criticized Kaplan for lumping different languages under one group such as "oriental" as if they were one while in fact they were not. He also thought that if one really wanted to see the movements of certain language group writers, he/she should analyze the writings in their L1 not their L2 for L2 production could be influenced by various factors other than L1. Hinds, thus, became the first researcher who shifted the field from focusing on L2 production in the late sixties and throughout the seventies to the focus on L1 production as real representation of certain written traditions of a given language. Another critic (Matalene, 1985) thought that Kaplan's study was ethnocentric because it seems to prefer the English written tradition over other languages and cultural written traditions. Raimes (1991) thought that Kaplan should have considered transfer as a positive strategy rather than a negative one. Thus, Kaplan (1987) reconsidered his position and embraced a rather milder stance claiming that writing differences could be ascribed to different cultures, learning experiences, and writing conventions.

The amount of criticism and later studies developed and pushed the field to take new directions and to use different means. Researchers in the field used different types of data. As Kaplan started by ESL students' paragraphs, Hinds shifted the field and analyzed professional L1 writings (newspaper editorials). Others used developmental L1 writings from different cultures (e.g. Bickner and Peyasantiwong, 1988; Purves, 1988). Other researchers considered analyzing texts in specific genres (e.g. Swales, 1990; Bhatia, 1993). Thus, the field actually branched to cover different areas for different purposes. Connor (1996) identified four major areas of research in contrastive rhetoric which are as follows:

1. Research in contrastive text linguistics: research in this domain emphasizes linguistic devices comparisons. This domain is best exemplified by the work of Hinds (1983, 1984, 1987, and 1990).
2. Studies of writing as a cultural activity: this domain is concerned with the study of L1 developmental writings and how a given culture is embedded in the writings of its members. Then findings in one culture could be compared with others. Purves (1988) is an example in this domain.
3. Classroom-based research: this domain deals with research based on classroom observations of process writing. This is done usually through observing different cultures as they deal with each other in collaborative projects in addition to their individual products. An example of this area is Nelson and Murphy (1992).
4. Genre-specific research: this area deals with professional and academic writings like the research article (RA). This area is best exemplified by the work of Swales (1990).

The present study will be situated within the fourth area/domain of contrastive rhetoric where Arabic RA introductions will be compared to English RA introductions. This particular point will be discussed in a separate section below. The following section will review previous contrastive rhetoric studies in Arabic.

Contrastive rhetoric studies in Arabic

In contrastive rhetoric studies including those of Arabic, two kinds of studies are found. The first kind consists of those studies conducted by nonnative applied linguists of a target language, and the second comprises those studies done by native speakers of that language. The differences between the two groups of researchers have been discussed and noticed in the literature. Kubota (1992, 1997) found that Hinds, who was an American applied linguist, was incapable of interpreting the features found in Japanese writings as they were intended by their authors. Similarly, Connor (1996) and Shaikhulislami and Makhlof (2000) warned that nonnative speakers of a language may not be able to interpret the observations found in their research about different cultures and languages. They asserted that huge backgrounds are needed. Thus, contrastive studies in Arabic feature the two varying points of view. The first is the point of view held by non-Arab applied linguists like Kaplan (1966, 1972), Ostler (1987), and Harfmann (2004). The second is the point of view of Arab applied linguists who responded mostly to the non-Arabs' propositions about the language and the culture of Arabic. Thus, I will review the non-Arab applied linguists first and then the Arabs' studies.

Arabic was among the first languages studied in the field of contrastive rhetoric in Kaplan's (1966) seminal study. In that study, he observed that "paragraph development is based on a complex series of parallel constructions, both positive and negative" (p.47). Kaplan identified four types of parallelisms: synonymous, synthetic, antithetic, and climatic. He claimed that the four types were found in his corpus, and they were

practically responsible for the apparent awkwardness of Arab ESL writings. This degree of parallelism and coordination was considered to be responsible for the zigzag movement of the Arab ESL paragraphs. He claimed that English readers consider mature writing to be subordinated rather than coordinated.

Later, Ostler (1987) extended the work of Kaplan employing basically the same stance about Arabic coordination and parallelism. In her study, the main observation was that Arabic essays reflect the forms found in classical Arabic. She compared and contrasted the rhetoric of Arabic as opposed to English. She claimed that English developed naturally from coordination and parallelism [as markers of orate societies (underdeveloped)] to deletion and subordination [as markers of civilized, literate societies]. As for English, it was once an oral society exhibiting oral traits of repetition, parallelism and the rest of the oral society's linguistic features. As the widespread use of print emerged and the society became literate these oral characteristics disappeared. Ostler marked the beginning of the use of deletion and subordination in English by the beginning of the twentieth century.

On the other hand, Arabic still shows the trait of oral society traditions; it did not develop like English. The use of parallelism and coordination were found to be evident in the essays studied by Ostler. Ostler claimed that Arabic strives for balance and that was fulfilled by the use of parallelism and by *saj* (a stylistic strategy used to make rhyming endings of strings of utterances). She found that the T-Unit test that she ran showed Arabic essays to have more coordination and thus more sentences as opposed to more subordinations and longer sentences in English. The socio-cultural explanation given for those results was that Arabs are very attached to classical Arabic, the language

of the holy Qur'an which is a divine oral text that was transcribed in written format; and therefore, they did not want to develop literate characteristics in their L1 writings and consequently in their L2 production . Harfmann (2004) made almost the same claim in terms of the use of parallelisms and coordination. After he analyzed 20 school essays in Arabic and compared them to 20 essays in German, he claimed that Arabic employed coordination, repetition, and parallelism to achieve cohesion as well as to appeal to the attention of the reader. He contended that such use was an oral trait. Yet, the results also showed that "Arabic essays had a stronger tendency toward the written mode than the German essays" (Harfmann, 2004, p. 45).

The second type of contrastive rhetoric studies in Arabic was those studies done by Arab applied linguists. All the studies responded to main claims about Arabic made by western linguists. The general impression taken is that the authors were on the defensive most of the time. An objective reader of their production would not miss the angry emotional tone. The basic argument was that western linguists failed to account for the real reasons for using such apparent oral structures in written Arabic; the westerners thought Arabs did not know how to evolve to the literate mode and thus were backward, and the Arabs were saying that westerners did not know what they were talking about. Similar anger could be observed in Kubota (1997) and Connor (1996).

Sa'adeddin (1989) and Shaikhulislami and Makhlof (2000) claim that the western linguists missed the point by explaining oral traits observed in the written Arabic to be tied to the Holy Qur'an or the classical Arabic (the oral era). In fact, oral traits are used to achieve certain rhetorical purposes. Sa'adeddin maintains that the use of such structures signifies closeness and intimacy with the readers which have implications in

communicating certain messages that the visual mode (the literate mode) would not be able to achieve. Also, Al-Jubouri (1984) found that repetition is used as strategy for making arguments at three levels: the phrase, the clause, and the larger discourse.

In addition, Arab linguists contend that the western linguists did not cover all possibilities in the written Arabic. Sa'adeddin (1989) asserts that the linear development of argument has been available in scientific and formal prose since the eleventh century. Also Shaikhulislami and Makhlouf observed that students wrote linearly when they were given sufficient time. Also, they claimed that the audio-lingual approach (oral skills emphasized) which is still widely used in the Arab world might be responsible for the oral traits in the EFL/ESL students' writings. Thus, all Arab linguists disagreed with westerners in linking the oral traits found in Arab students' writings to the classical Arabic and/or to the holy Qur'an. Also, they insist on the availability of other options for Arab writers, not only those observed by westerners.

Genre and contrastive rhetoric

As explained in the previous section, genre-specific studies in contrastive rhetoric comprise a whole research area that is growing rapidly. The area was a natural expansion of the field to respond to the needs of researchers who are nonnative speakers of English. The area helps them read, write, and interact with research that is dominantly written in English (Swales, 1990; Cmejrkova, 1997; Duszak, 1994; Connor, 1996, 1997, 2004). The basic task of contrastive rhetoric in this domain is to compare production of one specific genre (e.g., RA) that was written in one or more languages and to see how they differ and for what reasons. In practice thus far, most of the studies in this domain were

done by examining English texts that were written by nonnative speakers of English (e.g. Shim, 2005; Arvay and Tanko, 2004), and only very few studies were conducted by examining L1 texts from a given genre and then compared to their English counterparts (e.g. Lee, 2001; Jogthong, 2001). The question is what is genre to begin with? In the following paragraphs the definition of genre will be presented and then some of the previous studies in this domain will be reviewed.

The most cited definition of genre in the literature is provided by Swales (1990) in his renowned book *Genre Analysis: English in academic and research setting*. In that book, he defined genre as follows:

A genre comprises a class of communicative events, the members of which share some set of communicative purposes. These purposes are recognized by the expert members of the parent discourse community, and thereby constitute the rationale for the genre. This rationale shapes the schematic structure of discourse and influences and constrains choice of content and style.

Communicative purpose is both a privileged criterion and one that operates to keep the scope of a genre as here conceived narrowly focused on comparable rhetorical action. In addition to purpose, exemplars of a genre exhibit various patterns of similarity in terms of structure, style, content and intended audience. If all high probability expectations are realized, the exemplar will be viewed as a prototypical by the parent discourse community. The genre names inherited and produced by discourse communities and imported by others constitute valuable ethnographic communication, but typically need further validation (p. 58).

Genre, therefore, works as a medium that serves the communicative purposes of specific discourse communities. The concept of discourse community was also defined in Swales so that it would be distinguished from the concept of the speech community. Swales identified six characteristics that help recognize a group of people as a discourse community; those six features are quoted below:

1. A discourse community has a broadly agreed set of common public goals
2. A discourse community has mechanisms of intercommunication among its members.
3. A discourse community uses its participatory mechanisms primarily to provide information and feedback.
4. A discourse community utilizes and hence possesses one or more genres in the communicative furtherance of its aims.
5. In addition to owning genres, a discourse community has acquired some specific lexis.
6. A discourse community has a threshold level of members with a suitable degree of relevant content and discursal expertise (Swales, 1990,pp. 24-27).

Thus, examples of genres would include RAs, grant proposals, conference abstracts, newspapers editorials, research proposals, etc. Bhatia (1993) adds the concept of subgenre in which a genre may have different formats for different purposes, for

example, an RA as a genre has different formats or subgenres for different purposes like a survey article versus a state-of-the-art one.

The genre-specific research area in the field of contrastive rhetoric employs genre as it is identified above. Many researchers have already conducted research in this area and found eye-opening results that shed light on different cultures and the role/function of certain genres in different cultural contexts. Examples of such research comprise the work of Trikkonen-Condit (1996) who studied press editorials from the US, Finland, and the UK. The findings show how Finns tend to seek consensus and to look for acceptable ground to most people. On the other hand, US writers tend to argue for specific points. The researcher concluded that because of the size and diversity of the USA building consensus is practically not possible. In Finland, however, the audience is much smaller and homogeneous; and therefore, building consensus is required. Connor (2004) compared job application letters written in English by a Flemish applicant and by a US applicant. She observed that the two writers approached the task differently. The Flemish writing was short and to the point while the American applicant wrote a longer and more detailed letter despite the fact that most of the information presented was available in the enclosed résumé.

The cultural differences noticed between writers from different cultures are well attested to in the literature. However, since the genre-specific domain is relatively new, the number of research studies is limited. The most researched genre among the genre-specific research area is the RA and particularly the RA introductions. Since this dissertation is presenting a contrastive rhetoric study on RA, I will review the related previous RA studies in a separate section designated specifically for it.

Arabic rhetoric

Arabic writing has been around for more than 1600 years. The Qur'an is the most important document/book that has been preserved over these years. This book prompted Arabs and new Muslims as Islam expanded rapidly across the world to study its language, rhetoric, and develop huge amounts of scientific discussion. A look over the type of debate that used to take place among Arab linguists particularly during the Abbasid ruling era (from the eighth to the thirteenth century) is astonishing as most of the points discussed are still pretty much in use today. In this brief review, I will restrict myself to the relevant points that have significance to the present study which is rhetorical theory and modern writing educational practices in Arabia as the present study seeks to discover possible effects of educational experiences.

As for rhetoric, Arab rhetoricians were fascinated by the profoundness of the language of the Holy Qur'an and thus started to analyze it to understand the message and to explain the inherent beauty that it imparts to its readers. They initially agreed on the constituent parts of discourse; they started with the utterance and its meaning (cf. Schiffrin, 1994). Some of them like Al-Jahiz (who died in the first half of the tenth century under a pile of books that fell on him in one of Baghdad's libraries) believed that the utterance constitutes the essence of rhetoric and is then followed by its meaning. Others believed that the two aspects, the utterance and its meaning, occur at the same time and should not be separated. One prominent linguist by the name of Abdulqahir Al-Jarjani (died around 1090) emerged and had a new theory of rhetoric that basically superseded the utterance meaning combination argument. The underlying assumptions of that theory as Dahman (2000) explains are that "language consists of a group of

interrelated relationships that bears a texture of feelings. This texture is the overall meaning of the message not just its constituent parts: utterance and its meaning” (p. 101). Thus, Al-Jarjani made the first ever attempt to make the whole picture of a text count as an inseparable part of text analysis which is what is called today coherence. Further, Al-Jarjani delved deeper in his theory to include the importance of cohesive devices between utterances so they make a texture that is built on each other not merely words put next to each other (Radwan & Al-Furaih, 1997). Thus, Al-Jarjani’s theory of rhetoric comprised the following: the utterance/form, its meaning, and the new meaning conveyed by the whole text. He acknowledged that any of the three elements, though important and indispensable, may not stand alone; only the combination of all would make sense of the text.

Modern Arabic writing instruction

The second part in this section is modern writing practices in Arabia. In Arabia, the teaching of writing composition starts at the fourth grade and continues throughout high school. At the university level, composition is a required course; it is called Arabic Composition which is comparable to freshman composition in America. I will discuss how writing is taught and the main underlying principles of its development. The theory that underlies the writing practices consists of three parts: first, language is controlled by thought; second, writing is a talent; and third, clear ideas and conveying meaning is the responsibility of the writer (Radwan & Al-Furaih, 1997). As for the first part, (would-be) Arabic teachers in Arabia (no specialization option in writing is available) still hold the belief that language controls thought and vice versa, Whorfian views. Thus, those

teachers are prepared to teach students how to have their language corrected because confused language reflects perplexed thoughts and, therefore, produces perplexed writing.

The second principle is that writing is a talent. This entails that writers are not restricted to certain prescribed structures when writing specific genres. Within this framework, writers should be given the freedom to exhibit their creativity and not be restricted by prescribed, learned rules of a rhetorical structure. However, the writers are still required to master rules of grammar and good vocabulary. Thus, teachers teach stylistics in Arabia. The third principle is that writers are responsible for making their ideas as clear as possible; the basic premise is that the writer is the loser if he/she did not get her ideas across to the reader. Teachers usually make it clear that a writer should have a plan for writing and make sure that he/she uses the accurate vocabulary, write grammatically correct sentences that are concise and clear, and make accurate use of punctuation marks (Radwan and Al-Furaih, 1997).

Having reviewed teaching practices in Arabia, it is imperative to assert that there is no specific training for writing RAs. Two main channels that researchers use to assist in writing acceptable RAs: comparison to earlier published RAs and style sheets of specific journals. As for the first venue, the general practice according to Dr. Al-Furaih, a professor of Arabic language at King Saud University, is that each field of study had unwritten conventions as far as the macrostructure of the RA is concerned. He asserted that researchers compare their products to earlier accepted RAs before submission in addition to abiding by the style sheet of the target journal (usually one-page long in most Arabic journals). He identified seven major sections of the Arabic RA in his field, as

follows: introduction, purpose of the study, the importance of the study, questions of the study, methods and procedures, results, and recommendations and suggestions (personal communication).

As for the style sheets of journals in Arabia, most of them consist of general instructions. The Journal of King Saud University, for example, has a one-page long style sheet. It starts by identifying the types of genres accepted for publication: RAs, book reviews, forum, RA reviews, and brief RAs. Then, it provides ten instruction items many of which are mechanical directions, e.g., to make the tables and figures fit the size of the journal's papers, include a disk, pages to be numbered, etc. However, some other instructions are somewhat comparable (in content not in the degree of elaboration) to those found in the APA manual, namely the description of the abstract, the references, and notes formats. One item of the ten states that abstracts are required for certain genres and those abstracts should be both in English and Arabic and no longer than 200 words, no further prescriptions. The references requirement was the longest of the ten items; it provides specific brief descriptions of how to cite periodical/journal RAs and books in the text. The following is a quotation of the exact instructions:

Under the "References" heading at the end of the manuscript all references are to be presented sequentially in the following fashion:

a) Periodical citations in the text are to be enclosed in on-line brackets, e.g. [7]. Periodical references are to be presented in the following form: reference number (in on-line brackets []),

author's surname followed by a given name and/or initials, the title of the article, title of the periodical (italicized), volume, number, year of publication (in parentheses), and pages.

b) Book citations in the text are to be enclosed in on-line brackets including the page(s), e.g., [8, p. 16]. Book references are to include the following: reference number (in on-line brackets []), author's surname followed by a given name and/or initials, title of the book (italicized), place of publication, publisher, and year of publication.

When a citation in the text is used to refer to a previously cited reference, use the same reference number and include the appropriate page numbers(s) in on-line brackets. Latin abbreviations such as: *op. cit.*, *loc. cit.*, *ibid.*, are to be avoided (King Saud University Journal Style sheet).

The third sort of detailed instruction is how to use notes inside the text. The sheet prescribes that the writer should use a superscript number above the keyword in the text and then put the corresponding number next to the note in the footnote at the end of the same page.

The Arabic RA, therefore, is not restricted by many rhetorical rules compared to its English counterpart. However, the Arabic RA, as we have seen above, is still produced in a way similar to some extent to that of the English RA. The reason for such resemblance is explained in Najjar (1990). Najjar claims that the RA in the Arab

world is a borrowed genre from the English speaking countries in most part and in fewer cases from French. The borrowing happened as a result of the direct contact with the English culture during the colonization era in addition to Arab scholars who had their education in the West and came back to publish their work in an RA format. Since Najjar is the only previous researcher who tackled the RA in Arabic, I cannot afford to disqualify his claim because there is not any other source of information as to how and when Arabs started writing in RA formats. In the following sections, I will restrict my review to English RA introductions because the amount of literature on the English RA in general is huge and beyond the scope and purpose of this study. I will also postpone the only study on RA introductions in Arabic to be reviewed along with other studies of different languages since they used the same model of analysis.

English RA introductions

There are two sources of information available to help in writing the English RA (here only the introduction section of the RA will be addressed): writing manuals and writing research findings. Each source approaches the same topic differently; the writing manuals prescribe to the writer how to write an RA introduction. On the other hand, research findings describe how writers tend to write their introductions. Though the two sources may have a point of interface, and that is when writers abide by the manuals and the researchers describe the written product that was essentially an artifact of the same source (the manual), the two sources are considered independent of each other as was suggested by Lee (2001). The relationship between the two sources could be seen as we review the historical evolution of both sources.

In English, *The Publication Manual of the American Psychological Association* (the APA manual), *the Modern Language Association Manual* (the MLA manual), and *Chicago Manual of Style* are considered the leading writing manuals. Authors have to consult one of them in order to produce an acceptable RA. The two manuals prescribe almost the same elements that have to be provided in an RA. For brevity, only the APA will be reviewed as an example.

The APA manual was first prepared in 1928 by businesspeople and editors of psychological and anthropological journals who met and agreed on a set of writing instructions that guide publications in their journals. The report of that meeting was first published in a nine page article in 1929 in *Psychological Bulletin*, which was published by the American Psychological Association. In 1952, the manual expanded to become 60-pages long as a result of revisions and additions. Now, the fifth addition (2001) is published in a 439 page book. The manual depends on three sources of information that informs its instructions: the psychological literature, the editors', and authors' consensus (usually in meetings, as it happened in 1928), and authorities in the publication business. Thus, writing manuals and research findings are essentially two different sources as Lee (2001) contends, though closely related.

Writing RA introductions according to writing manuals is done through preserving three logically connected elements: topic introduction, literature review, and introducing the study at hand. The three elements should function as follows: first, the introduction has to introduce the topic and justifies its importance to the audience. Second, it has to develop sufficient background to acknowledge what has been done in

the topic. The third element is that the writer has to articulate the aims and the justifications of the study/RA being presented.

The APA Fifth Edition, as an example of the two manuals, identifies the three elements under separate boldfaced subheadings which are as follows: *introduce the problem, develop the background, and state the purpose and rationale*. Under *introduce the problem* subheading, the manual stipulates that the introduction in general should not be labeled. The introduction is identified by its position in the beginning of the RA. The basic goal of this section in the introduction is to give the reader a “firm sense of what was done and why” (APA Fifth Edition, p 16).

The second subheading was to provide a literature review of the topic presented. The manual prescribes how this element of the introduction should be conducted. First, the literature review should avoid becoming exhaustive of all past knowledge; only past literature with direct and high relevance to the present research should be included. The writer should assume that readers are knowledgeable of the field and they do not need a complete historical account. Also, under this subheading, the manual warns against summarizing any details from earlier studies that are not relevant to the specifics of the topic at hand: a summary should only include major findings, conclusions, and maybe pertinent methodological issues that might have certain significance to the present study. In addition, the manual requires writers to make the connection between earlier studies and the one at hand. It specifies also, that the writers should provide clear and balanced accounts of all controversies found in the literature.

The third element prescribed in the APA manual is to *state the purpose and rationale* of the study. Under this subheading, the manual prescribes that the writer

should be ready at this point to explain his/her solution to the problem identified in the first section. Thus, the writer should state his/her hypotheses and to explicitly provide justifications for each hypothesis.

Writing research findings particularly in the field of English for academic/specific purposes is the second source of information after the writing manuals described above. These findings provide a descriptive account of the English RA; and thus, contribute to the development of the present understanding of the English RA. The RA introductions received most of the emphasis compared to the other sections of the RA (Swales and Najjar, 1987; Swales, 1989; Najjar, 1990). As a result, two major models of the rhetorical structure of the English RA introduction were recognized: a problem-solution model and create a research space model “CARS model”. The two models developed overtime, but the former gained more prominence than the second. A brief history of the two models will be discussed in the following paragraphs.

The problem-solution model

The problem-solution model was developed as an extension of different theories of rhetoric that typify scientific research, but those theories treated the model to cover the entire scientific RA (Najjar, 1990). This holistic approach of the model created a problem of actual application as discussed by Najjar. The first who applied this model on RA introductions was Zappen (1983, 1985). Zappen (1985) identified an earlier model that is called The Problem-Solving Approach. This older model was first “prescribed as a general pattern by Day... the pattern has four steps:

1. presenting the nature and scope of the problem investigated, first and with all possible clarity;
2. reviewing the pertinent literature, to orient the reader;
3. stating the method of investigation and, if necessary, the reasons for the choice of a particular method; and
4. stating the principal results of the investigation (Zappen, 1985, p 96).”

In response to two problems of the problem-solving approach, namely its lack of providing a standard of judgment and inability to provide explicit judgment, Zappen proposed his Goal-Oriented Approach to writing RA introductions. His proposed model/approach was based on Toulmin’s (1972) study. Toulmin concluded that a scientific problem could be identified from the equation “scientific problems = explanatory ideals – current capacity” (Zappen, 1985, p 99). Zappen applied the same principle on RA introductions as a means to identify research problems. His equation is as follows: the goals of a field minus its current capacity equal its outstanding problems.

The new approach has five steps:

1. establishing the goal of a particular scientific or technical discipline;
2. reviewing an existing body of research directed toward the goal;
3. identifying an outstanding problem of the discipline;
4. identifying selection criteria of the discipline applicable to any proposed solution to the problem; and
5. presenting a solution to the problem that meets the criteria (Zappen, 1985, p 98).

This goal-oriented model, as Zappen put it, is an extension of the problem-solving model. It solves the two problems identified in the problem-solving approach. This approach provides a standard of judgment through the fourth step and explicit judgment in the fifth step. However, the new approach created a new problem: it does not provide a sense of objectivity as the problem-solving approach, a problem that is acknowledged by Zappen himself.

Critics of Zappen's model, which they agreed to name a problem-solution model instead of goal-oriented approach, like Najjar and others, believe that Zappen's model was idealistic and too abstract to be applied by everyday researchers (Najjar (1990). Najjar contends that a researcher who wants to conduct a study in a specific field at a specific time cannot possibly set a goal for an entire discipline as the first step in the model suggests. Also Lee (2001) adds that the model fails to provide clear description of the steps and possible linguistic exponents whereby the model's steps might be realized. This abstractness might have been the reason for this model to lose prominence to another model that is more applicable which is the CARS model. Furthermore, Swales (1990) observes that the problem-solution model is difficult to fit to the RA introductions, and if it does, it would fit only a few introductions, but the model may not be generalized. The reason given was that researchers avoid foregrounding their research problems/questions at the outset of their introductions as the problem-solution requires in the first step. To Swales, mainly the popularization of scientific reports should follow this approach.

The CARS model

The second model for analyzing RA introductions is the CARS model. Presented as an alternative to the problem-solution model, the model was first created by Swales in 1981 as an attempt to account for the rhetorical organization of RA introductions. In that study Swales collected forty-eight articles from three major disciplines and then selected sixteen of them for rhetorical analysis. The three fields were biology/medicine, social sciences, and physics. He found that there was a pattern common to all of the articles and across the three different fields. The recurring pattern was then identified as rhetorical moves of RA introductions. Table 1 shows the four identified moves.

Table 1: Swales 1980 four-move model, p. 21a.

Move 1	Establishing the field by: a) Showing centrality b) stating current knowledge c) ascribing key characteristics
Move 2	Summarizing previous research
Move 3	Preparing for present research by: a) indicating a gap b) question raising c) extending a finding
Move 4	Introducing present research by: a) giving the purpose b) describing present research

The model is set to describe how researchers approach the task of introducing their research to their respective discourse communities. According to Swales and Najjar (1987), researchers' first rhetorical task was to convince their readership that the research presented is important to the current interest. This is accomplished by showing centrality of the topic and/or showing that the topic is relevant to the current or evolving knowledge

(accomplished in Move 1). Move 2 reviews previous relevant research for two reasons: to show the current capacity of research and to prepare a place for the ensuing study in the larger context. Move 3 indicates where exactly the present study should fit the incomplete research reviewed in Move 2. This is done by indicating a gap, by raising a question, or by showing that a new perspective is required. Move 4 comes to present the answer for the problem identified in Move 3, the space occupying solution.

The model attracted immediate attention of researchers who started experimenting on various RA introductions. The model was found deficient in some areas. Lopez (1982), Bley-Vroman and Selinker (1984), and Crookes (1986) had found that Move 1 (establishing the field) and Move 2 (reviewing previous literature) were inseparable when they analyzed their corpora. Also, Crookes (1986) found that different disciplines might require certain adjustments of the model: he contends that social sciences require longer introductions than hard sciences. Thus, longer introductions require a degree of cycling between Move 2 (previous research review) and Move 3 (preparing for present research) as a means to provide the reader with a) sufficient background and b) more convincing argument for the significance of the place the present study would occupy. Crookes (1986) also suggested adding a move that accounts for the general, non-referenced statements that are usually found in RA introductions which may not fit under any of the four moves suggested in Swales (1981). This move was also suggested by Lee (1999) as she compared Korean RA introductions to English ones. She observed that Koreans made very general statements that cannot be ascribed to any of Swales' moves.

Acknowledging the shortcomings and the observations of the model's critics, Swales (1990) modified the four-move model. Swales explained that the apparent reason

for the failure of the 1981 study to capture the inseparability of Move 1 and Move 2 is the fact that the corpus of the study consisted of short introductions (100-500 words). Therefore, he subsumed Move 2 (literature review) under Move 1 (establishing the field). Thus, the model became a three-move model instead of four. He also used the ecological analogy to capture most of the RA introduction's features: instead of establishing the field, he substituted it with establishing a territory; instead of preparing for present research, he made it establishing a niche; and instead of introducing the present research, he termed it occupying the niche. Table 2 shows the new modified CARS model. In the next paragraphs the modified version of the model is presented.

Table 2: Swales Model, 1990 p. 141

<p>Move 1 Establishing a territory Step 1 Claiming centrality and/or Step 2 Making topic generalization(s) and/or Step 3 Reviewing items of previous research</p> <p>Declining rhetorical effort</p> <p>Move 2 Establishing a niche Step 1 A Counter-claiming or Step 1 B Indicating a gap or Step 1 C Question-raising or Step 1 D Continuing a tradition</p> <p>Weakening knowledge claims</p> <p>Move 3 Occupying the niche Step 1 A Outlining purposes or Step 1 B Announcing present research Step 2 Announcing principal findings Step 3 Indicating research article structure</p> <p>Increasing explicitness</p>
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Description of Move-Step

The Move-Steps, as Swales (1990) put them, are rhetorical constructs that could be achieved by a word, a phrase, a clause, a sentence, or a paragraph or even more used in certain context to achieve the prescribed goals of the given discourse community. What really counts is the function performed by a given Move-step using certain linguistic exponents. In spite of this fact and for practical reasons, most previous research adapting this model used the sentence as the basic unit of analysis.

The form (linguistic exponents) and the meaning amalgamate together to achieve the rhetorical function of RA introductions (Ahmad, 1997). Thus, each Move-Step has to have identifiable linguistic forms. The three moves are as follows.

Move1: Establishing a territory:

The purpose of this move is to establish the present research in the eyes of the respective discourse community as it relates to the field of study. This move should attract attention and prove the topic relevance. It could be realized by one or more of three steps: first, by claiming that the present research is significant and central/nonperipheral to the respective field. This step comes usually at the outset of the introduction. The linguistic forms usually used to fulfill this function are as follows:

Recently, there has been a spate of interest in how to ...

In recent years, applied researchers have become recently interested in ...

Recently, there has been wide interest in ...

The explication of the relationship between ... is a classic problem of ...

Knowledge of ... has a great importance for...

The study of ... has become an important aspect of ...

The effect of ... has been studied extensively in recent years.

Many investigators have recently turned to ... (Swales, 1990, p. 144)

The second step in this move is *making topic generalization*. It provides general statements about the field. This step aims at providing readers with one or both of two

pieces of information: information about general knowledge or practice and/or general statements about phenomena without providing any kind of citations. The forms frequently used to achieve the general knowledge or practice as cited in Swales are as follows:

The aetiology and pathology of ... is well known.

There is now much evidence to support the hypothesis that...

The ... properties of ... are still not completely understood.

A standard procedure for assessing has been ...

Education core courses are often criticized for... (p. 146)

As for statements about phenomena, Swales found the following recurring forms:

... is a common finding in patients with ...

An elaborate system of ... is found in the...

English is rich in related words exhibiting 'stress shifts'

There are many situations where... (p. 146)

The third step in this move is *reviewing items of previous research*. The basic function of this step is to provide at least one or two citations relevant to the present study. Swales considers this step obligatory in Move 1. In this step, claims or findings are cited with their authors. The basic function is to give the reader an opportunity a) to have background knowledge and b) to see the relevance of the present research as it fits into

the previous body of literature. Swales identified two types of forms of citations: integral and non-integral. The integrals are the ones in which the author's name cited is part of the actual sentence, for example, *Swales (1990) said that....* The non-integral, however, is put between two parentheses or referred to by another device of another convention. The key is that the citation is independent from the actual sentence of the present research, for example, *the CARS model did not account for general non-referenced statements in Korean RA introductions (Lee, 1999).*

Move 2: Establishing a niche

The main goal of this move is to create a space for the present research. This space/niche should be created in the past literature (this is not always the case as we will see later in this chapter). The basic premise is that the literature is incomplete with regard to the present topic as attested by the identified niche. The move is usually realized by one option of one four-option step. The first option is Step1A: counter claiming. This step shows that the previous research is not correct, and that would create a niche for the present research to substitute the previous claims or findings. The second option is Step1B: indicating a gap. This step shows that the previous literature has a gap which would be occupied by the present research. The third option is Step1C: question-raising. This step challenges certain claims in the previous studies or merely asks questions regarding concerns raised from the review of the literature. The fourth and the last option is Step1D: continuing a tradition. The aim of this step is to show that the niche is not about challenging any part of the previous research but rather building on it and extending it.

Step 1C and Step 1D are usually used when weaker research claims are made: Swales describes them as minor. The first two (Step1A and 1B), however, are considered the stronger and widely used. The linguistic exponents that usually recur in this step are adversative connecting expressions/words like *however, conversely, nevertheless, yet, unfortunately*, etc. In a survey of Move 2 instances in 100 RA introductions from diverse fields (composition, physics, geology, and psychology), Swales found that the frequency of linguistic forms could be grouped in eight categories. These categories are as follows: negative and quasi-negative quantifiers, lexical negation, negation in the verb phrase, questions, expressed needs/desires/interests, logical conclusions, contrastive comments, and problem raising. Table 3 shows these categories and their frequencies in Swales's survey. The table shows that the two form categories *negative and quasi-negative quantifiers* (28 times) and *lexical negation* (26 times) constitute more than half of the instances in the corpus. This provides an insight in what to expect and what to look for when writing or analyzing Move 2.

Table 3: Summary of Swales Survey of Move 2 instances

<u>Category name</u>	<u>forms</u>	<u>frequency</u>
1. negative and quasi-negative quantifiers	no	12
	little	7
	non	4
	few /very few	4
	neither... nor	1
2. lexical negation	verbs (fail, lack, overlook)	15
	adjectives (inconclusive, misleading, limited)	7
	nouns (failure, limitation)	3
	other (without regard for)	1
3- negation in the verb phrase	not	14
	rarely	1
	ill	1
4- questions	direct	6
	indirect (ex. a question remains whether...)	2
5- expressed needs/ desires/interests	there is a need/desire/an interest to...	8
6- logical conclusions	must	3
	seem/appear	2
	would expect	1
7- contrastive comment	...rather than...	8
	...as oppose to...	
	with scant attention to	
	much less is known	
8- problem raising	the key problem is	2

* Adapted from Swales (1990)

Move 3: Occupying the niche

The main function of Move 3 is, as the name stipulates, to occupy the space/niche that has been created in Move 2 and, therefore, justify the research to be presented. This move follows Move 2 immediately. It was observed that the move usually answers the type of niche found in Move 2: if the niche was a question, Move 3 would be an answer;

if it was a gap it would provide an argument that shows how that particular gap would be filled and so on. The move is realized through two versions of Step 1 which is obligatory and possibly two other optional steps. Step 1 is characterized by absence of references and direct referring to the present study. Swales (1990) cited a number of examples of linguistic exponents of this step:

This paper reports on the results obtained...

The aim of the present paper is to give...

The present study extends...

We now report the interaction... (p. 160)

As is clear from the examples, the tense used is present. This gives the study introduced a sense of currency. Though the past tense is possible, it is rarely used. The past tense may be used only when the reference to the study was about the type of inquiry (ex. This experiment was to discover...). However, if the reference was to the genre (e.g. This report..., this paper..., this article...), the tense would be limited to the present tense.

The other two steps are optional. Step 2 is concerned with announcing principle findings. Swales and Najjar (1987) analyzed 116 article introductions from physics and educational psychology. They found that some type of introductions which they called informative introductions do sometimes allow this step. They observed that disciplinary factors affect such decisions. In physics introductions, they found that 45% of them had actually this step while in educational psychology the step appeared only in 7% of the corpus. Thus, the use of this step is dependent to some extent on the specifics of the field

rather than on the RA genre at large. As for Step 3: indicating research article structure, it is found to be rare in the corpora analyzed by Swales. However, Cooper (1985) found this step in 10 out of her 15 RA corpus. The apparent reason was that the field of which those articles were selected (computer technology) was relatively new; and therefore, a guide to the structure of the RA was expected and needed.

Overview of earlier studies that used the CARS model

Two types of studies were found in the past literature that used the CARS model. Each type is characterized by the purpose of the respective study. The first type consists of those studies that used the CARS model to either verify its reliability and/or to explore disciplinary variations. This type of study was usually conducted in English. The second type of studies comprises those cross-cultural studies where other languages were studied and compared to English. In this case, the CARS model is used as a measurement against which other RA rhetorical organizations from various languages are tested. The CARS model is assumed to be a valid and reliable tool that captures the structure of the English RA introduction. Table 4 provides information about those studies. The table is organized chronologically. The two types of studies will be reviewed in the following paragraphs.

Table 4: Previous Studies that used the CARS model

Author(s)	No. of Research Introductions	Articles Areas of research	Language(s)
1. Swales (1981)	48	Mixed	English
2. Lopez (1982)	21	Mixed	Spanish
3. Crookes (1986)	96	range/ differentiated	English
4. Swales and Najjar (1987)	110	Physical Science and Ed. Psychology	English
5. Najjar (1990)	48	agriculture	Arabic
6. Taylor and Tingguang (1991)	31	Hard Sciences	English & Chinese
7. Duszak (1994)	40	Language	English & Polish
8. Bisenbach-Lucas (1994)	12	Sciences	English
9. Cmejrkova (1996)	30	Mixed	English & Czech
10. Ahmad (1997)	62	Sciences	Malay
11. Anthony (1999)	12	Software Engineering	English
12. Lee (2001)	116	EFL/ESL Education	Korean & English
13. Jogthong (2001)	40	Medicine and education	Thai & English
14. Samraj (2002)	24	Wildlife behavior and Conservation Biology	English
15. Arvay & Tanko (2004)	40	linguistics	Hungarian & English
16. Shim (2005)	30	ESL/EFL Education	Korean & English

CARS Studies in English

The first type is exemplified by studies conducted in English for two interrelated purposes: first, to validate the CARS model as an analysis and a teaching tool; and second to explore disciplinary variations. The two purposes are usually achieved in tandem with each other; if the model was found to need modification because of disciplinary factors, there would be both modification and assertion about the validity of the original model in capturing at least the main macrostructure features of a given corpus. The validating studies were launched immediately after the CARS model was presented in 1981. Those studies were later acknowledged by Swales in his modification

of the model in 1990. One of the influential studies was conducted by Crookes (1986). In that study Crookes collected 96 RA introductions from hard sciences and social sciences. He selected 24 introductions and conducted his analysis using the old CARS model. He noticed that CARS could not distinguish specifically between Move-1 (establishing the field) and Move-2 (review previous literature). He also noticed that there was a cyclical movement between Move 2 and Move 3. He contends that social sciences tend to have longer introductions. He concluded that the CARS model should be modified to account for the observations and suggested a further Move that would account for non-referenced general statements.

The second influential study was conducted by Swales and Najjar (1987) in which they analyzed 110 introductions from physics and educational psychology. The corpus fit the model and the researchers noticed two major observations. First, they noticed that the RA genre had evolved over the past few decades. Thus, they concluded that time factor should be taken into account when analyzing genre as different times and situations require certain accommodations: the rhetorical needs could move the structure of a genre from one place to another within a few decades. The second observation was that different disciplines use certain steps from the CARS model more than others to accomplish their respective rhetorical goals. The evidence in that study was the fact that the physics introductions were informative in that they presented their principle findings whereas the educational psychology introductions refrained from doing so. The reasons given were that physics is a hard science that would prefer to foreground their findings so that readers would have some guidance to appreciate and understand the article. On the other hand, in educational psychology the writers would prefer to keep their readers in

suspense. Swales and Najjar (1987) explained that the authors in this field do not want to present what they want to say in the end right at the outset of the article. Thus, both Swales and Najjar (1987) and Crookes (1986) noted the disciplinary variations.

The later studies which were based on the newer version of CARS acknowledged two facts: the validity of the CARS model as a holistic tool of analyzing RA introductions and the specific disciplinary variations. Anthony (1999) analyzed 12 reward winning RA introductions in the field of software engineering. He contends that the CARS model did in fact capture the macrostructure of his corpus; however, the model was not clear and did not account for certain rhetorical features that are discipline specific. Namely, he found that software engineering and engineering at large requires an evaluation step that includes the applicability of the research in its professional context; a step that is not available in the model. He also noticed that software engineering, unlike many other engineering areas, provides excessive literature review. He explained that this particular field attracts people from various engineering backgrounds, and to present an excessive literature review would give them a good grasp of the topic. This function, as Anthony, asserts, could not be clearly accounted for by the model since the function of Move 1 Step 3 (review previous literature) is quite different from the function found in this study. That is, the model provides literature review mainly not to teach people who might have background deficiency, as it is clear in this case, but rather to show how previous literature is somehow incomplete in order to fit the new study in that vacant space. Also, Anthony found that definitions and examples were problematic and could not easily fit the model.

The CARS model could not apply fully to all fields in all situations. Disciplines have their own conventions and their rhetorical devices that express their specific rhetorical functions (Bazerman, 1999). Following the same line of Anthony (1999), Samraj (2002) examined the disciplinary variations between two related fields: wildlife behavior and conservation biology; both are related disciplines under the umbrella of environmental sciences. She analyzed 24 RA introductions, 12 RAs from each field, published in a single year. She found that the CARS model did capture the main rhetorical organizations. The model, she observed, needed to be more flexible to capture some of disciplinary variations. She found that the literature review step is used to realize other moves other than Move 1; and therefore, this step should be embedded in the two other moves. She also found that Move 2 (establishing a niche) could be realized in other ways other than depending entirely on previous literature which was mostly the case in wildlife behavior. However, in some cases Move 2 is realized through showing the need for the research through what Samraj dubbed as positive justification. Samraj believed that this positive justification is a face keeping, non-threatening strategy. In conservation biology, Move 2 is realized differently: the need for the research, the justification for the research, is accomplished by recognizing a real world problem that faces the field. Thus, Move 2 is not a niche in the literature but rather an environmental problem.

The two fields realize their rhetorical moves differently. This is as a result of three major differences. First, their histories differ; second, their sources of information differ; and third, their communicative purposes differ. These differences were fully discussed in Samraj (2004). In that study, Samraj analyzed 30 papers (library research)

produced by graduate students from the two disciplines. As for the historical differences, she observed that wildlife behavior is a well established field and has a long history that makes it easier to build on earlier studies and create its new niches accordingly. On the other hand, conservative biology is a relatively new field and thus lacks the historical depth.

The second major difference is that wildlife behavior is a disciplinary field, whereas conservative biology is an interdisciplinary one. Wildlife draws on its long history as a major source of information. In fact, Samraj observed that professors appreciated papers written based solely on the long tradition of the field more than the papers which drew on related fields as a source of information. Conversely, conservation biology is an interdisciplinary field. It draws on economy, management, policy, ecology, etc. Thus, RAs in this field have to reflect this important aspect. Samraj noticed that the most successful papers featured a wide range of references to different disciplines. Thus creating a niche based on a focused literature review is out of the question in this case. Therefore, conservation biology justifies research in terms of the world's needs rather than a gap in previous research (Samraj, 2002, 2004). As for the third major difference, wildlife behavior seeks to locate a niche in the previous research and report on how that niche would be occupied. Conservation biology, however, seeks to communicate a solution to an outstanding environmental problem found in the real world. These two different communicative purposes are reflected directly in the way the moves of the CARS model are realized.

Thus, we can conclude that disciplinary variations are serious and should not be overlooked. At the same time, we found further support for the reliability of the CARS

model which endured rigorous, various tests. Therefore, the present study has taken into account the disciplinary variation issues by using a single field, education. Knowing that different subdisciplines might have their own variations as was found in Anthony's (1999) study, the subdiscipline of educational psychology was selected from the field of education. The choice of the field was made for many reasons, one of which was its relevance to the field of TESL, which gave the researcher and his raters the advantage of reading and interpreting the corpora of the study. Also, the CARS model was employed because it is the best available tool for analyzing RA introductions since it has endured vigorous trials and proved to be reliable.

CARS Cross-cultural studies

The second type of studies that used the CARS model includes cross-cultural studies. These studies compare and contrast RA introductions written by native speakers of other languages with those written by native English speakers. In some cases the comparison is done between articles written in the other languages and in some other cases the comparison is done between articles written in English by nonnative speakers. The impetus for such studies is the realization of the importance of English as the language of research. Many authors cited the need to attract the attention of scholars from different languages to the specific expectations of readers of research particularly English readers. Some other authors wanted to explore the extent to which their native languages resemble or differ from English RA rhetorical structures. The following review presents a sample of cross-cultural studies classified by language. The studies are

presented in their chronological order except for the two Korean studies where the later study (2005) was cited with older study (2001) for the purpose of comparison.

Arabic

The only Arabic study that could be found that used the CARS model to study RA introductions was conducted by Najjar (1990). In that study, he analyzed 48 Arabic RA introductions from the field of agriculture. The articles were drawn from three subfields: animal sciences, soil, and plants. He found that only 27 introductions of his corpus followed the model. He based his analysis on those 27 introductions. He claimed that all of the articles begin with some sort of Move 1: 10 centrality claims, 11 topic generalization, and 2 literature review. For the centrality claims, he noticed that the authors used linguistics exponents that were strikingly similar to their English counterparts. Namely, they used expressions like *it is considered very important... the importance of this topic, recently* and so on. Also, the use of the passive in claiming centrality was found noticeable which is very similar to the English usage. The use of the passive in centrality claims adds a sense of higher authority that provides credibility to the reader, for example, *it is considered*. The topic generalization was found to follow centrality claims in only 5 instances. As for the literature review, he found that all except three introductions contained a review of previous literature.

Move 2 as defined in the CARS model was only found in seven articles. All of them were Move-2 step1B, indicating a gap. However, the move itself was expressed in other ways mainly through asserting the need for the study, problem raising, hypothesis raising, and logical conclusions. These ways of niche establishments have been called

minor niche establishment methods (Najjar, 1990; Swales, 1990). The next move was Move 3, found in 23 out of the 27 introductions. The remaining four did not include Move 3, and interestingly three of those four did not include Move 2 either. Move three was found to be expressed 90% of the time mainly by using the phrase *the study aims*.

Najjar concluded that the works in his study generally conformed to the sequence of the CARS model. He also concluded that the linguistic exponents used in centrality claims and the gap indicating step is very similar to their English counterparts. The only problem with the gap indicating similarity is the low frequency of the use of the step. Najjar did not generalize his findings and restricted his observations to his corpus.

Chinese

Taylor and Tingguang (1991) conducted the only study found on Chinese RA introductions that used the CARS model. In this study, thirty-one articles, published in various scientific journals in both the USA and China, were analyzed. 10 of them were written in Chinese by native speakers of Chinese, 10 were written by Chinese in English, and 11 were written by native English speakers in English. They were selected from various fields of hard sciences: mineral processing, geophysics, and materials engineering. The older version of the CARS model was used. The focus of this study was not how the CARS model fit the Chinese but rather the socio-cultural differences. The results showed that the twenty RA introductions written by Chinese both in English and Chinese differed categorically from their English counterparts.

Three main differences were noted: the differences were in terms of length, citations, and the manner by which they realized their moves, particularly Move 3 in the

old model. The 20 articles written in Chinese were shorter than their English counterparts. The second difference noted in this study is the fewer research citations. The Chinese writers tended to cite fewer previous works; they decline to expose the names of other researchers with whom they disagreed, a cultural trait not found in their 11 English-speaking colleagues. Thus, creating a niche is not as straightforward in Chinese as it is in English. Chinese prefer non-threatening, face keeping techniques to show where their research should fit; one of those techniques is to avoid mentioning the body of related research to begin with. Another reason given for such fewer citations was the lack of comparable access to libraries, electronic databases, and other facilities that are enjoyed and well exploited by English-speaking writers.

Polish

The best known study on Polish RA introductions was conducted by Duszak (1994). In her study, she analyzed RA introductions from the field of general and applied linguistics, semiotics, and culture. The CARS model was used. She found that there was much dissimilarity between English and Polish. The general dissimilarities start from the fact that Polish is a reader responsible language. As Hinds (1987) contends, reader responsible languages tend not to pay much attention to the form as much as the content. The reader responsible trait is manifested in the way in which Polish ignores sectioning: organizing distinct thoughts in distinct sections; linearity: following a line of thought from general to specific; indirect address of topic: implicit writing style; and very little use of metalinguistic cues: the use of text about text. These traits were dissimilar to English RA introductions.

As for the move-step analysis, Duszak found that the CARS model did not account for statements about terminological discussion which Polish writers use in their introductions. The rhetorical functions of those statements were to convince the readers with the writers' mastery of their fields. It also functions as a face-keeping tactic to limit the commitments that the writer intends to achieve. Apart from this Polish tactic, the rest of the moves were there. However, the way in which the moves were realized differed drastically from their English counterparts. Move 3 in particular showed a unique realization. Polish researchers tended to be less assertive in announcing their research, refrained from announcing principle findings and did not employ Move 3-step 3 (indicating research article structure). Duszak explained that Polish writers use these strategies as defensive measures from expected criticism.

Czech

The study of the Czech scholars' norms was done in a somewhat different way from other languages in this review. Cmejrkova (1996) studied English RA introductions written by Czech scholars instead of analyzing Czech texts. The goal was to see if Czech writing norms would be traced in the written products of those scholars. 30 RA introductions written in linguistics, aesthetics, and literary theory were analyzed using the CARS model. She observed that the articles did not follow the CARS model closely.

Cmejrkova found variations basically in all the moves. Move 1 had many variations in topic generalizations, centrality claims, and reviewing previous literature. Though Cmejrkova did not discuss how Move 1 varied, one could discern from the examples provided that most of the sentences were very general to the field. The writers

evoke the importance of the topic (could be seen as claiming centrality), or make general statements about the topic (topic generalization) by making super-ordinate statements about the topic; generally, its importance in the real world rather than the previous research within the respective field, e.g., *language is the principle means of human communication*. Move 2 also manifested variations in the way in which they create the niche. Cmejrkova reported that “all the articles that I investigated demonstrate the inclination to pose questions, to weigh alternatives and to condition statements through numerous *ifs...and thens... and it depends, whether...etc*” (p. 149).

Move 3 was reported to be very low in the corpus. Cmejrkova found that only one introduction followed the CARS model. She thinks that the reason for this lone instance was the fact that the writer was a linguist who had knowledge of English writing norms. The rest of the introductions (29 introductions) showed culture specific variations. The general trend is that those scholars either did not use the move all together or used it in a very indirect way. Cmejrkova tried to answer the question of why Czechs refrain from announcing the purposes of their research early on in the introduction section; she contends that this trait is generally observed in Czech writings in other fields. Czech writers tend to be indirect in their realization of Move 3 as protective measures from criticism. Some of the linguists who were interviewed by the researcher said that they wanted the reader to follow the paths of their thoughts; one said, “I do not feel like stating at the beginning what I want to reach in the end” (p. 149). Interestingly enough, no one of the interviewees mentioned anything about the reasons usually given by discourse analysts who usually would see mild Move 3 as a strategy of face-keeping.

Malay

Ahmad's (1997) study is the only study found on Malay RA introductions.

Ahmad analyzed 62 RAs in Malay in a number of fields in the hard sciences. The CARS model was used to capture the macrostructure of those RAs. All three moves were found in the corpus. However, the distribution of those moves was of interest for the purpose of comparison. Move 1 was found in almost all of the articles (61 out of 62); Move 3 was found in most of the introductions (58 out of 62); but Move 2 was found only in 29 introductions out of the 62. This discrepancy was striking. Ahmad explained this discrepancy as a result of lack of competition for research space.

As for Move 1, Ahmad found that this move was expressed more than the other two moves by numerous sentences. The average number of sentences was 7.43 compared to 1.4 for Move 3 and 2.0 for Move 2. Ahmad observed that more than half of the RAs started with textbook-like definitions of the topic, a survey of the history of the field, and/or a discussion of the topic in Malaysian context. In such cases, the actual topic of research would not be introduced until much later. Thus, such introductions were very long. The other aspect of Move 1 is the use of previous literature. Ahmad found that the use of previous literature was not to create or prepare for a research space but rather to provide general background knowledge and support the facts stated about the field.

Move 2 was found to be minimal in the corpus compared to the other two moves. More than half of the articles did not include this move. In most of the cases where the move was not used, the writers seemed to jump from Move 1 to the methods and

materials sections after “a very brief announcement of the purpose of their papers” (Ahmad, 1997, p. 110). The articles that included this move used it in a very unconventional way: the move was realized by identifying a need for the research in two ways: by comparing a situation overseas with one in Malaysia and by replicating an experiment or idea that has been done somewhere else.

Move 3 is expressed in almost all the articles in the corpus (in 58 compared to 61 of move 1). The realization of this step is very short compared to move 1. In most cases, the move was realized in two sentences. In the cases where no clear presence of Move 2 was detected, Move 3 collapsed into a single statement announcing the present research. On the other hand, in cases where Move 2 was used, Move 3 would follow instantly, and the move would be connected to Move 2 by a connector like *therefore*. The utterance of the move is usually expressed in the passive truncating the first person use as it is usually the case in English.

Korean

Two main studies of Korean RA introductions were found: Lee (2001) and Shim (2005). In both studies the CARS model was the tool of analysis. Lee analyzed 116 RA introductions in the field of applied linguistics. Her study was exploratory in nature; she wanted to compare English RAs to Korean RAs. She also wanted to see if US-educated Korean scholars would write their RAs in both languages differently. The results showed that Korean RA introductions resemble in general terms the English RAs. However, a degree of variation was found; the US-educated Korean scholars and the US-writers had

more similarities than the Korean-educated scholars. This result shows the influence of English writing norms on other cultures' norms.

Within Move 1, Korean educated writers tend to employ more general statements about the field than the US-writers. Also, she found that Koreans provided fewer citations and avoided criticizing previous research. The US-educated Koreans had more citations, and yet their critical comments were not as direct as their American counterparts. Move 2 was by and large not based on a niche found in the literature but rather on the need found in the real world. Shim (2005) found this point to be very relevant; he reviewed 30 RA introductions written solely in English in the field of applied linguistics and found that previous literature was used differently by Korean and American writers. The Korean writers use the literature review to provide background while American writers use it to create a niche in the literature context. Thus, Shim concludes that niche creation in Korean is situated in real world circumstances while Americans create their niches in the previous research on the topic. Both Shim and Lee agree that Koreans avoid criticism. However, Shim found that Koreans tend to make bold critical statement about the work of western writers and spare their Korean colleagues. He interpreted this observation as a result of cultural distance; Koreans use this strategy as a non-threatening tactic to make their points.

Move 3 in Korean was found by both Lee (2001) and Shim (2005) to have differences with English RAs. One difference is the use of connecting markers with previous moves; one recurring marker is translated as *therefore*. Another difference found was the explanations of implications of the study and how this study would be beneficial. Thus the emphasis in Move 3 is placed on the value and positive use of the

study rather than the study itself as is the case in English RAs. As a matter of fact, Lee (2001) suggested a new step to be added to CARS when used in the Korean context; that was called *Move 3 –Value* to account for this feature in Korean.

Thai

The study on Thai RA introductions was conducted by Jogthong (2001). The researcher analyzed 40 Thai RA introductions in two fields: medicine and education. The results showed that the CARS model did capture the main frame of the Thai structure. However, the constituent steps were realized in somewhat different ways. The reasons given for the dissimilarities were ascribed to the Thai culture. As for Move 1, Jogthong observed that Thai scholars avoid using Move 1 step 1 (centrality claims) in the outset of their introductions. She explained that such a step would be considered assertive and unacceptable in Thai culture. Step three (reviewing previous research) had its own differences; Thai writers avoid criticizing previous research. Jogthong explained that Thai writers are reluctant to evaluate others' work. The writers mainly provide a brief historical account of what had been done on the topic. The only criticism they provide is about their own practice. They also avoid citing their own past research consider such a move to be self-promotional and therefore, not acceptable in Thai culture.

Move 2 is also realized differently from English. In Thai, writers avoid indicating a gap or counterclaim another established tradition, stance, or acceptable argument. She explained this result as an artifact of Thai tradition of authority respect. Another reason given for such a result was the availability of research space; unlike the American research tradition where researchers are supposed to compete for research space, Thai

writers had that space available to them. Considering all of the above, Thai writers realize Move 2 in different ways. One of them was by elaborating a problem or a situation in the real world (particularly their practice) and leaving the formation of the gap to the audience's discretion to make their own decisions.

Move 3 also had its own differences in Thai. Steps 2 and 3 were not found in the corpus. Jogthong explained that Thais did not prefer to announce their principle findings and show the structure of their research. She also observed that only Move 3 step 1A was used. Thai writers did not outline the purposes of their research; they merely announced the present research without further details. They also tended to supply positive evaluation of their study by providing implications to practitioners in their field. This addition is interesting because the writers refrained from providing an outline of their research or showing a brief account of the principle findings, which would have logically consolidated their positive evaluation step.

Hungarian

The study that applied the CARS model to Hungarian RA introductions was done by Arvay and Tanko (2004). In that study the two authors wanted to explore the structure of Hungarian RA introductions compared to their English counterparts. They selected a corpus of 20 RA introductions in Hungarian and 20 RAs in English from the field of linguistics. The articles were all theoretical; therefore, they analyzed the English articles first to see if the CARS model would fit this type of RA. They found that there were certain areas that did not fit the model and offered a slight modification, namely the use of examples and analytical details. Thus, two steps were added to the model to

accommodate the two points: a step in Move 1 which was called Move 1-S2B and a step in Move 3 which was called Move 3-S1C.

The two authors found that the English RAs differed greatly from the Hungarian RAs. The first distinction reported from the outset was that the style sheets of the journals in both languages differ markedly in the specifics of the format and the layouts of the acceptable RAs. Hungarian style sheets were less specific and offered less guidance compared to English style sheets. The second distinction was that the English introductions were longer and were more divided into paragraphs than Hungarian. Another distinction was that Hungarian RAs did not follow a recognizable pattern. The writers had the freedom of word choice, to digress, and to say what they wanted without overt restriction to format. The writers ascribed these distinctions to the fact that Hungarian is a reader responsible language and the writer does not have to clarify his/her language as much as English, which is a writer responsible language.

As for the specific similarities and differences in the results of the move-step analyses, the two languages showed a use of the three moves of the CARS model. However, the frequency and the manner of use varied. The English RAs followed CARS closely. The Hungarian showed low frequency of Move 2. Arvay and Tanko contend that Hungarian writers tend to do more in establishing territory and occupying the niche than showing that niche. Further, the way that Hungarians announce their research in Move 3 was different from English. Hungarians were found to be reluctant in announcing their research. They employed various linguistic means to achieve this function. A frequent means was the use of understatement as in the case of anti-aim utterances, e. g., *I will not discuss the issue in this paper*. These types of strategies were

described as defensive measures against criticism. Thus, Hungarian RA rhetorical structures are different in many ways from English RAs.

Summary

In this chapter, I reviewed the related literature with respect to the main questions of this study. At the beginning, the field of contrastive rhetoric and its development were reviewed. Then, I limited the scope of the review to discuss the related contrastive rhetoric literature in Arabic. After that, the domain within which the present study was situated was discussed (the genre-specific domain). Following this, a review of the Arabic rhetoric and teaching practices in Arabia followed because it would give background to one of the study's questions- the educational experiences effect. After that, a review of English RA introduction issues and models were identified and explained. Then the chapter moved on to review previous research studies conducted on the topic.

The following chapter will present the methodology and procedures employed for this study. The chapter is divided into several sections. The sections will comprise the purposes of the study where the questions are outlined and a delineation of the scope of the study. Then, information about the corpus is presented: data selection procedures, data collection, the instrument, data analysis, problematic related issues, and finally remarks about the next chapter.

Chapter III

Methodology

Introduction

The main purpose of this study is twofold: the study explores the rhetorical structure of Arabic RA introductions and explores whether different educational experiences are reflected in the rhetorical structure of the introductions from three different groups. In other words, the study seeks to find if one group of authors of Arabic RA introductions who were educated in the US (henceforth, US-Ed-A) write their introductions differently from another group who received their education in the Arab world (henceforth, A-Ed-A). Second, the study explores similarities and differences that exist between a third group of RA introductions written in English by American native speakers of English (henceforth, US-N) and those written in Arabic. The question is to see to what extent the rhetorical organization/moves of Arabic RA introduction resembles and/or differs from that of the English RA. Hence, the study discusses the similarities and differences among the groups in realizing their various moves and steps and links them to their educational backgrounds. To paraphrase the above purposes in question format, I may put them as follows:

- 1) Do Arab scholars who had earned their graduate degrees from the USA employ the same rhetorical/organizational moves when they write Arabic RA introductions as Arabs who earned their degrees from the Arab world?
- 2) What is/are the macrostructure(s) of the selected Arabic RA introductions?
- 3) What are the differences and/or similarities between RA introductions written by Arab scholars and US scholars (native English speakers)?

Since this study is exploratory in nature, the scope of the two purposes is made general enough to grasp as many observations as possible. This is due to the fact that only one study, to the best of my knowledge, was conducted on Arabic RA (Najjar,1990). I find two problems in that study which create the need for this study: first, Najjar did not address the RA introductions in enough detail to achieve the purposes of this study. His study was about the Arabic RA in its entirety. The second problem is that the part that dealt with RA introductions used data which were drawn from four different disciplines of agricultural sciences. Some of the introductions were about plants, others about animals, and some about soil. Thus, the disciplinary variation concern was clearly not addressed in that study. The study touched only partially on the first question of this study. However, it did not address the second question. As for the third question, the study did not provide a clear answer as to whether the introductions studied were similar or not. Actually, the purpose of the comparison was to see which of the two models, the CARS model or Zappen's (1985) model, would fit better the Arabic RA introductions not to compare and contrast the two languages using the same genre.

The present study, however, fills that gap by concentrating qualitatively on the RA introductions alone based on data drawn from a single discipline. It is pioneering, and therefore, its qualitative nature is justified. For the second question to be answered, a close analysis of each and every sentence of this study's corpus is needed. Also, the study will compare and contrast the two languages in the same genre and will provide specific similarities and differences.

The study consists of three-way comparisons: first a comparison was made between the Arabic groups: the A-Ed-A group and the US-Ed-A group. Based on the results of the first comparison, since the two groups were found different, a second comparison was made between the US-N group and the US-Ed-A group. After that, another comparison was made between the US-N group and the Arab-Ed-A group. Thus, the first question was addressed when the two Arabic groups were compared. Simultaneously, the second question was addressed as the general macrostructures of the two groups were identified. As for the third question, the differences and the similarities were identified as the US-N group was compared to the other two Arabic groups.

The remainder of this chapter is divided into six parts. First, the corpus and the rationale for choosing the field are presented. Then, the criteria for choosing the journals are explained. After that, the selection criteria of articles are explained. The fourth section presents the instrument. Then the coding process of the data is provided, and the last section presents some problematic examples found in the corpus.

The corpus

The corpus consists of 15 research article introductions divided into three groups based on the language, the educational background of their writers, and discipline. Two of the three groups of RAs were written by nonnative speakers of English (Arabic speakers), while the third RA group was written by writers who are native speakers of English. As for the educational background, the first group was written by Arabic-educated scholars. The second group was written by US-educated Arab scholars. The third group was written by US-educated American scholars.

The field/discipline chosen was education. I had two main reasons for choosing this field. First, I have a fair background about this field enough, to my best judgment, to read and interpret some of its research articles. This knowledge was acquired through graduate coursework in education which required a vast amount of reading: I was required to conduct library research in some of these courses which necessitated close reading of RAs in this field. In some other courses, I was required to conduct quasi-experimental studies. Thus, I believe that I possess the qualification to read and interpret RAs in the field of education particularly within the educational psychology subdiscipline. The second reason for choosing this field is that my field, TESL, is essentially a subfield of education. As a matter of fact, many graduate programs in teaching English to Speakers of Other Languages (TESOL) or teaching English as a Second Language (TESL) are housed in colleges of education which in this case is considered a discipline within the field of education. The reason for not choosing TESL/TESOL/TEFL instead was that all RAs in this field were written in English, and the need was to find RAs written in Arabic.

After deciding on the field of education, a decision had to be taken on which subfield of education to be selected. Since it has been well attested in the literature that different fields have their own writing conventions, a decision was made to choose a single subdiscipline to control this variable (Anthony, 1999; Samraj 2002, 2004). The educational psychology subdiscipline was chosen as a result of a deliberation process that was undertaken based on the availability of the needed RAs (quasi- and experimental) in Arabic. It was found that this particular subfield has a higher profile in Saudi Arabia: it was noted that this subfield of education is well researched compared to other subdisciplines.

The criteria of selection of journals

The two conditions required for the journals from which the articles were chosen were first, to be refereed and second, to have acquired a professional reputation. The Arabic journals were chosen based on a consultation with two Saudi Arabian scholars in education: two assistant professors in education. The question asked was, what are the top two journals in the field of educational psychology in Saudi Arabia? The answer was that in Saudi Arabia there are no specific journals in the subfields of education. Some of the major universities issue biannual journals and the colleges of education have their own sections within those journals. The education sections are not divided into the known subfields of education like educational psychology or curriculum studies, but all papers are published together. The three scholars advised that in order to pinpoint a paper that could be classified as educational psychology, one should read the paper and see if the paper treats, measures, and/or tests a psychological aspect. They warned that

even if the author was affiliated with a department that is not educational psychology, his/her paper might very well be classified as a paper in educational psychology.

The two consultants unanimously agreed that the Journal of Um Al-Qura University (JUQ) and the Journal of King Saud University (JKS) are the two top journals in the field of education in Saudi Arabia. The two journals are refereed. Though the two scholars had different opinions on which one of the two journals they would prefer to publish in the most, they did not hesitate to confirm that the two journals were the top among the other few journals published in Saudi Arabia. They agreed that the promotion committees in their universities recognize papers published in the two journals for the purpose of promotion. They also cite the fact that other scholars in other Arab countries compete to publish in those two journals which is a fact that could be easily verified by seeing different authors' institutional affiliations under their names in their articles. Thus, the JUQ and the JKS were selected for this study. Both journals are biannual and accept and publish in English and Arabic.

The journal from which the native English speakers' articles were selected was the journal of Educational Psychology (JEP). This journal is published quarterly and is only in English. The reasons for selecting this particular journal were that first and foremost, it satisfied the two selection criteria conditions for this study: it is refereed and has a professional reputation. Based on a consultation with an American professor in Adult Education, this journal is a top tier journal. It is also one of the APA leading Journals in psychology. Second, the journal had already been considered for selection of studies of similar nature to the present study. Swales and Najjar (1987) chose this journal to study aspects of research articles' introductions.

The criteria of selection of articles

The RAs selected for this study were written in two different languages and two different contexts. Therefore, the process of selection differs from one language group to another (Arabic RAs versus English RAs). However, the major criteria were maintained throughout. The criteria were that all papers had to be:

- 1) Data-based (experimental and/or quasi-experimental)
- 2) In the field of educational psychology;
- 3) Authored by single authors;
- 4) Published during a comparable period of time (2002 and 2003); and
- 5) Authors' languages and educational backgrounds had to be identifiable.

The general criteria of selection of the RAs were based on previous research findings and the objectives which this study is trying to achieve. The first criterion above was put to meet the requirement of the tool of the analysis (the CARS model is devised to account for moves in experimental and quasi-experimental RAs). As for criterion 2, the previous research findings stipulate that different fields have their specific conventions in achieving their communicative purposes (Swales, 1990; Crooks, 1986; Samraj, 2002, 2004; Jacoby et al. 1995; Braine, 1995). Thus, I chose a single field from which all RAs were to be picked, educational psychology. Also, the specific purposes of this research played the vital role in deciding on the selection criteria. Namely, one of the purposes was to pinpoint different authors' strategies in the realization of their moves. This led to

deciding on making the decision to consider papers written by single authors. Also, the RA genre was found to be evolving over time as has been noted by many scholars like Swales & Najjar (1987) and Bazerman (1984). They found that RA is evolving and the time factor should be considered for comparability purposes. Thus, the RAs selected were picked from the three journals within a span of two years. The last criterion was considered to achieve one of the main goals of this study: educational background effect on the RA production. Thus, all authors' languages and educational background had to be identified.

Due to different contexts the selection of the Arabic RAs was a little more complicated than the selection of the English RAs. A number of steps were employed in the process of selecting the Arabic articles for this study. This process is shown in Table 5 below. First, since the two Arabic journals publish other articles from neighboring fields like English and Islamic studies within the same issue, a total of sixty one articles in the field of education were identified and numbered.

Second, articles which were authored by a single author were considered at this stage, and articles written by more than one were excluded. Out of the sixty-one, fifty three articles were found to fit this criterion. Then out of the fifty three, twenty eight educational psychology articles were identified. After that, the selected articles were divided based on the educational background of the author, US- educated numbered twenty three and Arab-educated numbered five. This division made me exclude articles written by European-educated scholars. As Table 5 shows, the number of Arab-educated authors is very low compared to the number of the US-educated. Only five of them published during the two specified years, 2002 and 2003. This is due to the fact that a

vast majority of academics in Saudi Arabia received their graduate education in the United States.

Electronic data-bases were utilized in the process of finding and verifying information about the articles authored by the US-educated Arab scholars group. The search was conducted by using digital dissertation databases. Luckily, the authors' CVs were found. The difficult part was to find information about the Arab-educated Arab scholars. Unfortunately, I could not find enough information about their backgrounds electronically. Therefore, I had to contact the institutions in which they work. At one time I had a relative go in person and meet with one of the authors. Thus, all needed information about the Arab authors' backgrounds was collected.

Table 5: The selection of the Arabic RA introductions

Name of Journal	No. of Articles 2002-2003	No. of Single Authored	No. of Ed. Psych. Articles	A-Ed-A	US-Ed-A	No. Selected
JUQ	19	16	11	3	8	5
JKS	42	37	17	2	15	5
Total	61	53	28	5	23	10

The RAs written in English were published in a journal in the specific target field, educational psychology. This made the selection process much easier compared to the process used for selecting the Arabic RAs. As Table 6 shows, first, all articles published in 2002 and 2003 were located electronically (the JEP is available online). Ninety-six articles were found. Second, fifteen single authored articles were identified. From these fifteen, data-based articles were selected. Then, the authors' backgrounds were checked.

As could be seen form Table 6 only eight native speakers could be verified, and then five of them were chosen.

Fortunately, all authors' needed background information was easily found in their institutions' websites. At times, some authors have their own websites. Authors who were found to be nonnative speakers of English were excluded even though they were affiliated with a US university.

Table 6: The selection of English RA introductions

Name of Journal	No. of Art. 2002-2003	No. of Single Authored Art.	No. of Verified US Native Speakers	selected
JEP	96	15	8	5

The instrument

The Create a Research Space Model (CARS) created by Swales (1990), was chosen to analyze the introductions selected for this study. As noted earlier in the literature review, the model has developed to its present form over many years as a result of continuous evaluation and validation studies conducted by Swales and others using the same tool (Crookes, 1986). Thus, the model used in this study is considered the best available tool for analyzing RA introductions in general (Anthony, 1999) and data-based RAs in particular.

The CARS model consists of three main sections. Using the ecological analogy, these sections are called moves. Each move is divided into steps which are employed to achieve the communicative goals of those moves. As Table 7 shows, the model starts with establishing a territory within the target field of research. This territory is essential in order for the researcher to attract the targeted research community. This is realized by

one or more of three steps within this move. To attract attention, the research presented must be important and central to the interest of the discourse community. To accomplish that, step one, claiming centrality, helps give the presented piece of research its importance and centrality in the field. It also has to be situated in its field and the preceding literature which could be realized through steps two and/or three: making topic generalization(s) and/or reviewing items of previous research.

Move 2, establishing a niche, provides the reason(s)/rationale for the study. Typically, at least in the US, this move is realized by indicating a gap (Ahmad, 1997) or showing some needs that were not addressed, or that were not well treated in the literature reviewed in Move-1 Step 3. These functions could be realized through any of the four steps: Counter-claiming, indicating a gap, question-raising, or continuing a tradition.

Move 3, occupying the niche, presents the reader with the study that would fit in the empty space identified in Move-2. One or more of three possible steps might be used to carry out this function: Step 1A: outlining purposes or Step 1B: Announcing present research, Step 2: announcing principal findings and Step 3: indicating research article structure (see chapter II for full description of the model).

Table 7: The CARS model, Swales (1990)

Move 1
Establishing a territory
Step 1: Claiming centrality
and/or
Step 2: Making topic generalization(s)
and/or
Step 3: Reviewing items of previous research
Move 2
Establishing a niche
Step 1A: Counter-claiming
or
Step 1B: Indicating a gap
or
Step 1C: Question-raising
or
Step 1D: Continuing a tradition
Move 3
Occupying the niche
Step 1A: Outlining purposes
or
Step 1B: Announcing present research
Step 2: Announcing principal findings
Step 3: Indicating research article structure

Coding and analysis

The data were coded by assigning each RA introduction an identification number. Then two raters were asked to use the instrument to assign sentence by sentence in each introduction to a move and to a step in the CARS model and to note problematic instances where the model failed to work. The two raters are two applied linguists who earned PhDs in their field. Both of the raters are connected to writing pedagogy. One of them is specialized in genre theory and genre analysis, and the other rater had been a director of a Writing Center for a year before her participation as a rater in this study. They teach TESL and linguistics in a major American university in the Midwest. They were given the three sets of introductions. The two Arabic sets were translated into English by the researcher, who is a native speaker of Arabic, so that the raters could code

them. The translation used was literal so that the raters would use the parallel linguistic exponents to help them identify the moves and the steps. Semantic translation would have been possible, but it would have ruined the actual rhetorical and linguistic features of the original texts.

After the two raters finished coding the corpus, their agreements and differences were counted. The percentage of agreement was calculated using the formula:

$$\text{No. agreements} / (\text{No. of agreements} + \text{the No. differences}) \times 100 =$$

percentage of agreements.

The initial results reported by the two raters are shown in Tables (8, 9, and 10). The tables show four types of information about each introduction in the corpus: first, the number of sentences; second, the number of disagreements found by the raters; third, the number of agreement, and fourth, the percentage of agreement. As shown in Table 8, the agreement percentage of the US-N writers' group was 47.05%. This result is quite unsatisfactory and falls way below the minimum acceptable agreement percentage which is 80%. As could be seen from the table the percentage varies from one introduction to another. However, Intro. 3 in the US-N group pulled down the percentage. One obvious reason was that one of the raters did not provide responses to all the sentences while the other rater did. This problem was easily settled in a follow up meeting. The A-Ed-A group (table 9) showed the highest agreement rate among the three groups of 53.57%. Again one of the introductions seemed to have skewed the result which is namely A-Ed Introduction # 4. The third group, US-Ed-A, received 52.05% agreement. Though the differences between the three groups might not be statistically significant, the US-Intro group received the least agreement between the raters which was very counterintuitive.

Table 8: Raters' first coding of the US-N Group

<u>US-N ID #.</u>	<u>No. of Sentences</u>	<u>No. of Disagreements</u>	<u>No. of agreement</u>	<u>Percentage of agreement</u>
1	17	6	11	64.7
2	3	1	2	66.66
3	23	21	2	8.69
4	35	15	20	57.14
5	7	2	5	71.42
Total	85	45	40	47.05% general

Table 9: Raters' first coding of the A-Ed-A Group

<u>A-Ed-A ID #</u>	<u>No. of Sentences</u>	<u>No. of Disagreements</u>	<u>No. of agreement</u>	<u>Percentage of agreement</u>
1	26	7	19	73.07
2	24	8	16	66.66
3	22	17	5	22.7
4	17	16	1	5.88
5	23	4	19	82.6
Total	112	52	60	53.57% general

Table 10: Raters' first coding of the US-Ed-A Group

<u>US-Ed-A ID #</u>	<u>No. of Sentences</u>	<u>No. of Disagreements</u>	<u>No. of agreement</u>	<u>Percentage of agreement</u>
1	19	12	7	36.84
2	13	4	9	69.23
3	14	1	13	92.85
4	15	9	6	40
5	12	9	3	25
Total	73	35	38	52.05% general

Another important but related issue that should be raised in this context is that the low agreement level is not as serious as it might seem. Most differences were within steps of the same move. In other words, the agreement level was much higher when it came to general moves. As a matter of fact, the agreement at the move level was well above 80%

which is my benchmark. Nevertheless, the low agreement level had called for a meeting between the two raters to discuss and negotiate their differences. The need for a full agreement is an optimal goal for the purpose of this study. However, it is hard to have such a result. Therefore, the two raters were asked to meet to discuss the differences that were found between them. After the meeting, the raters were able to agree at a more acceptable level (see Tables 11, 12, and 13).

In the meeting, the researcher provided the two raters with two copies of their old responses along with the texts, and then the differences between them were reported. The two raters went over their differences and negotiated their decisions. They had very few disagreements compared to their earlier report. One point of disagreement was about Move-1 Step 3 (1-3) versus Move1 Step 2 (1-2). One of the raters thought that even when there was a citation it should not count as a 1-3 invariably: sometimes the citation was employed to realize a topic generalization or a centrality claim; and therefore, it should be judged as a 1-2 or 1-1 instead of 1-3. So, the raters managed to set up a criterion to judge such points. They agreed to read the sentence as a whole and decide on the exact function of the sentence in realizing the move and assign the move-step accordingly. However, at times they did not agree on the purpose that 1-2 or 1-3 served in spite of the presence of a citation. One of the raters said that it is 1-2 because the purpose was to provide a general statement about the field. However, the other rater decided that the sentences were 1-3 because there is clear reference to the past specific research supported by a citation. This difference lowered the agreement percentage to 60% in US-Ed-A # 4 introduction as shown in table (13).

The other point that the two raters had some disagreements on was the assignment of one of the options of Move 3 Step 1a (3-1a) versus Move 3 Step 1b (3-1b). The two

raters settled their disagreement by deciding that the 3-1a should be assigned to sentences that expressed hope/aim or other similar words when announcing the present research, for example, *this study aims to... the study hopes to achieve...* and so on. The distinction is that in 3-1a only the purpose or the hoped for occupation of the niche is expressed. On the other hand, the choice of 3-1b should be restricted to the announcement that provided and/or discussed parts of research without referring to the results, for example, *the classrooms selected for this study varied in learner centeredness...*

Table 11: The US-N group results after the meeting

<u>US-W ID #.</u>	<u>No. of Sentences</u>	<u>No. of Disagreements</u>	<u>No. of agreement</u>	<u>Percentage of agreement</u>
1	17	2	15	88.23
2	3	0	3	100
3	23	0	23	100
4	35	1	34	97.14
5	7	0	7	100
Total	85	3	82	96.47% general

Table 12: The A-Ed-A group results after the meeting

<u>A-Ed-A ID #</u>	<u>No. of Sentences</u>	<u>No. of Disagreements</u>	<u>No. of agreement</u>	<u>Percentage of agreement</u>
1	26	0	26	100
2	24	0	24	100
3	22	0	22	100
4	17	1	16	94.11
5	23	0	23	100
Total	112	1	111	99.%

Table 13: The US-Ed-A group results after the meeting

<u>US-Ed-A ID #</u>	<u>No. of Sentences</u>	<u>No. of Disagreements</u>	<u>No. of agreement</u>	<u>Percentage of agreement</u>
1	19	0	19	100
2	13	1	12	92.3
3	14	0	14	100
4	15	6	9	60
5	12	0	12	100
Total	73	7	66	90.14% general

The two raters agreed on a general approach that was based on looking beyond the sentence level to decide on the identity of a specific sentence. One of the raters commented on how the movement from general to specific (what is called the funneling effect) could be felt as she read down the introduction. She then back tracked to see where exactly the moves were. All things considered, the agreement rate for each group in the corpus was categorically high enough for the criteria set for accepting the raters' results which was 80% for each group. In the following section, some of the problematic sentences that could not be assigned to any of the moves or steps of the analysis tool will be classified and exemplified.

Problematic examples

In the Arabic corpus, a number of sentences were found to be very problematic. They could not be assigned to any of the move-steps in the CARS model. The nature of their problem was their irrelevance to the actual studies at least from a western point of view. Those sentences are culturally and religiously bound to the writers' backgrounds. These sentences could be typified into three classes. The first is the Islamic opening

statements that are required in many contexts particularly formal speeches, letters, acknowledgements, etc. The second is the use of the Holy Qur'an and the prophet (peace be upon him) sayings within the text. And the third is the inclusion of acknowledgements and prayers for the helpers at the end of the introduction.

As for the first type, two introductions were found to have such opening statements, one from each of the two Arabic groups, the A-Ed-A and the US-Ed-A. US-Ed-A#3 had the following opening statement:

--الحمد لله رب العالمين والصلاة والسلام على سيدنا محمد وعلى آله وصحبه أجمعين وبعد.

--*All praises and thanks be to Allah, the Lord of the two worlds, and the prayers and peace be on our master Mohammad, his household, and all his companions; and yet [commas added].*

The other opening was of A-Ed-A # 3:

--الحمد لله رب العالمين ، و سلام على عباده الذين اصطفى ، أما بعد .

-- *All the praises and thanks be to Allah, the Lord of the two worlds, and peace on his chosen slaves, and yet.*

The two raters agreed that the first opening may not fit the CARS model. One of the raters commented that it was just a religious prayer. The other thought that this opening was unique to Arabic RAs. As for the second opening statement, one of the raters believed initially that it provided background since the introduction was about teaching the Qur'an. The other rater, however, thought it simply could not be applied to the model.

In their discussion meeting, the two raters agreed that the two openings could not be applied.

The second type of sentences that were found problematic were the citation of Ayat (verses) from the holy Qur'an and the sayings/traditions of the prophet Mohammad, peace be upon him. Those instances permeate some of the introductions. In US-Ed-A#5, two instances were found: one use of Qur'an Ayah (verse) and one Hadieth (prophet saying). The Ayah was

-- "فِيمَا رَحْمَةً مِنَ اللَّهِ لَئِنَّ لَهُمْ وَلَوْ كُنْتُمْ فَظًا غَلِيظَ الْقَلْبِ لَانْفَضُّوا مِنْ حَوْلِكَ" (آل عمران : 159).

--*“And by the Mercy of Allah, you dealt with them gently. And had you been severe and harsh-hearted, they would have broken away from about you” (Al-Imran: 159).*

The prophet saying was

-- " إنه سيأتيكم أقوام من بعدي يطلبون العلم ، فرحبوا بهم وحيوهم ، وعلموهم "

-- *“there will be people after me who will seek knowledge, you must welcome them and salute them, and teach them”*

The two raters thought this might apply to the literature review step in the model.

However, both raters agreed that their suggestion is still problematic. One reason given is that the quotations were not of direct relevance to the study at hand: it was not part of the previous research on the topic.

The last type of sentences that were found problematic was including acknowledgements and prayers for the participants who helped conduct the study at the end of the introduction. Though the frequency of this usage was rare, only in one introduction, it was there. The following two sentences concluded A-Ed-A# 3:

-- ولا يفوت الباحث أن يتقدم بجزيل الشكر إلى كل من قدم له عوناً لإنجاز هذه الدراسة، من مديري التعليم ، ومشرفي التوعية الإسلامية ، ومديري المدارس، ومعلمي القرآن الكريم ، ومحكمي بطاقة الملاحظة ، وأخص بالذكر الأخوين الكريمين: د . طارق سعيد عبد المجيد، والأستاذ حمد بن عبد العزيز اليوسف،

--And the researcher will not fail to remember to thank very much those who offered their help to complete this study, from school principals, and educational supervisors, and superintendents, and teachers, and students, and the tool referees particularly the two brothers: Dr.[X], and Mr. [Y],

-- فجزى الله الجميع خيراً.

--may Allah reward all abundantly.

Both sentences, the first which is an acknowledgement and the second that is a prayer for those who helped in the study, were found inapplicable by the two raters.

Summary

In this chapter, the methodology of the present study was presented. The questions were justified and asked, the corpus was described, the research tool was named and explained, and the analysis procedures were presented. In addition, some problematic areas were identified.

The following chapter presents the results and discussion of the three questions of this study. Each one of the three groups which constituted the whole corpus was analyzed based on raters' decisions. The two Arabic groups were analyzed first as to answer the first and the second questions. The first question was answered after comparing the results of the analyses of the two Arabic groups, and the second question was answered as a result of general syntheses from the detailed analyses of both groups. Then the third group was analyzed in order to answer the third question.

Chapter IV

Results and Discussion

Introduction

This study was conducted mainly to answer three questions. These questions are as follows:

- 1) Do Arab scholars who had earned their graduate degrees in the USA employ the same rhetorical/organizational moves when they write Arabic RA introductions as Arabs who earned their degrees in the Arab world?
- 2) What is the macrostructure of the selected Arabic RA introductions?
- 3) What are the differences and/or similarities between RA introductions written by Arab scholars and US scholars (native English speakers)?

In this chapter, I will present the results and discussion of the answers of the above mentioned questions. The first two questions will be addressed concurrently. The answer of these two questions will be done in two phases: the first will present results of Arabic RAs written by the Arab-educated scholars group (A-Ed-A). Then, a summary of the results of this phase will follow. The second phase will present results of the analysis of the US-educated Arab scholars (US-Ed-A). At the end of this phase, a summary of the results will be presented. Then a discussion about similarities and differences between the two Arabic groups will follow to answer the first question. After that the answer to the second question will be presented. The third question will be answered by reporting

the results of the analysis of the American native English speaking writers' RAs (US-N) followed by a comparison between the results of each of the Arabic groups against the results of the US-N group. The chapter, then, will be concluded with a general overview of the conclusion chapter that comes next.

Arab-Educated Arab Scholars group (A-Ed-A)

The A-Ed-A group consists of five article introductions written by Arab scholars who had earned their degrees from the Arab world. The CARS model was employed to discover the rhetorical structure patterns of these introductions. The results of the analysis of the A-Ed-A group are reported in Table 14. The table shows different types of information: the move structure of each introduction, the number of sentences used to actualize each move, the number of sentences that were problematic and could not be applied to the model, and the total number of sentences in each introduction. At the end of the table, the total and the average number of sentences were calculated, and the percentage of each move compared to the entire introduction was provided.

Table 14: Results of general move structure and their distribution in the A-Ed-A group

A-Ed-A ID#	Move structure <u>total</u>	<u>Number of Sentences</u>				
		Move 1	Move 2	Move 3	Not Applicable	
1	1 – 3	24	0	1	1	26
2	1	24	0	0	0	24
3	1 – 3	16	0	3	3	22
4	1 – 3	9	0	8	0	17
5	1 – 2 – 3	21	1	1	0	23
Total		94	1	13	4	112
Average		18.8	0.2	2.5	0.8	22.4
Percentage		83.9%	0.89%	11.16%	3.5 %	

As Table 14 shows, the A-Ed-A group did not employ Move 2 (establishing a niche) in four of the five introductions while they used Move 1 (establishing a territory) in all the introductions. However, Move 3 (occupying the niche) was used in four of the introductions and was not used in one. Also, two introductions had inapplicable sentences to the CARS model. Further, the percentages of the number of sentences used in each move showed that Move 1 was the move used most with 83.9 % of the introduction devoted to it. Move 3 came next with a significantly lower rate of 11.16% of the sentences used. As for Move 2, the rate was the lowest (0.2% of the general number of sentences only one sentence in one of the introductions). One additional observation is that the moves did not cycle and came in their natural order even in the

longer introductions (cf. Crookes, 1986; Swales, 1990). The following sections will show how these general observations were realized by analyzing each move individually.

Move 1: Establishing a territory

As was explained by Swales (1990), the role of Move 1 is to establish a territory for the research to be presented through one or more of three steps. The first step works to establish in the eye of the reader the importance, the currency, and/or the centrality of the research as a means of attracting attention (centrality claims); this step is called Move 1 Step 1 (henceforth 1-1). The second step, which is Move 1 Step 2 (henceforth 1 – 2), provides topic generalization about the field by either making statements about general practice and knowledge or by directing attention to certain phenomena. The third step, Move 1 Step 3 (henceforth 1-3), reviews pertinent literature that helps to situate the ensuing study in the previous body of research.

The A-Ed-A group appears to pay much more attention to establishing their research territory than the other two moves as was observed earlier: Move 1 was the most used move in the A-Ed-A group (average 83.9% of the sentences per introduction). Though this move was used in all the introductions, its use varied in the way in which it was realized. That is, different steps were employed in somewhat various ways to accomplish the function of the general move. Table 15 presents the results reported by the two raters of the individual steps within Move 1.

Table 15: Steps structure in Move 1 in A-Ed-A group

(N/A= not applicable)

<i>Intro.</i> # 1	<i>Intro.</i> # 2	<i>Intro.</i> # 3	<i>Intro.</i> # 4	<i>Intro.</i> # 5
1-2	1-1	N/A	1-2	1-1
1-2	1-2	1-1	1-2	1-1
1-2	1-2	1-1	1-3	1-1
1-2	1-2	1-1	1-2	1-1
1-2	1-2	1-1	1-1	1-3
1-2	1-2	1-1	1-2	1-3
1-2	1-2	1-1	1-3	1-3
1-2	1-2	1-1	1-3	1-3
1-2	1-2	1-1	1-3	1-3
1-2	1-2	1-1	1-3	1-3
1-2	1-2	1-1		1-3
1-2	1-2	1-1		1-3
1-2	1-2	1-1		1-3
1-2	1-2	1-1		1-3
1-2	1-2	1-1		1-3
N/A	1-2	1-1		1-3
1-2	1-3	1-1		1-3
1-2	1-3	1-1		1-3
1-2	1-3	1-1		1-3
1-2	1-3	1-1		1-3
1-2	1-3			1-3
1-2	1-3			1-3
1-3	1-3			1-3
1-3	1-3			1-3
1-3	1-3			1-3
1-3	1-3			1-3
1-3	1-2			
1-3	1-2			
1-3				
24 sentences	24 sentences	16 sentences	9 sentences	21 sentences

Step 1-1: Claiming centrality

The first step in the CARS model is 1-1, centrality claims. The step was found in four of the five introductions, three of which started with it (Intros. 2, 3, and 5 as shown in Table 15). Though the three introductions started with this step, each introduction used it in a different way. As Intro.2 started with 1-1 in a single sentence, all 16 sentences of Move 1 in Intro. 3 consisted of 1-1. Further, Intro.5 had four consecutive

sentences of 1-1 in the beginning. The fourth introduction that had this step was Intro.4 in which the step occurred between two 1-2 steps in the middle of the move.

Intro.2 started with 1-1 in the following sentence:

تعد الإدارة من الأنشطة التي تعتمد على التفكير و العمل الذهني المرتبط بالشخصية الادارية ...

Ex.1:-- It is considered that Administration is from the activities that depend on the thought and the mental wok which is connected to the administrative personality...

The two raters reported that this sentence emphasized the importance and the centrality of the topic and therefore was assigned to 1-1 step. The key linguistic form noted was the phrase *it is considered*. Also, the entire sentence emphasized the central role of administration as one of the central activities connected to the administrative personality. This sentence was then followed by a series of sentences of 1-2 step. Intro.3 Move 1 consisted of step 1-1 in its entirety. The introduction, in fact, did not start with 1-1 but rather with a prayer that was not found applicable to the model. The entire 1-1 was found to have emphasized the importance of the topic. The following sentences were cited to exemplify those instances:

--فإن القرآن الكريم روح الأمة الإسلامية

Ex.2:-- The Holy Qur'an is the soul of the Islamic nation.

--فأرشد به إلى أحسن سبيل

Ex.3:-- And by it, He guides to the best way.

-- ولا سبيل لسلوك هذا المنهج الكامل والتربية الربانية إلا بالعلم بكتاب الله تعالى

Ex.4:-- There is no way to follow this perfect course and the divine teaching except by knowing the book of Allah almighty.

- ومن هذا المنطلق اهتمت المملكة العربية السعودية بالقرآن الكريم اهتماما بالغاً من جميع الوجوه

Ex.5:-- Based on these grounds the Kingdom of Saudi Arabia took very good care of the holly Qur'an from all facets.

The author of this introduction kept reiterating the same message which is the importance of the topic of his research until he jumped to Move 3 where he presented his study. He made use of a range of expressions that perform basically the same function. In other words, had he cut the number of sentences used in this move to a half, the exact message would be equally delivered. The linguistic exponents used to achieve this step were basically expressions like *the best way, no way to follow the perfect...except by, very good care, and from all facets.*

Intro.5 started with 1-1 from the beginning in four successive sentences. The four sentences were one whole thought that was divided into four sentences. They all claim the importance and the centrality of the topic to the field of education. The following two examples represent those sentences:

– يهدف التعليم فيما يهدف اليه الى التعريف بقيمة العلم الحقيقية.

Ex.6:--Education aims among its [central] goals to familiarize [people] with the real value of science.

-- و من ثم ظهرت اهمية تدريس المفاهيم العلمية.

Ex.7:--And thus appeared the importance of teaching the scientific concepts.

The first example claims centrality of one of the important aims of education which, is teaching people the real value of science. The second example completes the thought by showing the importance of the means that help accomplish the central aim. The linguistic exponents used in these two examples are *aims among its main goals* and *the importance*.

The fourth instance of 1-1 was used in Intro.4. The step occurred in the middle of the move between two occurrences of 1-2. The sentence reads as follows:

-- لذلك فان من المهم ان يؤخذ اعداد المعلم بعين الاعتبار من قبل مؤسسات إعداد العلم.

Ex.8: -- So it is important that teacher training is considered by teacher training institutions.

The sentence came as a result of the topic generalization mentioned earlier. This is realized by the use of the linguistic exponent *so*. This use occurred in the context of pinpointing what is important from a topic generalization sentence. Then the author moved back to another topic generalization.

Step 1-2: Making topic generalization(s)

Step 1-2 was used in three introductions: Intro.1, Intro.2, and Intro.4. As Swales (1990) asserts, the function of this step is to make statements about knowledge or practice or to make statements about phenomena. Intro.1 started with this step and continued for seventeen sentences. The main function was to make statements about the globalization

phenomenon and its implications on the roles that each nation should assume. In the course of explaining the implications, the author made statements about knowledge. The following exemplify the said different functions of this step starting with statements about phenomena:

-- أصبح العالم اليوم كقرية صغيرة واحدة

Ex.9:-- The world became like a small village.

-- لقد هدمت الحواجز، وافتضحت الكواليس، و انكشف المستور

Ex.10:-- The barriers were torn down, and the backstage was revealed, and the hidden was discovered.

The two examples show how the globalization phenomena had worked. The following two examples make statements about knowledge:

-- إن العمل الإبداعي يعني القيادة،

Ex.11: -- The creative endeavor means leadership.

-- و قدرة التأثير ضرورة لتحقيق الذات و إثبات الوجود الحضاري.

Ex.12: -- And the ability to influence [others in the world] underlies self-actualization and a proof of cultural presence/existence.

The last two examples clearly made statements about knowledge. Swales concludes that step 1-2 could be seen as step 1-3 without a citation. It gives general knowledge without citing their sources.

Intro.2 had also a great deal of 1-2 steps. There are fourteen sentences of this step twelve of which came after step 1-1 which started the introduction. The last two concluded the introduction after a series of sentences of step 1-3. The finding is that the first twelve sentences of this step were statements about knowledge where the author provided general statements about the field of educational administration and the reasons for such statements. The second part which is the last concluding sentences of the introduction were statements about recommended practices rather than knowledge. The following are two examples of the first part:

-- إن نجاح أي مؤسسة عامة أو خاصة، تعتمد اعتمادا كبيرا على فاعلية العنصر البشري

Ex.13:-- The success of any establishment public or private depends greatly on the efficiency of the human factor.

-- وكلما زاد المجتمع تقدما و نموا اتسعت مسؤولية الإدارة تبعا لذلك،

Ex.14:--and as the society's progress and growth increase [,] the responsibility of administration [school administration] increases accordingly.

The last two sentences in Intro. 2 made statements about recommended practices in school administration. The following are the two lengthy sentences:

-- ولكي يتمكن المدير من القيام بمسؤولياته بكفاءة ويقابل المشكلات التي تواجه الإدارة على مختلف المستويات ، سواءً أكان على مستوى أعضاء الهيئة التدريسية أم الطلبة أم المجتمع المحلي ، وكذلك المشكلات المتعلقة ببناء المناهج ، لا بُدَّ من تمتع المدير بالمهارات المعرفية أو الفكرية التي تمكنه

من التعرف على بناء المناهج وأساليب تنمية المعلمين مهنيًا وخصائص نمو التلاميذ وطرائق التفاعل
البناء مع المجتمع المحلي،

Ex.15:--And for the school principle to carry out his responsibilities and to face all sorts of problems, be they at the level of the teachers or the students or the local communities, and also the problems in curriculum building, he has to have all leadership skills and knowledge which will make him/her aware of the specific needs to improve curricula and teacher professional developments programs and the ways to better deal with the local community,

وكذلك التمتع بالمهارات الإنسانية التي تمكنه من التواصل الصحي الفعّال مع العاملين في المدرسة وطلاب، وموظفين، والإسهام في تفهم وحل المشكلات النفسية والاجتماعية التي --من معلمين، تواجه أفراد المجتمع المدرسي ، وأيضاً التمتع بالمهارات الفنية التي تمكنه من الإلمام بتخطيط الدروس واستخدام الوسائل، التعليمية ، وتنفيذ النشاطات اللامنهجية ، وتعديل المنهج، وإن كان لا يقوم بذلك مباشرة وبشكل كامل.

Ex.16:-- and also he has to have the interpersonal skills that allow him to deal with all workers in the school teachers, and students, and employees, and to participate in understanding and solving all kinds of problems facing the school community, and to have the technical skills that make him/her able to plan lessons and use teaching methods, and to plan and execute extracurricular activities, and to change the curriculum, though he/she does not do that by him/herself directly alone.

Thus, the two sentences made statements about recommended practices that a school administrator should consider.

Intro.4 had four sentences which were assigned by the raters to step 1-2: the first two sentences, one after a 1-3 step sentence, and the last one occurred after a centrality claim step (1-1) and then followed by a 1-3 step. The first two sentences were among the sentences that the two raters had a little disagreement with: one rater thought they were centrality claims because it has the linguistic exponent *it is considered* which was used as a signifier of the importance of the topic and its centrality to the field, and the other thought they were topic generalizations because they make general statements about knowledge. However, the two raters settled their differences by recognizing the function that the two sentences perform. Thus, they decided that the two sentences should be a topic generalization (1-2) because they made statements about facts and the practices that are generally known to the public. The first sentence made a statement about knowledge and the second made a statement about practices. The two sentences read as follows:

--يعد إعداد المعلم من مسؤوليات كليات التربية وكليات المعلمين

Ex.17:-- It is considered that the preparation of teachers is the job of education colleges and teachers' colleges.

-- ويعتمد نجاح هذه الكليات في عملها على مدى قدرتها على تخطيط مناهج تربوية جيدة تستطيع من خلالها توجيه طلابها الوجهة التربوية الصحيحة

Ex.18:-- and their success depends on their ability to plan their educational curricula through which they direct their students in the optimal direction.

The third and the fourth sentences that were assigned to step 1-2 were the first and the third sentence of the second paragraph in the introduction. The second paragraph started a new thought by a statement about knowledge which read as follows:

-- يعد المدرس إحدى الركائز المهمة التي يعتمد عليها نجاح العملية التعليمية من عدمه

Ex.19:-- The teacher is considered one of the pillars upon which the success of the educational process depends

The last sentence, also a statement about practices, occurred after a centrality claim 1-1 and before a literature review step 1-3 which read in the following way:

-- ولكي يؤدي الفرد دوره في التعليم فإنه لا بد من وجود اتجاهات إيجابية لديه نحو التدريس

Ex.20:-- And for the individual to perform a good job at education he should have positive attitudes towards teaching

Step 1-3: Reviewing items of previous research

This step occurred in four of the five introductions: Intro.1, Intro.2, Intro.4, and Intro.5. Table 16 shows the number and the type of citations in the four introductions. The table provides three types of information. First, it provides a distinction between the citation types employed whether they were integral or non-integral. Integral citation refers to the instance when researchers incorporate the name and the research findings of others in their actual texts. The non-integral refers to providing the citation between

parentheses. Second it provides information about the use of reporting and non-reporting citations; and by this, we mean that when authors use reporting words like *said*, *suggested*, *reported*, *etc.*, we call the citation reporting; however, when there is no reporting word used, we call it non-reporting. And the last column provides the total number of citations used in this corpus in its entirety and in individual introductions.

Table 16: Number and types of citation in the A-Ed-A group

Intro. ID#	Number of Citations				total
	Integral	non-integral	reporting	non-reporting	
1	7	0	3	4	7
2	0	9	0	9	9
4	3	1	1	3	4
5	14	3	3	14	17
Total	24	13	7	30	37
Percentage	64.86%	35.13%	18.91%	81.08%	

As for the first type of information: integral versus non-integral, Intro.1 employed integral citations. All of the citations incorporated the principle researcher(s)/research in the sentences. However, the integral citation use would usually call for a reporting word to be used in the sentence, yet only three of the total of seven sentences in this introduction used reporting words in the course of the citations. The following two examples show how the author of this introduction used the citations. The first example is an integral-reporting citation:

-- إن القيادة و الريادة في اي مجال لا تعني الإكتمال و إنما تعني كما يقول البليهي (1421، ص 18

(بداية التأسيس

Ex.21:-- Pioneering and leadership in any field doesn't mean perfection it means as Al-Blaihi (1421, p 18) said to establish...

The citation in this example incorporated the cited study into the fabric of the sentence. Also, the author used the reporting word *said*. Thus, the example is integral-reporting citation. The second example presents an integral non-reporting citation in this study. The example reads:

-- امرئ القيس الذي كان رائداً في الشعر ظهر بعده شعراء يفوقونه في الإبداع

Ex.22:-- Emro El-Qias who was a pioneer in poetry was succeeded by poets who surpassed his talent.

This example incorporated the name of the literary figure in the sentence but reported no claims by him. Thus, it is integral-non-reporting.

Another observation about Intro.1 is that step 1-3 sentences came uninterrupted in the entire introduction. They followed step 1-2 and continued until the author jumped to Move 3 where he announced his research.

Step 1-3 in Intro.2 was quite the opposite of Intro.1; all the citations were non-integral and non-reporting. This introduction had nine citations. The non-reporting non-integral is easier to accomplish compared to integral non-reporting because the citation is just putting sources next to a piece of information that does not have to include a reporting word. The following example provides information about non-integral, non-reporting citations:

-- فهو القائد التربوي المسؤول عن الإشراف وتصريف الأمور الإدارية المتعددة التي تخلق البيئة التربوية المناسبة من جهة وهو المشرف التربوي المقيم الذي يتابع سير العملية التربوية ويشرف عليها بانتظام واهتمام من جهة أخرى، (بطاح والسعود ، 1993 ، ص 197).

Ex.23:-- For he/she[the school principal] is the leader that supervises and conducts the administrative tasks on one side and he is the academic leader who oversees and evaluates the educational progress on the other, (Batah and Al-Saud, 1993, p 197).

Intro.4 had four citations: three non-reporting, integral citations and one reporting, non-integral. The three integral, non-reporting were actually three quotations where the quote was incorporated in the text as whole sentences, then the citation and the page numbers were put between parentheses. This example was problematic because the citation was actually not incorporated into the actual sentence; however, the actual words of the cited sources were employed instead. In such a case, the decision to assign such instances to the integral type was justified. Here is one of the three instances as an example:

-- " وحيث إن كثيرا من الاتجاهات مكتسبة في مرحلة الطفولة كنتيجة للمؤثرات البيئية إلا أنها ليست بالضرورة غير قابلة للتغيير " [3 ، ص 24].

Ex.24:-- “And since most attitudes/perceptions/styles are acquired since childhood as a result mostly from the surrounding environment they are not unchangeable” [3, p 24].

The fourth citation was reporting non-integral in which the author used a reporting word (testified) about the research then provided the source between parentheses. Though the study itself was incorporated in the sentence, the researcher himself was not included in the statement and was referred to in a non-integral format. The citation reads:

-- كما أسفرت الدراسة نفسها عن عدم ارتباط اتجاهات الطلبة على المقياس مع مستوى تحصيلهم]
2، ص 1، 18 [.

*Ex.25:-- Also the same study testified that there was no correlation
between students' attitudes and the quality of their learning [2, pp 1, 18].*

Intro.5 had seventeen sentences that were assigned to step 1-3 by the two raters. These sentences came one after the other until the author shifted to Move 2 in a single sentence. The citations as could be seen in Table (4-3) were in most part integral and non-reporting; fourteen of them were integral and three were non-integral. The following four examples illustrate the four types of citations in this introduction: integral reporting, integral non-reporting, non-integral reporting, and non-integral non-reporting consecutively:

-- يذكر مايكل ابراهم و جون رينتر (1983) أن دورة التعلم تتكون من ثلاث مراحل

*Ex.26:-- Michael Abraham and John Renner (1983) mentioned that the
learning circle consists of three phases*

-- وهي مفاهيم تتوازي مع مفاهيم النموذج الوظيفي لبياجيه للتمثيل، و حالة عدم الاتزان

Ex.27:-- these concepts are parallel to the functional model of Paige which consists of assimilation, and the state of disequilibrium

-- وقد ترجم هذا المفهوم الى دائرة التعلم في كثير من ما ورد في ادبيات التربية

Ex.28:--and this Learning Cycle concept has been translated in many sources of education literature (Zaiton, 1982, Ghloosh, 1983, Ameen, 1989)

-- دورة التعلم في تدريس المفاهيم العلمية ثلاثية المراحل

Ex.29:-- the learning circle is three phases process (Atkin & Carplus, 1978)

Move 2: Establishing a niche

Move 2, as explained earlier, allows the author to create a space for his/her research in the context of an established body of previous literature of a given field. Thus, the general function of the move is to present a rationale for conducting the reported study. The findings reported by the two raters indicate that this Move is the least used move in this corpus with only one single sentence in Intro.5. The percentage of this move is 0.2% of the 112 sentences in the corpus. The sentence used in Intro.5 was assigned to Move 2 Step 1d (henceforth 2-1d) which as Swales (1990) described functions to establish the niche by continuing a research tradition. This step in essence provides the rationale for undertaking the study to be reported by building on what has been accomplished up to that point in the field. Thus, continuing a tradition is in fact building on the literature review. The sentence in Intro.5 reads as follows:

-- ولما كانت الكيمياء ذات طبيعة موهلة في العلمية، بمعنى أن نشوء هذا العلم و تطوره يشبه
مراحل دورة التعلم من إكتشاف و تطوير للمفهوم و تطبيق هذه المفاهيم المرتبطة مع بعضها،
والتوسع فيها،

*Ex.30:-- and since chemistry is scientific in nature, in other words the
development of this science parallels the phases of the learning cycle from
the discovery and the development of concepts and applying related
concepts, and expanding them,*

In the following paragraph we will see if this use of continuing tradition (option 2-1d)
was actually the case. And then a discussion of the findings will follow.

The sentence cited above is indeed a Move 2 because it provides the
rationale/reason for undertaking the study, and its assignment to the continuing tradition
step was the best available option by a consensus of the two raters, yet it is not quite
simple. This introduction had seventeen 1-3 sentences which is the highest 1-3 use in the
corpus compared to 4, 9, and 7 sentences in the others. All these 1-3 sentences were
talking basically about the learning cycles and their development; however, the study was
about employing a teaching method in a chemistry class. The first time chemistry was
mentioned in this introduction was in this sentence which is the one before the last where
the researcher announced her study. So, the context built in 1-3 did not quite fit. The
study was to employ a parallel method of teaching similar to the sequence of the learning
cycle. This could be easily noticed in the sentence when the researcher stated that
chemistry development paralleled the learning cycle. Thus, the tradition established in
Move 1 was just a parallel to what would follow in the study but not the tradition itself.

Having recognized this distinction, the step might not be assigned to another step in the model. This finding was also found in Najjar's (1990) study where he noticed that the literature review of one of the studies in his corpus did not really build into the rationale of Move 2.

Move 3: Occupying the niche

Occupying the niche, as explained by Swales, is the move where the described niche in Move 2 is occupied. Swales (1990) indicates that whenever Move 2 occurs, Move 3 should follow. This is done by one of two options either by outlining purpose (Move 3 Step 1a, henceforth 3-1a) or announcing present research (Move 3 Step 1b, henceforth 3-1b). There is also a possibility of adding one or more of two additional steps (though not found in this corpus) which are announcing principle findings (Move 3 Step 2, henceforth, 3-2) and indicating the structure of the article (Move 3 Step 3, henceforth 3-3). In this corpus, the two raters reported that Move 3 was used in four of the five introductions: Intro.1, Intro.3, Intro.4, and Intro.5. Also, they reported that only Step 1 of this move was employed. This result made this move the next most used after Move 1 which was used in all five. However, only 13 sentences of the 112 in the corpus were devoted to this move. The percentage of the number of sentences of Move 3 was 11.16%.

As for the distribution of the two options of Step 1, Table 17 shows the distribution and the number of sentences of each option. Three of the four introductions employed either one or the other of the two options and only one of them employed both options (Intro.3) with one 3-1a sentence and two 3-1b sentences. Also, the table shows

that 3-1b option was used much more than 3-1a option in terms of the total number of the sentences. However, option 3-1a was used in three of the four introductions compared to two introductions where 3-1b was used.

Table 17: Number of sentences of each option in Move 3

Intro. ID #	3 – 1a	3 – 1b
1	1	0
2	0	0
3	1	2
4	0	8
5	1	0
Total	3	10

The structure of the options in each introduction is shown in Table 18. Intros.1, 4, and 5 employed one option expressed in one sentence in Intros.1 and 5 where the purposes of the research were outlined and in 8 sentences in Intro.4 where a description of the main features of the study were indicated. Intro.3 employed the two options: the purpose and the announcements of the main features of the research were both expressed successively.

Table 18: Step structure in Move 3

Intro.1	Intro. 2	Intro.3	Intro.4	Intro.5
3-1a		3-1a 3-1b 3-1b	3-1b 3-1b 3-1b 3-1b 3-1b 3-1b 3-1b 3-1b	3-1a
1 sentence	0 sentences	3 sentences	8 sentences	1 sentence

In the following paragraphs each step option used in this move will be presented individually.

Step 3-1a: Outlining purposes

The two raters found that this option of Step 1 occurred in three introductions: Intro.1, Intro.3, and Intro.5. The option's main function was to announce the purposes of the research in each study; it was expressed in the beginning of the move in one sentence per introduction. In this step a number of aspects will be considered: the position of the deictic signal in the sentence, if the deictic signal referred to the type of inquiry or the genre used, if the tense was present or past, if the structure was active or passive, and if the structure was standard or collapsed.

Intro.1 had the purpose of the study introduced as follows:

-- و لضرورة العصر الحالي وحاجة المفكرين لإيجاد طرق لتقوية الضعفاء في هذا العالم كانت هذه الدراسة.

Ex.31:--And because of the present day condition and the apparent need for thinkers to find ways to empower the weak in this world this study was conducted.

In this example the deictic signal *this study* was delayed to the sentence final position. Also, the author referred the deictic used to the type of inquiry (the study) rather than to the genre (e.g. paper, article, review, etc.) used. Further, both the passive and the past tense were used. The sentence was considered standard.

Intro.5 indicated the main purpose of the study in a single sentence. The sentence reads as follows:

-- فإن الدراسة الحالية تحاول التثبت من أثر دورة التعلم في تدريس بعض المفاهيم الكيميائية بإحدى وحدات الكيمياء العامة على تحصيل طالبات الصف الثاني الثانوي بإحدى مدارس المملكة.

Ex.32:-- thus the present study tries to prove that there is an impact of the learning circle as used in teaching certain chemical concepts to 11th grades' students in one of the Kingdom's high schools.

The deictic signal *the present study* was placed in the sentence initial position. It refers to the type of inquiry of the study. The sentence was written in the active voice and the present tense was used. The structure of the step is collapsed.

In Intro.3 where the option was used along with the other option (3-1b), the option was expressed in a single sentence. The sentence reads as follows:

-- و تأتي هذه الدراسة لتسهم - و لو بشيء يسير - في دراسة الأساليب المتبعة في تدريس مادة القرآن الكريم في مدارس تحفيظ القرآن الكريم

Ex.33:-- And this study comes to share – though with very little- in studying the practiced teaching methods in the schools of teaching the holy Qur'an

Like Intro. 5, this introduction had the deictic signal in the beginning which also referred to the type of inquiry. The active voice and the present tense were also used. The structure of the move was found to be collapsed.

In short, this option featured two collapsed structures and one standard. The collapsed structures were written in present tense and in active voice. The deictic signals were placed in the sentence initial position. Also, they referred to the type of inquiry rather than to the type of genre used. The standard structure had the deictic signal in the sentence final position and like the other structure referred to the type of inquiry. The passive voice and the past tense were employed.

Step 3-1b: Announcing present research

This option of Step 1 was used in only two introductions: Intro.3 and Intro.4. The option functions as a means to announce what the authors thought the main features of their research were. In Intro.3, the author indicated the purpose of his study using the first option as mentioned above. However, the author then continued to describe what he had done to conduct his study and thus presented more about his research. The following are the two remaining sentences of this move as reported by the raters:

--19) حيث تم اختيار عينة منها ، و من ثم قام الباحث بالرحلة إليها لتطبيق أداة الملاحظة على أرض الواقع في الصفوف الدراسية، (20) فشملت هذه الرحلة عددا من المدن في المناطق التالية : مكة المكرمة - منطقة المدينة المنورة - منطقة الرياض - المنطقة الشرقية - منطقة عسير

Ex.34:-- 19) a sample of these schools was chosen, and then the researcher traveled to apply the research tool on location in the classrooms, 20) this trip covered a number of cities in the following provinces: Mecca Province- Medina Province-Riyadh Province- the Eastern Province- Assir Province.

The two raters explained that the two sentences were assigned to this option because it would not fit anywhere else: the sentences did not indicate a purpose, announce principle finding, or indicate the article structure. The author seemed to explain the method he used rather than announcing the features of his research. Yet, the raters contended that 3-1b is the best option because they indeed described some features of the study. The author also used the past tense and the passive to describe his procedures.

In Intro.4 the employment of this option was much clearer than in Intro.3. In this introduction, only this option was used. However, the two raters found difficulty at first in assigning 8 sentences in a row to this option. The problem was that the organization of the option was in reverse. The last sentence contained the announcement of the research with the deictic signal *this study* at the very end. The raters had to retrace the move and found that the seven previous sentences were actually a description of the main features

of the study. The following two examples were chosen to show how this writer organized this move:

-- لذا فقد رأى الباحث أن يستجلي الحقيقة من خلال هذه الدراسة

Ex.35:-- thus, the researcher saw to discover this truth through this study

-- (15) لذا فإنه من الممكن أن تتغير هذه الاتجاهات إذا كانت سالبة أو محايدة إلى الإيجابية بسبب نوعية الدراسة التي يتلقاها الطالب، (16) وهذا يتضح أكثر عند الكشف عن اتجاهات طلاب المستوى الرابع على وجه الخصوص

Ex.36:--15) So it is possible for these attitudes to change if they were negative or neutral to positive as a result of quality education that the student receives, 16) and this should become apparent when measuring the attitudes of senior students in particular.

The first example is the last sentence in the introduction. The author used the standard descriptive form in the announcement of his research by referring to himself as *the researcher*. The deictic signal was put in the sentence final position and referred to the type of inquiry in that signal, *this study*. The author also used the active and the past tense in this sentence. The second and third examples, however, occurred before the last sentence cited above. The writer described the main features of his research in these sentences. What helped a little in resolving the confusion caused by such reverse organization of Move 3 was the author's use of paragraph boundaries. The last paragraph of the introduction was devoted in its entirety to this step option.

General summary of the findings of A-Ed-A group

The summary covers two levels of findings: findings at the move and the overall structure level and findings at the step level. The overall structure of the introductions is characterized by excessive use of Move 1 as it occurred in all the five introductions and occupied the largest portion of the 112 sentences in the corpus with 94 sentences, 83.9%, followed by Move 3 with 13 sentences, and then by Move 2 with only one sentence in the entire corpus. However, though only 13 sentences were devoted to Move 3, it was used in four of the five introductions. Thus, the authors of this corpus tend to avoid establishing their niches, and yet present their research in Move 3. They seemed to have employed different strategies to justify their research announcements without Move 2. Further, even in the only sentence where Move 2 was found, the realization of that move was unusual because the literature review that preceded did not fit directly into the move, a case that has been also found in Najjar (1990). Another observation about the general structure is that three of the four authors who employed Move 3 used paragraphing to demarcate the boundaries between Move 1 and Move 3. Interestingly, the sole introduction that did not use this strategy was the one with Move 2. The last general observation is the use of religious, unrelated sentences to either begin the introduction or to end them. This happened in two of the five introductions and occurred in four sentences.

The findings at the step level are numerous. The following is a general summary of them.

The steps of Move 1

Within Move 1, step 1-1 was used 23.4% of the entire move as could be seen in Table 19. It occurred in four of the introductions. The function of this step was to claim importance and centrality of the topic of the research. One interesting observation is that all of the instances of this step were claims of importance in the real world rather than an importance and centrality of the topic in a body of established research tradition.

Another observation is that there is a degree of variation in the use of step 1-1. Each of the introductions employed the same step differently. As one of them employed the step as the only step in Move 1 (Intro.3), two other introductions expressed this step in one sentence where one started the introduction (Intro.2) and the other had the step in the middle of the Move (Intro.4). The fourth introduction started with this step in four consecutive sentences (Intro.5). Another observation is that the order in which the steps came varied. As step 1-1 in Intro.2 started the introduction to be followed by step 1-2, Intro.3 was not followed by any other step in this move. Also, in Intro.4, the step occurred in the middle between two topic generalizations. In Intro.5, four sentences of 1-1 started the introduction followed by step 1-3. Thus, the order of step 1-1 varies in the corpus as well.

Table 19: Number and percentage of each step in Move 1

	1-1 centrality claim	1-2 topic generalization	1-3 previous literature
# of introductions	4	3	4
# of Sentences	22	35	37
Percentage	23.4%	37.23%	39.36

The observations about step 1-2 could be summarized in three major observations. First, though the move was employed in only three introductions, it was used more than 1-1 with 37.23% of the total number of sentences of the entire Move 1. Second, the sequence in which this step occurred varied in each of the three introductions. In Intro.1 the step started the introduction in many sentences then was followed by step1-3; in Intro.2 the step occurred after step 1-1 then followed by 1-3 in a natural sequence then reappeared again (cycled) to mark the concluding remarks about suggested practices. In Intro.4 step 1-2 started the introduction and then was followed by 1-3; it reappeared to be followed again by 1-1 and appeared for the last time before (see the cycling pattern in table 20).

The last major observation is the function step 1-2 performed. The three introductions had different types of claims: in Intro.1, most claims were statements about phenomena (the world as a small village) that were distantly related to the topic (fostering creativity and leadership in schools) from the beginning followed by statements about knowledge that were distantly connected to the topic (no direct claims about creativity in schools which the paper was trying to present). In Intro.2, the statements were largely about knowledge that was directly related to the topic (school administration) in the first

appearance of the step; in the second appearance (the last two sentences), however, the statements were about recommended practices as concluding remarks resulted from both the literature review step (1-3) and the statements about knowledge from the beginning. In the last introduction (Intro.4), however, each statement about knowledge was followed by a statement about practice; therefore, the four instances of 1-2 were divided this way: two statements about knowledge and two statements about practice.

Table 20: Sequence of steps in Move 1

Intro. ID#	Sequence of steps
1	1-2, 1-3
2	1-1, 1-2, 1-3, 1-2
3	1-1
4	1-2,1-3,1-2, 1-1, 1-2, 1-3
5	1-1, 1-3

The last step in Move 1, 1-3, was found to be especially interesting because of the way in which the literature review was employed. The step occurred in four of the introductions. The first observation to be noted is that the step is the most used step in the corpus as it was used in 39.36% of the sentences. The second observation is that the integral citations are almost twice as many of the non-integral sentences (24 – 13). Also, most of these citations were non-reporting (30 sentences versus 7 reporting). The interesting observation is that the easiest combination is either the integral-reporting citation or the non-integral-non-reporting citation because when the author incorporates the source he/she tends to report the specific claim of the cited source. However, in this case, though 24 citations were integral compared to 13 non-integral, most of the citations were non-reporting. Also, the integral – non-integral distribution of the types of citation varied. Two of the introductions used one of them exclusively (Intro.1 used integral and

Intro.2 used non-integral). The other two introductions were mostly integral (see Table 16). The last observation about this step is about the sequence of the step. This step came in successive sentences in the most part except for a single instance of cycling in Intro.4.

The steps in Move 2

The findings of Move 2 could be summarized in four main observations. First, the Move was not employed in four of the five introductions. Second, the only introduction with this move expressed it in a single sentence. Third, the main function of the sentence was to justify the reported research through continuing a tradition option. The last observation is that the previous research did not really build into the justification of the study because it was a review of just a parallel tradition (learning cycles) not the actual tradition of the subject matter, which was chemistry.

The Steps in Move 3

Only the first step of Move 3 was used in all of the introductions where both of the two possible options of this step were used. Ten of the sentences were assigned to option 3-1b while the remaining 3 sentences were assigned to 3-1a. However, 3-1a was present in three of the four introductions while option 3-1b was used only in two of them.

The actual linguistic features of Option 3-1a are characterized by one standard and two collapsed structures. The standard had its deictic signal in the sentence final position while the collapsed form had their signals placed in the initial position of the sentences. In all of the cases the deictic signals referred to the type of inquiry *the study*

instead of the genre which allowed the use of the past tense in one of the instances (Intro.1). Also the standard structure used both the passive and the past tense while the collapsed structure used the present and active. Option 3-1b in Intro.4 had a standard structure, active, and past tense. The deictic signal came in the sentence final position and referred to the type of inquiry *this study*. Table 21 shows a summary of the linguistic features in this move.

Table 21: Summary of linguistic features of Move 3

Intro ID #	Structure	Voice	Deictic signal	Deictic reference Inqui. vs. genre	Deictic position	Tense
1	Standard	passive	This study	Inquiry	Final	Past
3	Collapsed	active	The present study	Inquiry	Initial	present
4	Standard	active	This study	Inquiry	Final	past
5	Collapsed	active	The present study	inquiry	Initial	present

US Educated Arab Scholars Group (US-Ed-A)

Now we turn to the next group, US-Ed-A. There were also five introductions in this group. These introductions were written by Arab scholars who earned their graduate degrees in the United States. The two raters' findings were tabulated and reported in Table 22. As the table shows, this group employed Move 1 in all the introductions in 58 sentences out of 73 sentences for a total of 79.4%. Moves 2 and 3 came next with equal weight of 7 sentences (9.58%) in each move. Further, moves 2 and 3 had equal distributions. Each of them occurred in three introductions. The inapplicable instance occurred only once in one of the introductions in a single sentence. In the following

sections, each of the moves will be discussed and then a summary of the findings will follow.

Table 22: Results of general move structure and their distribution in the US-Ed-A group

US-Ed-A ID#	Move Structure <u>total</u>	<u>number of sentences</u>				
		<u>Move 1</u>	<u>Move 2</u>	<u>Move 3</u>	<u>Not Applicable</u>	
1	1 – 2 – 3	14	3	2	0	19
2	1 – 2	12	1	0	0	13
3	1 – 2	10	3	0	1	14
4	1 – 3	11	0	4	0	15
5	1 – 3	11	0	1	0	12
Total		58	7	7	1	73
Average		11.6	1.4	1.4	0.2	14.6
Percentage		79.4%	9.58%	9.58%	1.36%	

Move 1: Establishing a territory

In this corpus, the authors seemed to have paid most of the attention to Move 1. As was just mentioned it occupied 73.4% of the total number of sentences in the corpus. This move is divided into three steps. Table 23 shows the step structure in this move. In this section, I will review these individual steps and present the findings reported by the two raters.

Table 23: Step structure in Move 1 of the US-Ed-A group

(N/A= inapplicable to the model)

<i>Intro.</i> # 1	<i>Intro.</i> # 2	<i>Intro.</i> # 3	<i>Intro.</i> # 4	<i>Intro.</i> # 5
1-1	1-1	N/A	1-1	1-1
1-2	1-1	1-1	1-2	1-1
1-2	1-3	1-3	1-2	1-1
1-2	1-3	1-3	1-2	1-1
1-2	1-3	1-3	1-3	1-1
1-2	1-3	1-3	1-2	1-1
1-2	1-3	1-3	1-2	1-1
1-2	1-3	1-3	1-2	1-1
1-2	1-3	1-3	1-3	1-2
1-2	1-3	1-3	1-2	1-2
1-2	1-3	1-3	1-2	1-2
1-3	1-3	1-3	1-2	1-3
1-3	1-3			
1-1				
1-1				
14 sentences	12 sentences	10 sentences	11 sentences	11 sentences

Step 1-1: Claiming centrality

As mentioned earlier, the main function of step 1-1 is to claim importance and centrality of the topic to be studied. This step was employed in all five of the introductions in the corpus. All the introductions began with this step: three of them began with one sentence, one with two, and one with seven sentences. In Intro.1, the step was used in three sentences: one at the outset of the introduction, and two at the end of the move. The first sentence in this introduction reads:

-- تفاقمت مشكلة تعاطي المخدرات - بأنواعها المختلفة - في العقدين الأخيرين

Ex.37:-- drug abuse problem, with all their kinds, has increased

dramatically in the last two decades.

This sentence attracts the attention of the reader to a real world problem of current influence. The author used the phrase *increased dramatically* to signify importance and *the last two decades* to emphasize currency. Thus, the problem is central and important. This sentence then was followed by a series of topic generalization sentences (step 1-2). Then step 1-1 reappeared in two sentences towards the end of the move and after two sentences of literature review (1-3). This time it is not only to claim an importance but further to warn against the problem [drugs] and suggests that the society at large has to face its responsibilities in fighting the crisis [drugs increasing use among students]. The following sentence is one of the two:

-- مما يترتب عليه مواجهتها لكي لا يفقد المجتمع على أثرها أعز ما يملك

Ex.38:-- this entails that it[the society] has to face this problem so that the society would not loose its dearest possession [its youth]

Step 1-1 came as concluding remarks that were learned from the argument at the beginning of the introduction and after two pieces of evidence were presented by step 1-3. Thus the second use at the end of the move was claiming importance by warning against the problem. The author used the superlative *dearest* to add to the emphasis of the importance of the topic.

In Intro.2, the introduction started with two sentences of this step. The two sentences were two parts of the same claim of importance/centrality. The claim was

made about the importance of dealing with a real world issue (people with special needs).
The following example is the opening sentence:

-- يعتبر الاهتمام بذوي الاحتياجات الخاصة من ابرز الدلالات على رقي المجتمعات في جانبها
الانساني و الاجتماعي،

*Ex.39:-- Solicitude for those with special needs is considered among the
most prominent indications of advancement of societies in their human
and social side,*

This author used the superlative *the most* alongside the word *prominent* to signify his
topic importance.

In Intro.3, however, Step 1-1 appeared once in a single sentence which is the first
sentence in this move (the actual first sentence was a prayer and thus was not considered
applicable by the raters). The centrality claim was based on a central importance in
research rather than the real world like the other previous two introductions in this
corpus. The sentence reads as follows:

-- فإن دور الأسئلة في تسهيل تعلم الطلاب كان وسيظل محل اهتمام الباحثين

*Ex.40:-- thus the role of the questions in facilitating students' learning
was and still is of researchers' interest.*

The author used certain linguistic exponents to achieve his goal of claiming centrality
like *was and still*. Both words signify importance and currency.

Intro.4 had this step in the first sentence of the introduction. The claim of importance/centrality was made about a problem in the real world. See the following example:

-- من أبرز ما يميز الناس عبر مختلف الثقافات والمجتمعات اختلافهم عن بعض في السمات العرقية والخصائص الإقليمية.

Ex.41:-- One of the most distinctive features across different cultures and societies is the race element and regional characteristics.

The author used the superlative *the most* to emphasize his claim's importance about the topic.

Intro.5 in contrast to the other introductions had the most use of this step. The first seven sentences were assigned to 1-1 step. The claims of importance of the topic like three of the previous introductions were made about a real world issue rather than on a research/field topic. The following two sentences exemplify this step in Intro.5:

-- تهتم التربية بإعداد الأجيال لتحمل مسؤولياتهم تجاه أنفسهم ، وأسرهم ، وأوطانهم ومواطنيهم ،
لمواكبة التطور المستمر في جميع ميادين الحياة ،

Ex.42:-- Education is concerned with preparing generations to assume their responsibilities towards themselves, their families, and their countries and fellow citizens, to keep up with continuing progress in all aspects of life

--ومن هذا المنطلق ركزت سياسة التعليم في المملكة العربية السعودية على التعليم ، وقامت
بنشر المدارس لجميع المراحل في مختلف المناطق

*Ex.43:-- and based on this fact the educational policy of the kingdom of
Saudi Arabia was focused on education, and it distributed schools of all
stages in all provinces of the kingdom.*

The author employed certain linguistic exponents to emphasize the importance of the topic. For example, he used maximum expressions like *all aspects of life* and *all stages* and *all provinces*. He also used words that connote importance like *focused* and *concerned*.

Thus, step 1-1 in this corpus was used in all of the introductions in almost the same way. The authors, for the most part, made their centrality claims about real world situations rather than about the research topic. Only one of them restricted the centrality claims to the research area. Also, all the introductions used maximum expressions to emphasize the topic importance like *the most, dramatically, all kinds, all facets of life, and dearest, etc.*

Step 1-2: Making topic generalization(s)

Step 1-2 functions, as mentioned earlier, to make topic generalizations by statements about knowledge or practice or statements about phenomena. The step was used in three introductions in this corpus: Intro.1, Intro.4, and Intro.5. Intro.1 employed this step in 9 successive sentences of the total 14 sentences of Move 1. The step occurred in its natural expected position in the CARS model: after step 1-1 and before step 1-3.

The first three sentences were statements about the phenomenon of drugs and its abuse. The remaining six sentences provided general knowledge and facts about drugs. Thus, the step was divided, though not equally, between the two main functions of the topic generalization step: statement about knowledge/practice or statements about phenomena. The following two sentences exemplify the two types of topic generalization. The phenomena statement reads as follows:

-- إذ لا نزال نسمع يومياً عن أخبار المخدرات في أماكن شتى من العالم

Ex.44:-- we still hear news about drugs daily in different parts of the world

The knowledge statement reads

-- إن نهاية مرحلة المراهقة وبداية مرحلة الشباب من المراحل التي يتعرض فيها الفرد للانزلاق في هذا الداء

Ex.45:-- The end of the teen stage and the beginning of youth stage are among the stages that the individual is at risk of using this poison

Intro.4 used this step in 8 sentences out of the 11 sentences of this move. Though the step was used excessively as in Intro.1, the step cycled with the 1-3 step. The first three sentences and the second two sentences were statements about the phenomenon of racism. The following is an example:

-- ومن المؤسف أن هذه الفوارق الحقيقية تمثل قاعدة للكثير من مظاهر التحيز وعدم الإنصاف

Ex.46:-- and it is unfortunate that these real differences represent a base for the phenomenon of discrimination and injustice.

The last group in this introduction was three statements about knowledge or practice that came as concluding remarks that were based on both the previous statements about the phenomenon and 1-3 steps. The following is an example of such statements:

-- لذا، من المتوقع أن القادم إلى موطن غير موطنه الأصلي سوف يحمل قبيل قدومه إليه نظرة معينة عن أهل ذلك الوطن

Ex.47:-- So, it is expected from someone who comes from his original home country that he will bring with him certain stereotypes about the people of the host society

As is clear from the example, the author used the word *so* to signify that this is a conclusion from what has been said thus far in this introduction.

Intro.5 used this step in three consecutive sentences in its assumed place (after 1-1 and before 1-3). The first two sentences were mainly statements about practices that are known to take place in schools and the last one was a recommended practice to the teachers. The following two sentences exemplify these statements. The first is a statement about a practice and the second is a statement about a recommended practice:

-- ويقبل الطالب على النشاط المدرسي اللاصفي لأسباب عديدة ، منها : إشباع ميوله وحاجاته والبحث عن تطوير مهاراته ، وزيادة معارفه ومعلوماته

Ex.48:-- And students are attracted to the extracurricular activities for many reasons, among them: satisfying their hobbies and needs and searching for developing their skills, and enlarging their knowledge and information.

-- فهم في حاجة إلى معاملة تتسم باللين

Ex.49:-- thus they need to be treated with gentleness

Step 1-3: Reviewing items of previous research

Step 1-3 occurred in all of the five introductions. The number of sentences and the type of citations were the most distinctive features considered for analyzing this step. As Table 24 shows, the number of citations varied; two introductions (Intro.2 and Intro.3) had 79.16% of the total number of sentences of the step while the other three introductions had from 1 to 2 sentences assigned to this step. Also, the table shows that most of the instances of this step were non-integral (83.33%) and non-reporting (79.16%). The following is a presentation of the results in each introduction.

Table 24: Number and types of citations in US-Ed-A group

Intro. ID#	Number of Citations				total
	Integral	non-integral	reporting	non-reporting	
1	0	2	1	1	2
2	0	10	0	10	10
3	3	6	2	7	9
4	0	2	1	1	2
5	1	0	1	0	1
Total	4	20	5	19	24
Percentage	16.66%	83.33%	20.83%	79.16%	

Intro.1 had only two sentences that were assigned to this step by the two raters. Both of the two sentences were non-integral. One of them was found to contain a reporting verb and thus considered reporting and the other was found to be non-reporting. See the following two examples (Ex.50 & Ex. 51), for the reporting and the non-reporting respectively:

-- وقد أكد أصحاب الاتجاه السلوكي على وجود الحاجة إلى خفض التوتر والقلق اللذين يواجهان الفرد، وما تسببه هذه الحاجة من لجوء الفرد إلى تعاطي المخدرات [4]

Ex.50:-- The behaviorists have confirmed the existence of the need to lessen tension and worry that face individuals [4]

-- إذ أنه عندما يشعر بالارتياح المؤقت بعد تعاطيها فإن ذلك يعزز لديه الفكرة بأن هذا المخدر عامل فعال في الحد أو التخفيض مما يعانيه من توتر وقلق [4 ، ص 5]

Ex.51:-- when he [the drug addict] experiences the temporary relaxation effect, the idea that the drug does actually lessen his tension and worries intensifies [4, p 5].

Thus, the first sentence used the reporting verb *confirm* in the context of meaning the act of telling, and the second sentence did not use such a device and therefore was considered non-reporting.

Intro.2, however, employed this step more than any other introduction with 10 sentences assigned to it. What is interesting is that all of them were non-integral and non-reporting which conform to the assumptions stated by Swales (1990) about this

particular combination. Since all the sentences were of the same kind, only one example will be provided as seen in Example 52:

-- و تمنح ميداليات او شرائط لجميع المشاركين، بغض النظر عن النتائج (المطر، 2000، ص 237
(

*Ex.52:-- and the medals and the ribbons should go to all the participants,
regardless of the results (Matar, 2000, p 237).*

Intro.3 also was the second to Intro.2 in terms of the number of sentences assigned to this step (9 sentences). However, this introduction features the use of both the integral and the non-integral options in addition to the reporting and non-reporting. The following sentences exemplify the range of options employed in this introduction:

-- وقد توصل روثكوف بعد إجراء عديد من الدراسات إلى أن لموقع الأسئلة في بداية المادة
الدراسية المطبوعة أو في نهايتها مباشرة أثرا دالا في تسهيل التعلم وزيادة الاحتفاظ بما تم تعلمه

*Ex.53:-- And Rothkoof found out after conducting several studies that the
place of the questions before the martial [passage] and right after it had a
significant effect in increasing the retention rate of learned material*

-- وأطلق على هذه الظاهرة مصطلح الاستجابة المولدة للتعلم [3، ص 241]

*Ex.54:-- and this phenomenon was called mathemagenic response [3, p
241]*

-- روثكوف الذي وضع بدراساته الكثيرة المتميزة أسس نظرية متنامية عن الدور الحقيقي للأسئلة في تسهيل التعلم، وخاصة الأسئلة المصاحبة التي توضع مباشرة في بداية المادة المطبوعة

Ex.55:-- Rothkoof took the lead in this area who through his studies laid down the bases for a theory of the role of questions in facilitating learning, in particular the questions that are put before the printed material

-- وخلاصة هذه النتائج أن تضمين المواد الدراسية المطبوعة أسئلة بين ثناياها يؤدي إلى وجود فروق دالة في الاسترجاع [1 ، ص 358].

Ex.56:-- And the summary of these findings states that enclosing questions in the learning materials led to significant differences in the recall [1, p 358]

The first sentence (Ex.53) is integral reporting. The author incorporated the cited name into the actual text and used the reporting verb *found*. Example 54 is non-integral and non-reporting; the author had the citation between brackets and did not use a reporting verb. Example 55 is integral and non-reporting as the writer incorporated the name of the researcher in the text but preferred to report what happened rather than what the researcher cited in the text had reported. The fourth sentence (Ex. 56) is non-integral reporting where the citation was put between brackets but also used the reporting verb *state* to report the general findings.

Intro.4 had 2 non-integral 1-3 steps one of which was reporting and the other was non-reporting. The reporting used the reporting verb *found* while the non-reporting

managed to state the findings as a piece of information. See Examples 57 and 58 for the two sentences, the reporting followed by the non-reporting:

-- وقد كشفت العديد من الدراسات عن وجود اتجاهات ونظرات للأفراد عبر مختلف الشعوب والثقافات [11؛ 4]

Ex.57:-- And several studies found these orientations in people conceptions in different cultures and peoples [11; 4]

-- وعند غياب أي معلومة واضحة عن شخص معين من غير جماعته، نجده يفترض خصائص ما حول ذلك الشخص على أساس من عضويته في تلك الجماعة [10]

Ex.58:-- And when there is not enough information about a certain person from an outside group, we found that a person assumes certain features based on that other person's group [10]

Intro.5 had one integral reporting 1-3 step. The two raters decided to assign this sentence to this step after a discussion of its applicability to the model. One of the raters thought it might loosely be considered a 1-3 but in an unusual way. The reason was that the sentence was a religious quotation. However, it was considered applicable because it fit the context for which it is used. The quotation was also considered reporting because it employed the reporting word *said*. See Example 59:

-- اقتداءً بخطاب الله سبحانه وتعالى للرسول صلى الله عليه وسلم بقوله تعالى: ...

Ex.59:-- this is to follow the direction that was given to the prophet peace be upon him when Allah almighty said: ...

Move 2: Establishing the niche

Establishing the niche (Move 2) provides the justification for the presented research by indicating a place for it in the body of the literature either in a form of gap, challenge to a claim, raising a question, or in continuing a tradition format. In this corpus, this move was used in three of the five introductions. It was realized in 7 (9.58%) sentences out of the 73 sentences of the entire corpus. In each of the three introductions, only one of the available four options for this move was used which was option 2 – 1b: indicating a gap. Table 25 represents the step option and the total number of sentences assigned to that option.

Table 25: Step options in Move 2 in the US-Ed-A group

Intro.1	Intro.2	Intro.3	Intro.4	Intro.5
2 – 1b 2 – 1b 2 – 1b	2 – 1b	2 – 1b 2 – 1b 2 – 1b		
3 sentences	1 sentence	3 sentences	0 sentences	0 sentences

The three sentences that were assigned to option 2 -1b in Intro.1 were presented successively in the introduction then were followed immediately by Move 3. All three of the sentences actually comprised a single thought expressed in three separate sentences. See example 60 for one of them:

-- إلا أن البحث في علاقة هذا الاتجاه بسلوك المساييرة لم تتناوله الدراسات التي أتيح للباحث الاطلاع عليها

Ex.60:-- however, the relationship of this orientation with peer imitation was not dealt with in the studies that the researcher had access to

Interestingly, only two studies were cited in this introduction. The author used the adversative connector *however* to mark his move. He also used the negation word *not* in the verb phrase to indicate the gap.

Intro.2 had only one sentence of this move which was also 2 – 1b. In this introduction, the author indicated his gap by asserting limitations in the previous studies.

See Example 61:

-- ورغم اتفاق المتطوعين و المشاركين في الاولمبياد الخاص على تحقق الاهداف المرجوة الا ان الدراسات التي تهدف الى تقييم اثر البرنامج على النواحي النفسية و البدنية و الاجتماعية للمشاركين من ذوي التخلف العقلي تتعتبر محدودة جداً

Ex.61:-- In spite of the agreement of the volunteers and the participants in the special Olympic on the achievement of the targeted objectives the studies which evaluate the lasting effect of the special Olympic programs on the physical and psychological and social aspects of the mentally retarded participants are considered very limited

Thus, the author used a lexical negation word/adjective *limited* to indicate his gap.

In Intro.3 option 2 -1b was expressed in three sentences. As in Intro.1 all of the three sentences occurred one after the other. However, unlike Intro.1 this introduction had three separate thoughts expressed in three separate sentences. The following excerpts from each of the three sentences exemplify the points mentioned:

-- غير أن الدور الحقيقي لأثر الأسئلة ... لا يزال هذا الدور بحاجة إلى مزيد من البحث

Ex.62:-- But the real role of the effect of the questions ... has not yet been investigated enough

-- حيث لا توجد إلا دراسات قليلة متناثرة في التراث العلمي للحقل بحثت في الأثر التسهيلي للأسئلة

Ex.63:-- there are only few studies scattered in scientific field literature which researched the facilitative effect of the questions... .

-- وهي دراسات، لا يمكن تعميم نتائجها

Ex.64:-- the results of these studies, cannot be generalized... .

The move like Intro.1 started with an adversative sentence connector *but*. Then the author used two types of words to indicate his gap: the negation word *not* and the negative quantifier *few*.

Move 3: Occupying the niche

This move occupies the niche that has been established typically in Move 2. For this corpus, the two raters reported the results shown in Table 26. Three of the five introductions employed this move in a total of seven sentences: two sentences in Intro.1, four sentences in Intro.4, and one sentence in Intro.5. The seven sentences accounted for

9.58% of the 73 sentences in the corpus. The three introductions realized this move through one option which was 3-1a: outlining the purpose(s) of their respective research.

Table 26: Number of sentences and type of Move 3 options in the US-Ed-A group

Intro.1	Intro.2	Intro.3	Intro.4	Intro.5
3-1a 3-1a			3-1a 3-1a 3-1a 3-1a	3-1a
2 sentences	0 sentences	0 sentences	4 sentences	1 sentence

The following is a presentation of each introduction and how each author realized this move using six different linguistic features. First, standard or collapsed structure of claim; second, passive or active voice; third, type of deictic signal; fourth, whether the deictic reference made about the type of inquiry or the genre used; fifth, initial or final position of the deictic signal; and sixth, past or present tense. Table 27 summarizes the results of the linguistic features in this move.

Table 27: Linguistic features in Move 3 in the US-Ed-A group

Intro ID #	Structure	Voice	Deictic signal	Deictic reference Inqui. vs. genre	Deictic position	Tense
1	Collapsed	Active	present study	Inquiry	Initial	Present
4	Collapsed	Active	present study	Inquiry	Initial	Present
5	Collapsed	Active	This study	Inquiry	Initial	Present

Intro.1 had two sentences that were designated as the 3-1a option. Both sentences provided the purpose of the reported research. The two sentences were actually a single

thought separated into two sentences. The first sentence announced the main purpose of the research, and the second added additional purposes. The first sentence is presented here in Example 65:

-- ولذا تحاول الدراسة الحالية أن تلقي الضوء على العلاقة بين هذين المتغيرين وارتباطهما ببعض المتغيرات الديموغرافية

Ex.65:-- and so the present study tries to shed light on the relationship between these two variables and their connection with the demographic variables

The structure of the announcement of the move is collapsed as it is clear in the example *the present study tries*, and it is in the active present. The other features of this introduction are that the deictic signal was placed in the initial position of the sentence and referred to the type of inquiry rather than the type of genre. Intro.4 had four sentences of 3-1a. The first sentence started the announcements of the purpose of the research and the other three sentences followed in the form of questions of the study.

Example 66 is the first sentence:

-- فإن مشكلة الدراسة الحالية تتمثل في محاولة الإجابة عن ما يلي من أسئلة

Ex.66:-- the problem of the present study comes to try to answer the following questions

The six linguistic features were typical of Intro.1: the introduction employed the same set of linguistic devices. Intro.5 also employed option 3-1a in a single sentence. It also used the same six linguistic features as shown in Table 27. See Example 67 below:

-- وهذه الدراسة تتناول العوامل التي تسهم في جذب الطالب للمشاركة في الأنشطة المدرسية
اللاصفية في المرحلة المتوسطة ، والكشف عن المشكلات التي تحدُّ منها

Ex.67:-- And this study deals with the factors that contribute to attracting students to participate in the extracurricular activities in the middle school, and to discover the problems that deter them.

General observations and findings in US-Ed-A group

58 of the 73 sentences in the US-Ed-A corpus were devoted to Move 1 accounting for 79.4%. Move 2 and Move 3 were given the same weight with seven sentences each, 9.58%, and the two moves were employed in three introductions each. Though only one introduction had all three of the moves (Intro.1), the two other introductions split in the use of the moves: 2 had moves 1 and 2 and the other two had moves 1 and 3.

As for the macrostructure for this corpus as a whole, the authors employed Move 2 in three of the introductions after Move 1. They actually used the indicating a gap option which calls for Move 3 to follow immediately. However, two of the introductions ended with Move 2, and only one had Move 3 to follow. The other observation is that three introductions had Move 3, and only one of them was preceded by Move 2. The other two seemed to create their niches in a different way that could not be captured by

the CARS model. The following is a review of a summary of the main observations and findings of the individual moves.

Summary of Move 1

Tables 28 and 29 provide a summary of the findings for this move. Table 28 shows the number of introductions that employed each step as well as the percentage of each step in this move. Table 29 shows the pattern of the sequence of the steps in this move. As for step 1-1, four main observations were noticed. First, it was used in all five of the introductions. Second, it was used in 24.13 % of the sentences in Move 1 which made it the least used. Third, four of the introductions made their centrality claims about real world importance rather than the centrality and importance made within the context of established research. Only one introduction (Intro.3) has actually claimed centrality in the context of an established research tradition. And the last observation is that the use of this step was to some degree invariant; the step opened all the introductions and did not cycle except for Intro.1 when the author claimed importance to the topic as concluding remarks of the argument built-up at the end of the move. The other four introductions employed the step in more or less the same way in terms of the place where it was used (it began all the introductions) and in terms of the number of sentences (two to three sentences in four of the introductions).

Table 28: Percentage of each step in Move 1 in the US-Ed-A group

	1-1 centrality claim	1-2 topic generalization	1-3 previous literature
# of Introductions	5	3	5
# of Sentences	14	20	24
Percentage	24.13%	34.48%	41.37%

As for step 1-2, it was used in only three of the introductions compared to five for step 1-1. However, the percentage of its use was higher than the previous step as 1-2 occupied 34.48% of the sentences in the move. Also, this step was found to have been employed in different ways. Intro.1 and 5 had this move situated in its natural place (after 1-1 and before 1-3) while in Intro.4 the step cycled with step 1-3 and ended Move 1 (See Table 29). As for the type of statements made, both statements about knowledge/practice and statements about phenomena were employed.

Step 1-3 in this corpus was used in all of the five introductions. It was found to be the most used step in this move with 41.37%. It was also found that most of the sentences that employed this step were non-integral and non-reporting with 83.33% and 79.16% respectively. Three of the five introductions did not use the integral option at all. Also, only five of the 24 sentences in this step used reporting verbs. As for the sequence, four of the introductions had this step placed in its natural sequence with only one introduction (Intro.4) that cycled it (See Table 29).

Table 29: Sequence of the steps in Move 1 in the US-Ed-A group

Intro. ID#	Sequence of steps
1	1-1, 1-2, 1-3, 1-1
2	1-1, 1-3
3	1-1, 1-3
4	1-1, 1-2, 1-3, 1-2, 1-3, 1-2
5	1-1, 1-2, 1-3

Summary of Move 2

There are four major observations about this move. First of all of the three introductions employed the indicating a gap option (2-1b). Second, two of the three started the move with the adversative connector *however*. The third observation is that two of the introductions employed the verb negation word *not* to indicate the gap in Intro.1 and part of the gap in Intro.3. Also, the lexical negation adjective *limited* was used once in the lone Move 2 sentence in Intro.2, and the negative quantifier *few* was used once in Intro.3. All of these observations were found to be commonplace in the studies cited Swales (1990) about the English RA introductions. The fourth observation is that no cycling occurred in this option/move. Also, Intro.1 indicates a gap in the previous literature but failed to provide enough citations of that literature (only two sentences of 1-3).

Summary of Move 3

Only three of the five introductions used Move 3. It accounted for 9.58% of the entire corpus. It used only one option of step1 which was 3-1a. The six linguistic exponents were the same for all three of the introductions. Also, two of the three

introductions (Intros 1 and 4) that had this move did not use paragraph boundaries to demarcate the beginning of the move.

Comparison between the A-Ed-A and the US-Ed-A groups

The first and the second questions of this study were answered as a result of the comparison between the A-Ed-A group and the US-Ed-A group which was held at two different levels: the macrostructure level and the move-step level. The questions were as follows: *1) Do Arab scholars who had earned their graduate degrees in the USA employ the same rhetorical/organizational moves when they write Arabic RA introductions as Arabs who earned their degrees in the Arab world? 2) What is the macrostructure of the selected Arabic RA introductions?* The answer for the first question was ‘yes indeed’. The A-Ed-A scholars wrote their introductions differently from the US-Ed-A scholars. The following sections present a detailed comparison between the two groups that justifies the answer to the first question. Then, the macrostructure of each of the groups is provided as to answer the second question.

Differences at the macrostructure level

The differences at the macrostructure level were found to revolve around three main aspects. The first aspect is the difference in employing the moves and their functions. The second aspect is the use of paragraphing as a rhetorical device to guide the reader. The last aspect was the way the authors of the two groups distributed the weight of each move. As for the first aspect, the two groups employed the three moves of the model differently: the A-Ed-A group did not use Move 2 in four of the five

introductions, and even in the fifth, Move 2 was very mild in tone and did not fit the model adequately. Thus, this group did not have this move practically. On the other hand, the US-Ed-A group used Move 2 in three of the five introductions, and all the usages were strong gap indications which fit into the model perfectly. This disparity between the two groups indicated that the two groups were employing two different strategies when they performed the same task of writing RA introductions.

The above-mentioned finding was further consolidated when I considered the second aspect of the comparison at this level: the use of paragraphing as a rhetorical device to guide reading. A-Ed-A writers used paragraphing to indicate the shift from Move 1 to Move 3. As was mentioned earlier, three of the four introductions started Move 3 in a new paragraph. Interestingly, the only introduction that did not use this strategy was the one which employed the mild Move 2. Hence, this group seemed to have used this strategy to compensate for the absence of Move 2. Conversely, the US-Ed-A group did not use this strategy at all even in the two introductions where Move 2 was missing which further suggested the absence of a paragraphing rationale in this group.

The third aspect for the comparison at the macrostructure level is the different distributions of the moves. The A-Ed-A group used Move 1 more than the other group with 83.9% of the sentences in the corpus compared to 79.4% respectively. The second move was found to be more different as the US-Ed-A group used Move 2 more than the A-Ed-A group with 0.89% compared to 9.58%. The third move was used slightly more in the A-Ed-A group than the US-Ed-A group with 11.16% versus 9.58%. The other difference is the use of religious opening and closing prayers which was found in the A-

Ed-A more than the other group with 3.5% of the sentences in the introductions compared to 1.36% in the US-Ed-A group. Figure 1 shows a visual image of the differences of the three moves and the additional inapplicable sentences.

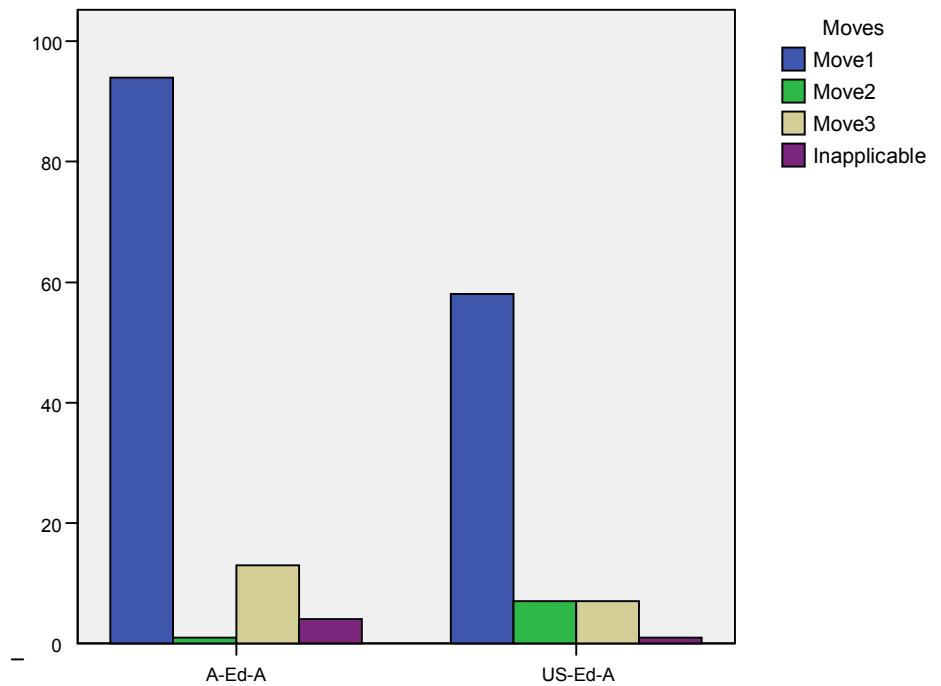


Figure 1: The rhetorical moves weighted by Frequency in the A-Ed-A and the US-Ed-A groups

Because the differences between some of the percentages in the previous paragraph appeared somewhat small, I opted to explore and test if the differences between the numbers of sentences in each move in the two groups were statistically significant. The suitable statistical test was the chi-square and the contingency table that would show if there was a significant relationship between the type of education in the two groups and the number of sentences in each move. The results of this test can be

seen in Table 30. The table shows that the relationship was found to be statistically significant at $p < 0.05$ level.

Table 30: The contingency table and the Chi-square test results of the A-Ed-A & US-Ed-A groups

			Moves				Total
			Move1	Move2	Move3	Inapplicable	
Education	A-Ed-A	Count	94	1	13	4	112
		% within Education	83.9%	.9%	11.6%	3.6%	100.0%
	US-Ed-A	Count	58	7	7	1	73
		% within Education	79.5%	9.6%	9.6%	1.4%	100.0%
Total	Count		152	8	20	5	185
	% within Education		82.2%	4.3%	10.8%	2.7%	100.0%

* Chi-square value = 8.796, $p = 0.32$

* Cramer's V value = 0.218

Differences at the move-steps level

The differences at the move-step level were also found to be many in the way each move and step was used as to fulfill its task in the introductions of the two groups. The steps in Move 1 were found to be used in different ways. To begin with, Step 1-1 exhibited interesting differences. Though the writers of both groups made claims about the importance of their topics in the real world rather than the research world, the A-Ed-A group used much less forceful language than the US-Ed-A. In most of the 1-1 step in the US-Ed-A group, writers used extreme expressions to emphasize the importance of their topics in the real world (e.g. they would refer to their topics as *من أبرز الدلالات* *most prominent indications*, *من أبرز ما يميز الناس* *One of the most distinctive features*, *في جميع ميادين الحياة* *all facets of life*, *أعز ما يملك* *dearest to them*, etc.) whereas the A-Ed-A used more economical expressions (e.g. they would refer to their topics as *among its*

goals, it is better to consider the importance, it is considered one of the important topics, etc.).

Step 1-2 was found to have been used in almost similar ways. However, step 1-3 exhibited more differences. Though the weight given for this step in both groups was comparable, the function of its use differed. The A-Ed-A group used step 1-3 to emphasize the importance of the topic in the real world whereas the US-Ed-A group tended to use the step to indicate a gap. The second observation is that the A-Ed-A group employed more integral citations than the US-Ed-A group which tended to use the non-integral most of the time. The combination of integral and non-reporting was found more in the A-Ed-A and was rarely found in the US-Ed-A.

In Move 2, the difference between the two groups was huge. The A-Ed-A group did not practically use this move except for a mild-toned sentence in one of the five introductions. On the other hand, the US-Ed-A group used this step in an obvious manner by indicating a gap in the previous research using high frequency linguistic devices like negative quantifiers and lexical negation devices. The interesting observation is that the writers in this group did not provide enough literature to show their gaps. As a matter of fact, in one of the cases, one writer said that he did not find the answer of his research question in the studies that he had the chance to review, which he did not really cite.

Move 3 also showed some differences between the two groups. As the move was used more in the A-Ed-A group, and the group employed the paragraphing strategy to demarcate its beginning, the group also used more options as it used both options of Step 3-1: 3-1a and 3-1b. Also, the group used more linguistic variations as it employed the

collapsed and the standard structures, the active and the passive, the initial and final sentence positions for the deictic signals. The US-Ed-A group, on the other hand, employed one option which was 3-1a and all the introductions that had this move used one option of all the linguistic features that were considered for this study.

In sum, the two groups were found to be different at both the macrostructure and the move-step levels which reiterates the answer to the first research question of this study. The differences between the two groups were found statistically significant in terms of the number of sentences in each move for each group. It was also found that the two groups employed different strategies to realize their different moves. And at the move-step level, the two groups used different linguistic devices to realize their steps. Thus, I would conclude that the two groups were indeed different due to different educational backgrounds.

The macrostructure of the two groups

The third question which asks about the macrostructure of the Arabic RA introductions in the two groups could be answered by treating each group in its own right. That is, the answer of the first question stipulates that the two groups had two different macrostructures and thus each one had to be described individually. Though the two groups had only one introduction each that had all the three moves, the rest of them employed only two moves. In the majority of the cases the A-Ed-A group employed Move 1 and Move 3. Also, the weight of Move 1 is much greater than Move 3, 83.9% compared to 11.16%. This means that the A-Ed-A group seemed to emphasize the importance of their research in the real world for a rhetorical purpose which is that by

repeating the importance of the topic, the writer is practically saying we need this study. However, he/she does not state that in actual words. Table 31 below shows the proposed macrostructure of the A-Ed-A group. Move 1, as we have seen, was dedicated to emphasizing the need and the importance of the research in its three steps in the real world rather than the topic research area. Thus, the use of the ecological analogy of Swales about establishing territory is not really applicable in this case. Move 2 in the CARS model was not really used in its intended format by the authors of the A-Ed-A group; thus, it was replaced by Move 2 in the table which is actually Move 3 in the CARS model, as shown in Table 31.

Table 31: The proposed macrostructure of the A-Ed-A group

<p>Move 1: establishing need Step 1: claim importance in the real world Step 2: topic generalization Step 3: cite appropriate literature to emphasize importance</p> <p>Move 2: announcing research Step1: a) outline purpose b) announcing present research</p>

The avoidance of establishing a niche that was detected in the A-Ed-A group has also been found in other languages by other researchers. I think the reason may be the lack of competition for research space as was found in some other cultures like Malaysians. Ahmad (1997) found that Malaysian writers refrain from employing Move 2 because of the lack of competition for research space in that culture. Some other groups,

like the Chinese, may refrain from using the move for a different reason such as to avoid being critical of others' work (Taylor & Tingguang, 1991).

However, there is a problem with the above explanation: the fact that the other group, the US-Ed-A, used the move unequivocally. The difference could be explained in light of the results of this study which is that the cross-cultural influence of the US writing traditions had influenced the US-Ed-A group to the extent that they used this niche creating strategy as part of their RA introductions. This result lends support to Kaplan's (1986) and Lee's (2001) claims of the educational background influence of English on Koreans' writings as the written products of US-educated Koreans became more like the Americans. What is even more interesting in the case of the US-Ed-A group is that some of the niches were established as authors referred to research studies that had been conducted originally in the USA.

The macrostructure of the US-Ed-A group is different. Three of the five introductions had Move 2 and three had Move 3. Therefore, the proposed outline of the macrostructure had the three moves which are to some extent typical of the original CARS model except for the content of two of the Move 1 steps. Table 32 shows the macrostructure of the general structure of the US-Ed-A group. Thus, the US-Ed-A and the A-Ed-A group were found to be different at the macrostructure level. What this means is that the CARS model captured in a general sense the general rhetorical moves of the US-Ed-A group but did not quite match the specific features of the typical American RA introductions.

I might conclude that the original CARS model and its ecological analogy paradigm did not work in the case of the A-Ed-A group; however, it works in the other

group. The reasons for such difference in the two groups varied: as the reason for avoiding establishing a niche in the A-Ed-A group was the lack of competition for research space, the other group transferred an American research tradition though they did not have to compete for a space. Actually, the lack of providing enough literature to delineate their proposed niches lent more support to the transfer explanation and it further confirms the notion of lack of competition for research space. Thus, there are two different models: a homegrown model (the A-Ed-A group) and a hybrid model (the US-Ed-A group).

Table 32: The proposed macrostructure of the US-Ed-A group

<p>Move 1: establishing a territory Step 1: claim importance in the real world Step 2: topic generalization about the topic Step 3: cite appropriate literature to prepare a space for the research</p> <p>Move 2: establishing a niche Step 1b: indicating a gap</p> <p>Move 3: announcing research Step1: b) announcing present research</p>

US Native Speaking Writers Group (US-N)

This section is concerned with the answer to the third question which reads as follows: *What are the differences and/or similarities between RA introductions written by Arab scholars and US scholars (native English speakers)?* Based on the fact that the two Arab groups were found to be very different, this section will compare the results

reported about the US-N group, which consists of five introductions that were authored by English native speakers in the United States, with each of the Arab groups instead of considering the two Arab groups as one entity. In the following, the results reported about the US-N group will be presented, and then a discussion about the similarities and the differences between each of the two Arab groups and the US-N group will follow.

The results are reported in Table 33. The table shows that all of the five introductions had used all the three moves recognized in the CARS model. It also shows that the moves were distributed in a balanced way: there is no drastic variation among the three moves. Four of the introductions (Intro.1, Intro.2, Intro.4, and Intro.5) had the number of the sentences of the third Move equal or exceeding the number of sentences in Move 1. Also, the number of the sentences in Move2 was the lowest compared to the other two moves. The percentages of the moves in the 85 sentence corpus were 42.8% for Move1, 23.8% for Move 2, and 34.52% for Move 3. Further, the two raters did not find any inapplicable sentences in the whole corpus. As for the general sequences of the moves, three introductions followed the archetypical sequence of the CARS model: Move 1 – Move 2 – Move 3. However, two of the introductions, Intro.3 and Intro.4, which were the longest, exhibited a degree of cycling. The longer of the two, Intro.4 with 35 sentences, cycled more than Intro. 3 which came in 23 sentences as Table 33 shows. This result conforms to the claims made by Swales (1990) and Crookes (1986) about longer introductions. The following sections are presentations of each of the moves.

Table 33: Results of general move structure and their distribution in the US-N group

US-N ID#	Move Structure	<u>number of sentences</u>				<u>total</u>
		<u>Move 1</u>	<u>Move 2</u>	<u>Move 3</u>	<u>Not Applicable</u>	
1	1-2-3	6	1	10	0	17
2	1-2-3	1	1	1	0	3
3	1-2-1-3	16	4	3	0	23
4	1-2-1-2-3	11	13	11	0	35
5	1-2-3	2	1	4	0	7
Total		36	20	29	0	85
Average		7.2	4	5.8	0	16.8
Percentage		42.8%	23.8%	34.52%		

Move 1: Establishing a territory

The authors of the US-N corpus seemed to strike a balance between Move 1 and Move 3 in terms of the number of sentences for each move. Yet, Move 1 had the highest percentage with 42.8% compared to 34.52% for Move 3. The reason that skewed this percentage was in Intro. 3 where Move 1 was used excessively with 16 sentences for Move 1 and only 3 sentences for Move 3. Nevertheless, Move 1 performed its function through its three steps 1-1, 1-2, and 1-3. Table 34 shows the step structure in this corpus. As the table shows, the steps came in their natural sequence without any degree of cycling among them.

Table 34: Step structure of Move 1 in the US-N group

<i>Intro.</i> # 1	<i>Intro.</i> # 2	<i>Intro.</i> # 3	<i>Intro.</i> # 4	<i>Intro.</i> # 5
1-1 1-1 1-1 1-2 1-3 1-3	1-3	1-2 1-2 1-3 1-3 1-3 1-3 1-3 1-3 1-3 1-3 1-3 1-3 1-3 1-3 1-3 1-3 1-3 1-3 1-3 1-3 1-3	1-1 1-1 1-2 1-3 1-3 1-3 1-3 1-3 1-3 1-3 1-3 1-3 1-3	1-1 1-3
6 sentences	1 sentence	16 sentences	11 sentences	2 sentences

Step 1-1: Claiming centrality

This step, as mentioned earlier, is concerned with claiming centrality and importance of the topic to be reported. In this corpus, the step was assigned to six sentences that were found in three introductions: three sentences in Intro.1, two sentences in Intro.4, and one sentence in Intro.5. Further, the step started the three introductions. The three sentences of Intro.1 claimed centrality of the topic in the previous research that has been considered over the past 30 years. See Example 68 below:

Ex.68:-- For over 30 years, the U.S. Department of Education has regularly administered the National Assessment of Educational Progress

(NAEP) to get a sense of whether children are learning what they should be learning in American schools

The sentence used the length of the time phrase *for over 30 years* during which the topic was considered important and still on focus at the time of the research. The other two sentences followed this sentence and extended its proposition. Thus, step 1-1 in this introduction made claims about previous research on the topic of the paper.

Intro.4 had step 1-1 in its first two sentences. See Example 69 for the first sentence:

Ex.69:-- Anomalous events encountered by the learner are widely considered to be a catalyst for conceptual change learning

The sentence claimed centrality of the topic by referring to its central importance in the field of previous research consideration. The author used the passive in the phrase *widely considered* to emphasize the importance of the topic. The active subject of the passive phrase was *researchers (widely considered by researchers)*.

In Intro.5, the step was used in the first sentence only. See Example 70 below:

Ex.70:-- It is a basic tenet of cognitive psychology in general and constructivism in particular that new knowledge develops out of a process of construction

The sentence asserted the centrality of the topic right from the beginning by considering it a basic tenet. The claim was made about the past constructed literature of the topic. Thus, the author referred to past research to situate her present study. Thus, the general observation about this step is that all of the authors claimed the importance of their research in the context of the previous research in their respective fields.

Step 1-2: Making topic generalization(s)

Step 1-2, making topic generalization, was used in three introductions: Intro.1, Intro.3, and Intro.4. While the step occurred in its natural place among the other steps in the move (after 1-1 and before 1-3) in Intro.1 and Intro.4, it actually started Intro.3 in light of the complete absence of step 1-1. In Intro.1, the step was only used in a single sentence. See Example 71:

Ex. 71:-- NAEP is a massive undertaking that involves four main activities: (a) constructing instruments to assess content-specific skills (e.g., mathematical problem solving), (b) distributing these instruments to thousands of students in the 4th, 8th, and 12th grades, (c) scoring student performance in terms of proficiency levels, and (d) disseminating brief reports that describe the levels of proficiency attained by students in particular demographic subgroups (e.g., 4th-grade boys vs. 4th-grade girls).

The sentence made a statement about knowledge whereby the NAEP project and its activities were identified. Thus, the main function of the step (making statements about knowledge) was fulfilled.

In Intro.3, the step started the introduction with two sentences. Example 72 below is one of the two sentences:

Ex.72:-- Academic procrastination can be understood as knowing that one is supposed to, and perhaps even wanting to, complete an academic task but failing to perform the activity within the expected or desired time frame

The sentence provided definition and information about the topic which was basically statements about knowledge. The sentence in Intro.4, however, performed a little bit different function by making a statement about practice. The sentence is cited below in Example 73:

Ex.73:-- Use of this approach typically involves presenting an anomalous situation to learners and examining how their ideas might change.

Step 1-3: Reviewing items of previous research

Step 1-3 is the only step of Move 1 that was found in all of the five introductions. However, the extent of its use varied in length from one sentence to fourteen sentences. In most of the instances, the step was located in its natural sequence, after step 1-2 or 1-1

and before Move 2. The two exceptions were the cycling that occurred between this step and Move2 in Intro.3 and Intro.4. Table 35 shows the parameters that this step was tested against.

Table 35: Number and type of citations in US-N group

Intro. ID#	Number of Citations				total
	Integral	non-integral	reporting	non-reporting	
1	0	2	1	1	2
2	0	1	1	0	1
3	0	14	4	10	14
4	1	7	2	6	8
5	1	0	1	0	1
Total	2	24	9	17	26
Percentage	7.69%	92.3%	34.61%	65.38%	

Most of the sentences assigned to this step were non-integral with 92.3% of the total 26 sentences in this step. Also, 65.38% of the total sentences were found to be non-reporting. Only 7.69% of the sentences were found integral and 34.61% reporting. The following is a review of each of the five introductions.

Intro.1 had this step in only two sentences. Both of the sentences were found to be non-integral; however, one was found reporting and the other was non-reporting. See Example 74 for the reporting example:

Ex.74:-- Since its inception, NAEP reports have usually shown that White students demonstrate substantially higher levels of proficiency than either Black or Hispanic students (Campbell, Reese, O'Sullivan, & Dossey, 1996)

The reporting device was *have shown* referring to the reports. See Example 75 for the non-reporting sentence:

Ex. 75:-- Another common finding is that most students acquire only modest levels of skill in a given subject area (e.g., math) by the time they reach the 12th grade (Byrnes, 2001).

This sentence had no reporting verb phrase and thus was considered an example of a non-reporting citation.

Intro.2 and Intro.5 had only one sentence of this step each. The two sentences were reporting but the Intro.2 sentence was non-integral and the Intro.5 sentence was integral. The reporting, non-integral sentence of Intro.2 reads as follows:

Ex. 76:-- Research on school-level differences during adolescence often has focused on nonpsychological outcomes, such as academic achievement and behavioral issues (Roeser, 1998).

The sentence used the verb phrase *has focused* to report about what the previous research had done. Also, the sentence in Intro.5 used the reporting verb *assert* to make the sentence reporting. However, it was integral and thus made the combination of integral reporting which is the commonplace in this type of citations as Swales suggested. See Example 77 below:

Ex. 77:-- Constructivists such as von Glasersfeld (1995) assert that new knowledge arises out of an individual's active construction drawing on unique prior experience and knowledge, as he or she strives to make sense of the world.

Intro.3 and Intro.4 had employed this step more than the other three introductions. Almost all of the sentences assigned to this step in the two introductions were non-integral: all of the fourteen sentences in Intro.3 were non-integral and only one sentence in Intro.4 was integral. Further, the majority of the sentences were found to be non-reporting. The following examples illustrate three options that were found in the corpus: 1) non-integral, non-reporting (Ex. 78); 2) non-integral, reporting (Ex. 79); and 3) integral, reporting (Ex. 80):

Ex. 78:-- learners might be presented with texts in which anomalous claims are examined in relation to existing theories (Limon & Carretero, 1997) or texts in which anomalous information is embedded in order to elicit questions (Graesser & McMahan, 1993).

Ex. 79:-- One view suggests that procrastination is the result of one or more fairly stable personality traits that cause individuals to procrastinate across many different contexts or situations (Lay & Silverman, 1996; Milgram, Dangour, & Raviv, 1992; Saddler & Buley, 1999).

Ex.80:-- Schauble (1990) investigated the extent to which children were able to determine the relation between various design features of a race car and the speed of that race car.

Move 2: Establishing the niche

Move 2, as explained earlier, is concerned with establishing the niche which the study at hand would occupy. This move was utilized in all five of the introductions of the US-N group. There were 20 sentences that were assigned to this move distributed among the five introductions. Three of the introductions: Intro.1, Intro.2, and Intro.5 realized this move in a single sentence. The other two introductions: Intro.3 and Intro.4 realized it in four and thirteen sentences respectively. These two introductions happened to be the longest in the group with 23 sentences for Intro.3 and 35 sentences for Intro.4.

As Table 36 shows, the results reported by the two raters indicate that step 2-1b (indicating a gap) is the most used step within Move 2. As a matter of fact, 14 out of the 20 sentences in this move were assigned to this step. The three introductions that realized this move in a single sentence had actually used this step to fulfill the niche establishment function. The remaining two introductions had also used the 2-1b option alongside their other option (2-1c: question-raising). The following sections present the two options as they were used.

Table 36: Step structure of Move 2 in the US-N group

<i>Intro.</i> # 1	<i>Intro.</i> # 2	<i>Intro.</i> # 3	<i>Intro.</i> # 4	<i>Intro.</i> # 5
2 – 1b	2 – 1b	2 – 1c 2 – 1c 2 – 1c 2 – 1b	2 – 1b 2 – 1c 2 – 1c 2 – 1c 2 – 1b 2 – 1b 2 – 1b 2 – 1b 2 – 1b 2 – 1b 2 – 1b 2 – 1b 2 – 1b 2 – 1b	2 – 1b
1 sentence	1 sentence	4 sentences	13 sentences	1 sentence

Option 2-1b: Indicating a gap

As mentioned above, the 2-1b option was used in all of the five introductions, three of which had employed it as the only option. The five introductions used this option to indicate a gap in the previous research thus justifying the research to be presented. Intro.1, Intro.2, and Intro.5 employed this option in a single sentence each. Two major observations were noted; the first observation is that none of the three sentences started with an adversative sentence connector like *however*, *nevertheless*, etc. The second observation is that the linguistic exponents used to show the gap were different in all of the three. In Intro.1, the author used lexical negation devices by using the combination of the two words *serious shortcomings* to show the targeted gap though his research was not meant to fill that gap entirely but merely to fill part of it. See Example 81 below:

Ex.81:-- These results suggest that there are serious shortcomings in the current American education system.

In Intro.2, the author also used a different lexical negation device *quite rare* to show his research gap. The sentence reads this way:

Ex.82:-- Research on school-level differences in nonacademic variables is quite rare.

The author of Intro.5 used the negative quantifier *little* to indicate her gap. The sentence reads as follows:

Ex.83:-- Little research is available on why these methods are helpful at a cognitive level

It is noteworthy that both usage of lexical negation devices and the use of the negative quantifiers are among the most frequently used strategies noted in the literature in the realization of Move 2.

Intro.3 and Intro.4 used option 2-1b (indicating a gap) alongside another option which was 2-1c. One observation is that the two introductions employed this option in somewhat different ways. In Intro.3, the sentences assigned to Move 2 came in an uninterrupted row while in Intro.4 the move cycled with step 1-3. The next appearance of the Move was all 2-1b. Thus, the option played the vital role in both introductions as it

was the one that indicated the research gap as it ends the move in the two cases. As for linguistic exponents used, both introductions used the adversative sentence connector *however* in the only 2-1b sentence of Intro. 3 and in the first appearance of this step option in Intro.4. As for the negation devices that were used, Intro.3 used the negative quantifier *little* to show the gap. See Example 84:

Ex.84:-- There has been little research, however, that examines students' level of procrastination from a self-regulated learning perspective.

However, the author of Intro.4 used negation in the verb phrase by using *not*. See Examples 85 and 86 for two uses of the 2-1b option:

Ex.85:-- However, what this approach does not illuminate is how the learner may further choose to investigate an anomalous event and what impact that investigation may have on the knowledge that is subsequently constructed.

Ex.86:-- Although these studies are informative about approaches to scientific reasoning, they are not informative about subsequent changes in knowledge

Option 2-1c: Question-raising

Option 2-1c, question-raising, was used in only two of the five introductions alongside option 2-1b. Interestingly, the option was secondary in realization of the niche since the niches were clearly indicated by 2-1b in both introductions as it ended Move 2. In both of the introductions, the option occurred in an uninterrupted row of three sentences each. Further, in both introductions the option was used to justify the gap specified in 2-1b by asking questions that intensify the importance of the gap. In Intro.3 the questions were indirect, did not end in question marks and were milder than the questions in Intro.4 where the questions were direct and ended with question marks. See Example 87 for the indirect question of Intro.3 and Example 88 for the direct question of Intro.4:

Ex.87:-- More specifically, one might question whether the characteristics that make self-regulated learners motivated, playful, and autonomous are lacking in students who frequently procrastinate.

Ex.88:-- How will these testing approaches influence the knowledge that is subsequently constructed?

Move 3: Occupying the niche

The role of Move 3, as mentioned earlier, is to occupy the niche that has been established in Move 2 which in this study was gaps that had been indicated in previous literature. In this corpus, the move was employed in all five of the introductions that account for 34.52% of the 85 sentence in the corpus. As mentioned earlier, the number

of sentences assigned to this move in four of the introductions equals or exceeds the number of sentences in Move 1.

The results reported about this move are shown in Table 37. The table shows the use of two options of Step 3-1: 3-1a and 3-1b and the use of step 3-3 in Intro.1. In the following sections, I will present the results of each step option and the six linguistic features that had been used in the other two groups which are as follows: first, if the structure of the claim was standard or collapsed; second, if the voice was passive or active; third, the type of deictic signal; fourth, if the deictic reference was made about the type of inquiry or the genre used; fifth, if the position of the deictic signal was in the initial or the final position in the sentence; and sixth, if the tense used in the sentence was past or present.

Table 37: Step structure of Move 3 in the US-N group

<i>Intro.</i> # 1	<i>Intro.</i> # 2	<i>Intro.</i> # 3	<i>Intro.</i> # 4	<i>Intro.</i> # 5
3 – 1a	3 – 1a	3 – 1a	3 – 1a	3 – 1b
3 – 1a		3 – 1a	3 – 1b	3 – 1b
3 – 1a		3 – 1a	3 – 1b	3 – 1b
3 – 1a			3 – 1b	3 – 1b
3 – 3			3 – 1b	
3 – 3			3 – 1b	
3 – 3			3 – 1b	
3 – 3			3 – 1b	
3 – 3			3 – 1b	
3 – 3			3 – 1b	
3 – 3			3 – 1b	
10 sentences	1 sentence	3 sentences	11 sentences	4 sentences

Option 3-1a: Outlining purposes

Option 3-1a was used as the initial step option in four of the five introductions: Intro.1, Intro.2, Intro.3, and Intro.4. Each author of these four introductions indicated the purpose of his/her research in the first sentence in this option. Table 38 shows how each of the authors used the linguistic devices to accomplish the function of this option. As the table shows, two of the introductions employed collapsed sentence structure and the other three opted for the standard, four active versus one passive. As for the deictic signal, one referred to genre and the other three referred to the type of inquiry. All of the four had the deictic signal in the initial position of the sentence. Three of the announcement sentences were in past and two were in the present.

Table 38: Linguistic features in Move 3 in the US-N group

Intro ID #	Structure	Voice	Deictic signal	Deictic reference Inqui. vs. genre	Deictic position	Tense
1	Standard	Active	This article	Genre	Initial	Present
2	Collapse	Active	present research	Inquiry	Initial	past
3	Standard	Passive	present study	Inquiry	Initial	Past
4	Collapse	Active	present study	Inquiry	Initial	Past
5	Standard	Active	this study	Inquiry	Initial	Present

Intro.1 used this option in four sentences. All of the four announced the purposes of the author's study. The sentence structure was standard, active, the deictic signal came in the initial position of the first sentence and it referred to the type of genre used, and the sentence was in the present tense. See Example 89 for a sentence that exemplifies this option in Intro.1:

Ex.89:-- In this article, I attempted to explore the meaning of these two results by conducting a secondary analysis of the 1992 NAEP for mathematics.

Intro.2, however, had only one sentence that was assigned to this option. The sentence employed the collapsed structure, was active, had the deictic signal in the initial position and referred to the type of inquiry, and the sentence was in the past tense. See Example 90 below:

Ex.90:-- The purpose of the present research was to examine school-level differences in a variety of psychological outcomes, using a large nationally representative sample of adolescents.

Intro.3 had all of its three sentences assigned to this option. The first sentence provided the announcement of the purpose of the study. The structure was found to be standard, passive, and in the past tense. The deictic signal was in initial position and referred to the type of inquiry. The other three sentences expanded the propositions made in the first. See Example 91 for the first sentence:

Ex.91:-- The present study, therefore, was designed to examine the relationship between students' reported level of procrastination and aspects of both their motivational and cognitive functioning.

Intro.4 had only the first sentence in this move assigned to option 3-1a. In this sentence, the author used a collapsed and active structure, the sentence was in the past, and the deictic signal was initial and referred to the type of inquiry. See Example 92 below:

Ex.92:-- The purpose of the present study was to examine knowledge construction and scientific reasoning of seventh-grade students during a 3-week inquiry unit on Mendelian genetics.

Option 3-1b: Announcing present research

Option 3-1b (describing what is considered to be the main features of the about to be presented research) was used in only two of the five introductions: Intro.4 and Intro.5. In Intro.4 the option was used after the 3-1a sentence where the purpose of the research was announced. The 10 sentences in this introduction were mainly a description of the main features of the study to direct the readers' attention to where to look and what to expect in terms of the issues discussed. See Examples 93 and 94 for two of these ten sentences:

Ex.93:-- During this unit, student responses were examined in relation to anomalous inheritance patterns that arose when offspring were produced that did not resemble the parents or that resembled only one of the parents.

Ex.94:-- This pattern was considered anomalous in that it was not apparent why white-eyed offspring would be produced from two red-eyed parents.

Intro.5, however, used this option in occupying her niche in four uninterrupted sentences. The first sentence announced the research by describing the main features of the study. The author employed a standard and active structure. The deictic signal referred to the type of inquiry and was placed in the beginning of the sentence which was written in the present tense. The other three sentences added descriptions of the issues to be presented. See Example 95 for the first sentence whereby the research is announced:

Ex.95:--In this study, I investigate the individual process of knowledge construction, how learners in 3 sixth-grade classrooms had opportunities to construct their own meanings of the subject matter being studied.

Table 38 presents the six linguistic devices that were considered in realizing the first option of Move 3 (3-1).

Step 3 – 3: Indicating RA structure

Step 3-3 (indicating RA structure) was used in only six sentences in Intro.1 following option 3-1a. The author presented the structure of the RA using the first person pronoun. See Examples 96 and 97 below:

Ex.96:-- In the first section, I briefly summarize and critique existing explanations of ethnic and racial differences.

Ex.97:-- In the fourth section, I present the results of my secondary analysis.

General observations and findings in US-N group

This group was found to have followed the CARS model very closely as it was intended by Swales (1990). All five of the introductions employed the three moves. In three of the introductions, the moves occurred in the natural sequence: Move 1, Move 2, and then Move 3. Two of the introductions which were considerably longer than the other three employed cycling with Move 1 as a rhetorical strategy used in longer introductions as was observed by Swales and others. Interestingly, the shorter of the two lengthy introductions cycled less than the longer one which conforms to Swales (1990) and Crookes' (1986) conclusions about cycling in English RAs. The following sections summarize the results in each Move.

Summary of Move 1

Table 39 shows the distribution of the individual steps in the introductions, the number of sentences for each step, and the percentages of each step compared to the total number of the 36 sentences found in this move. Step 1-3 was the most used step: it was used in all five of the introductions in 72.22% of the total number of sentences in the move. Steps 1-2 and 1-1 were used in fewer sentences with only 11.11% for 1-2 and 16.66% of the sentences for 1-1.

Table 39: Percentage of each step in Move 1 in the US-N group

	1-1 centrality claim	1-2 topic generalization	1-3 previous literature
# of Introductions	3	3	5
# of Sentences	6	4	26
Percentage	16.66%	11.11%	72.22%

Thus, Move 1 was characterized by its commitment to establishing the ensuing research territory in the context of previous research. All of the claims of centrality and importance, step 1-1, were made about the research tradition directly connected to the topic at hand not the importance in the real world. The instances where step 1-2 was used made claims about knowledge or practice that were also in direct connection to the topic and previous research. In addition, step 1-3 was used to help establish the territory and pave the way to Move 2. In two of the introductions, Intros 3 and 4, step 1-3 cycled with Move 2 to help show the desired/intended gap. Another observation was the complete absence of cycling between the steps within this move. Thus, Move 1 followed closely the CARS model as it was intended and outlined by Swales (1990).

Summary of Move 2

Move 2 was used in all of the five introductions and accounted for 23.8% of all 85 of the corpus sentences. Three introductions realized this move in a single sentence, one introduction in four, and one introduction in thirteen sentences. Thus, most of the introductions (four) realized this move in relatively fewer sentences than the other two

moves. Move 2 in this corpus was realized mainly by indicating a gap in previous research (option 2-1b). The move also cycled with step 1-3 in Intro.4 as it was the longest by appearing two times in the following manner: 2-1b, 1-3, and then 2-1b. In Intro.3 the cycling was done by the 1-3 in this manner: 1-3, 2-1c, 2-1b, 1-3. Move 2 occurred only in one cluster of 4 uninterrupted sentences.

The gap indication strategy is the most used in English RA introductions as observed by Swales, and that observation was found in this corpus too. In addition the use of lexical negation devices and negative quantifiers had high frequency in this move which was also one of Swales' observations about English RAs. Thus, this move followed closely the CARS model.

Summary of Move 3

Move 3 followed Move 2 and occurred in all of the five introductions. Its function was to occupy the gap or part of the gap created in Move 2. One of the major observations is that though 34.52% of the number of sentences in the entire corpus were assigned to this move, four of the introductions had this move expressed in either as many sentences or even more than Move 1.

This corpus used Step 1 option 3-1a in four of the introductions. Also, option 3-1b was used in two introductions; in one of them it was the only option used. Step 3-3 was used in only one introduction following option 3-1a. As for linguistic features that were used in realizing this move, there were three standard structures versus two collapsed ones; four active sentences; all the introductions had the deictic signal in the initial place of the sentence with four references to the type of inquiry versus one that

referred to the genre used; and there were three uses of the past tense. As was outlined by Swales, the three instances of the past tense were used with the deictic signals referring to the type of inquiry. Thus, Move 3 in this corpus also followed the CARS model closely as did the other two moves.

Comparison between US-Ed-A group and the US-N group

The differences between the US-Ed-A group and the US-N group will be held at two levels: the general macrostructure level and the move-step level. As part of answering the research question whether the two groups were different, the answer is positive; the two groups were found different at all levels of analysis. However, there were some degree of similarities in certain steps and certain linguistic features used. The following two sections present a comparison of the two groups at the two levels: macrostructure level and the move-step level.

Differences at the macrostructure level

At the macrostructure level, the two groups were different in the employment of the three moves. As the US-N group employed all three moves in all of the introductions, the US-Ed-A group employed the three moves in only one of its five introductions. In addition, the distribution of the moves was found to be different; most of the weight of the introductions was allocated to Move 1 in the US-Ed-A group with 79.4% of the sentences in the entire corpus compared to 42.8% in the US-N group. The US-N, on the other hand, applied more emphasis to Move 2 and Move 3 with 23.8% and 34.52% of their entire corpus to these two moves respectively compared to only 9.58% for each

move in the US-Ed-A group. Figure 2 shows a visual image of the degree of variations. As also could be seen in the figure, there was a fourth option that was found in the US-Ed-A group which was the inapplicable option where the sentences that were not found to fit the model would be assigned; US-N had none of them. Another important difference is that the cycling between the moves was not used in the US-Ed-A group while it was used in the two longer introductions in the US-N group. As a matter of fact, the degree of cycling correlated with the extent of length: the longer cycled more.

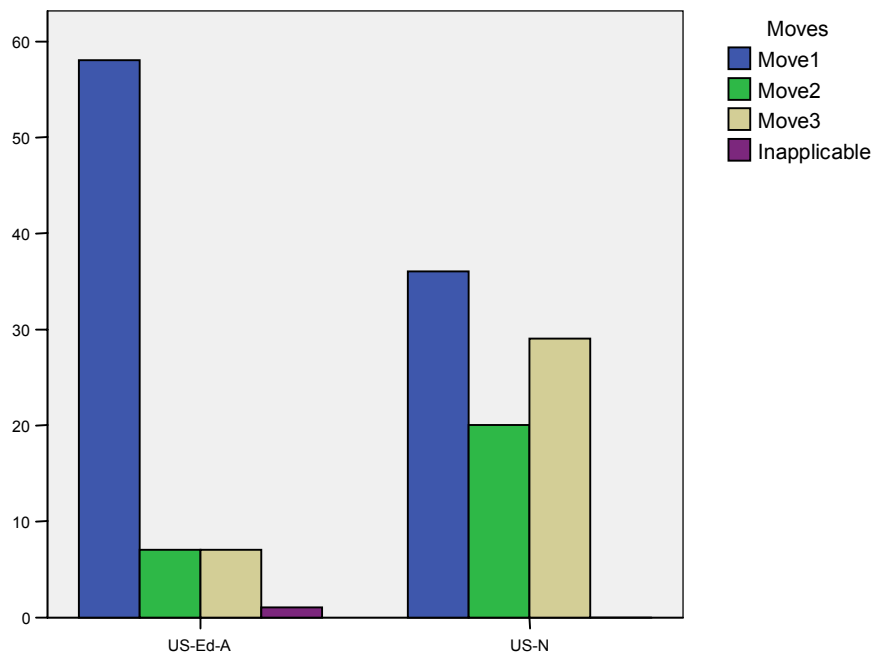


Figure 2: The rhetorical moves weighted by frequency in the US-Ed-A and the US-N groups

Thus, the general structure of the two groups differed in terms of moves used and distribution. In order to see if there was a significant relationship between the types of educational and language backgrounds (US-Ed-A vs. US-N) and the number of sentences used in each move, a contingency table was created and the chi-square test was run. The

results, as can be seen in Table 40, stipulate that the relationship is indeed statistically significant at $p < .05$.

Table 40: The contingency table and the Chi-square test results of the US-Ed-A & the US-N groups

			Moves				Total
			Move1	Move2	Move3	Inapplicable	
Education	US-Ed-A	Count	58	7	7	1	73
		% within Education	79.5%	9.6%	9.6%	1.4%	100.0%
	US-N	Count	36	20	29	0	85
		% within Education	42.4%	23.5%	34.1%	.0%	100.0%
Total		Count	94	27	36	1	158
		% within Education	59.5%	17.1%	22.8%	.6%	100.0%

* Chi-square test value = 25.086, $p < 0.05$

* Cramer's V value = 0.398

Differences at the Move-step level

In this section, the differences and the similarities in each of the three moves will be noted. To start with Move 1, the US-Ed-A group employed a degree of cycling between its steps compared to the complete absence of such a strategy in the US-N group. Apart from that, Step 1-1 was found to have been used in all of the five introductions in the US-Ed-A compared to three introductions in the other group; the percentage of the use of 1-1 was 24.13% (14 out of 58 sentences) of the sentences of the entire move in the US-Ed-A to 16.66% (6 out of 36 sentences) in the US-N group.

One of the significant differences was the different functions that the two groups used step 1-1 to accomplish. With only one exception of the five introductions, the US-Ed-A group employed the step to claim centrality and the importance of their topics in the real world whereas the US-N group placed their centrality claims in the previous research tradition of the topic. Further, the language with which the two groups realized

step 1-1 was also different. As the US-N group used a milder tone to claim the importance of their topic with expressions like *has regularly administered, widely considered, it is a basic tenet*, the US-Ed-A group used a much more assertive tone; the authors in this group used maximum expressions like *the most important, dramatically, all kinds, all facets of life, and dearest to mankind* when referring to their topics.

Though the two groups used Step 1-2 in three introductions each, the use was found to be different. First of all, the weight given to this step was found to be very different: US-Ed-A employed this step in 34.48% (20 of the 58 sentences in Move 1) compared to 11.11% (4 of the 36 sentences) of the sentences in the US-N group.

As for the functions of the step, the US-Ed-A group used this step to make statements about knowledge and phenomena in the real world that related loosely to their topic, while on the other hand the US-N group had their statements about knowledge restricted to their topics in the context of previous research.

The differences in Step 1-3 was found to be especially interesting because though there were general similarities, the differences were in the degree to which these similarities were realized. This step was used in all of the five introductions; it was also used in the same proportionate rates within each group. But the degree to which Step 1-3 was used when comparing the two groups differed. That is, this step was used more than the other two steps in both corpora with 41.37% in the US-Ed-A compared to 34.48% for Step1-2 and 24.13% for Step 1-1. In the same way, the US-N group used Step 1-3 in 72.22% of the sentences in Move 1 compared to 11.11% for 1-2 and 16.66% for 1-1. As could be seen, the difference between the two groups was in the extent to

which the two groups used this step in that move, which was 41.47% for the US-Ed-A compared to 72.22% for the other group.

By the same token, the other similarity is that the proportions of the use of different strategies in realizing step 1-3 were comparable in the two groups. More non-integral and more non-reporting citations were found in both groups versus less integral and less reporting. Yet the degree to which each feature was employed differed; while the US-Ed-A group used integral citations in 16.66% of the sentences in Move 1, the US-N group used them only in 7.69%. Similarly, the non-reporting in the US-Ed-A group accounted for 79.16% of the sentences in the move compared to 65.38% in the other group. Thus, though the trend is similar the extent of the use differs.

In Move 2, there were also some similarities and many differences. The major similarity is that all of the introductions that employed Move 2 created their niches by indicating a gap in the previous literature in their respective topics. It was also noted that this move is the least used move of the other two moves in both groups. In addition, the two corpora employed more or less similar linguistic devices to release this move. Namely, they used the adversative sentence connector *however* to mark the beginning of the move in addition to negative quantifiers like *few/little* and lexical negation words like the adjective *limited*.

However, the differences were much more profound than the above-mentioned similarity. First of all, while the US-N group used this move in all of its five introductions only three introductions in the other group used it. Also, the move in the US-Ed-A group was realized in 9.58% of its corpus sentences compared to 23.8% in the US-N group. The interesting observation about the US-Ed-A group realization of this

move is that they indicated their gaps in the previous literature from which they cited very little; in one of the cases only two sentences of step 1-3 were cited. On the other hand, the US-N group indicated their gap in a cited body of literature; as was noted in reviewing step 1-3, the literature was given the highest weight in this corpus. Thus, the gap was clearly identified.

Move 3 exhibited many differences between the two corpora. While the move was used in all five of the introductions in the US-N group, it was used in only three of the US-Ed-A group; two of those three did not have Move 2. In addition, the percentage of the sentences that were assigned to this move varied greatly between the two groups; as the US-Ed-A employed only 9.85% of its sentences to this move, the US-N had 34.52%. As a matter of fact, four of the five introductions in the US-N group had more sentences in this move than Move 1. The step options were also found to be different; the US-Ed-A group used only option 3-1a while the other group used both 3-1a and 3-1b in addition to Step 3-3 in one of the introductions.

As for the linguistic exponents used to fulfill the rhetorical functions of this move, the two groups were somewhat different. The US-Ed-A group employed a monotonous strategy in announcing the purposes of their individual research studies. All three of the participating introductions in this group had their deictic signals in the initial position of their sentences which also referred to the type of inquiry rather than the type of genre (a use commonly employed in the English RA introductions). Their sentences were all in the active present, and the structures of the sentences were collapsed. On the other hand, the US-N group employed a degree of variation. Though all the deictic signals in all of the five introductions were placed in the initial positions of the sentences, in one case it

referred to the type of genre. Further, the structure of the sentences varied: three were standard and two were collapsed. And there was only one passive compared to four active. Also, the past tense was used in three of the introductions versus two in the present.

In sum, the two corpora were found to be different at both the macrostructure level and the move-step level. Thus, the answer to the research question is that the two groups had more differences than similarities. The differences were found statistically significant when the relationship between the educational backgrounds and the number of sentences per move were accounted for in a contingency table procedure. Also, Move 1, the most used move, was employed differently by the two groups. As the US-N group used Move 1 mainly to establish a territory in the research world by excessive use of Step 1-3, the US-Ed-A group used most of this move to make topic generalizations and centrality claims about the real world. Though Move 2 exhibited some of the similarities between the two groups, the differences were greater especially when considering the weight of the move: the US-N group used this move much more and in a more effective way as it was intended in the CARS model. And lastly Move 3 differences were merely in the weight of the move given by each group as the US-N group used it more, and in the variation exhibited by this group compared to the monotonous employment of one option by the US-Ed-A group.

Comparison between the A-Ed-A group and the US-N group

Like the previous comparison between the US-N and the US-Ed-A groups, a similar comparison between the US-N group and the A-Ed-A group will be presented in

this section following the same structure: a comparison at the macrostructure level and a comparison at the move-step level. The two groups were found to be different at both levels, and unlike group US-Ed-A where a number of similarities were detected, the A-Ed-A group had almost no similarities with the US-N group at both levels. And this result supports the findings to the answer of the second research question when we found that the A-Ed-A group exhibited even more differences when compared to the CARS model than the other Arab group. The following is a presentation of the details of the differences found between the two groups.

Differences At the macrostructure level

The A-Ed-A group was found to be different in its employment of the three moves. The first point is that the A-Ed-A group employed no cycling between the moves whereas US-N cycled in two longer introductions as was explained earlier. Second, as the US-N group used all the three moves in all of its introductions only one introduction in the A-Ed-A group had the three moves used in all of its five texts. Another macro-difference is the distribution or the weight given to each move in the introductions in each group. The A-Ed-A group gave more weight to Move 1 (83.9% of the sentences in the entire corpus) than the other two moves (0.2% for Move 2 and 11.16% for Move 3) compared to a more balanced weight especially between Move 1 (42.8%) and Move 3 (34.52%) by the US-N group. In the A-Ed-A Move 2 was almost nonexistent with only one sentence in one of the five introductions compared to full use in the five introductions of the US-N group that accounted for 23.8% of the sentences in its entire corpus. Also, the A-Ed-A group had 3.5% of its sentences labeled inapplicable to the

CARS model. Figure 3 shows a visual image of the degree of the differences between the two groups in terms of each move frequency.

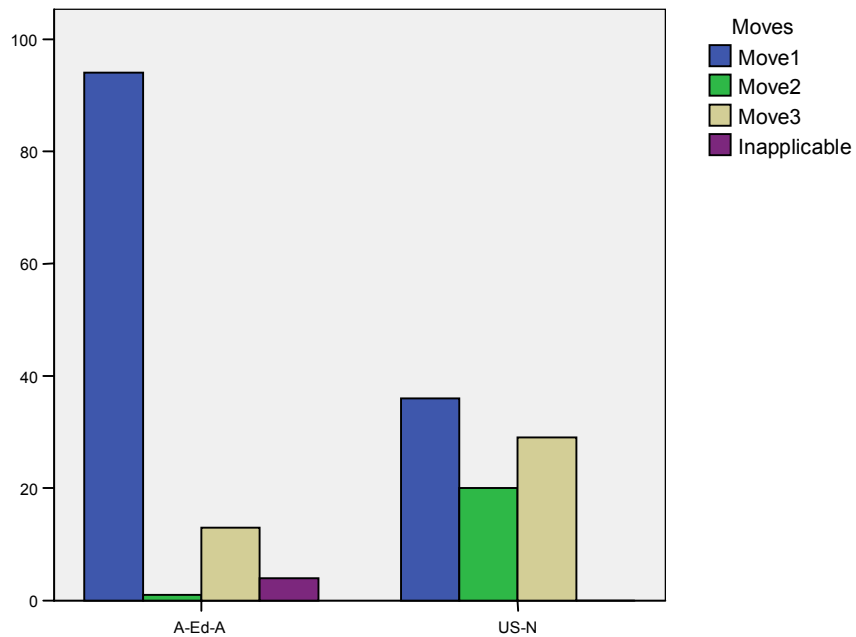


Figure 3: The rhetorical moves weighted by frequency in the A-Ed-A and the US-N groups

Following the same procedure used in the previous comparison between the US-N and the US-Ed-A group, the comparison with the A-Ed-A underwent a contingency table statistical measure, and the chi-square test was performed to see if there was a statistically significant relationship between different educational experiences and the number of sentences in each move. The results as could be seen in Table 41 show that indeed the differences between the two groups were statistically significant at $p < 0.05$ level. As a matter of fact, the difference between the A-Ed-A group and the US-N group was greater than the difference between the US-N and the US-Ed-A group. As could be

seen from table 40 the Cramer's $V = 0.398$ in the US-Ed-A group test whereas the same measure in table 41 was 0.506 in the A-Ed-A and the US-N test (a higher Cramer's V value means more differences detected).

Table 41: The contingency table and the Chi-square test results of the A-Ed-A & the US-N groups

			Moves				Total
			Move1	Move2	Move3	Inapplicable	
Education	A-Ed-A	Count	94	1	13	4	112
		% within Education	83.9%	.9%	11.6%	3.6%	100.0%
	US-N	Count	36	20	29	0	85
		% within Education	42.4%	23.5%	34.1%	.0%	100.0%
Total		Count	130	21	42	4	197
		% within Education	66.0%	10.7%	21.3%	2.0%	100.0%

* Chi-square test value = 50.409, $p < 0.05$

* Cramer's V value = 0.506

Differences at the move-step level

The differences at the move-step level were accounted for by comparing each of the three moves and their constituent steps. Move 1 was used in all of the introductions in both groups. However, the type of use was found different in terms of its weight and its function. As for the weight, Move 1 in the A-Ed-A group was used much more than its counterpart in the US-N. This weight is distributed among the move's three steps. To begin with, Step1-1 was used in four introductions in both the A-Ed-A group and the other group. Yet, the percentage of the number of sentences in the Arab group exceeded the US-N group, 23.4% to 16.66% respectively. Thus, the Arab group used more of centrality/importance claims than the US-N group. The function of the step for the A-Ed-A group was to make claims of importance about the real world whereas the US-N, as mentioned earlier, made their claims about research.

Step 1-2 was found in three introductions in each group, yet the weight given to this step varied between them. The A-Ed-A group used this step in 37.23% of the sentences compared to only 11.11% in the other group. Thus, the Arab group used this step much more than the American group. In both groups, the step made statements about knowledge and practice. The statements in two of the three introductions in the A-Ed-A were made about their research topics while one made a knowledge statement that was loosely related to its topic. The US-N group, however, restricted all its knowledge statements to the research tradition. This finding made the A-Ed-A group closer to the US-N group in this step than the US-Ed-A group, as we have seen that all the statements made in that group were statements about knowledge and practices in the real world.

Step 1-3 was found in four of the A-Ed-A introductions while it was employed in all five introductions of the US-N group. This step was the most used step in Move 1 in both groups. However, the US-N group used 1-3 proportionately more than the A-Ed-A group with 72.22% to 39.36% of the sentences used in the move respectively. The other difference is that most of the citations were integral in the A-Ed-A group whereas they were mostly non-integral in the other group. In addition, the integral non-reporting combination was the norm in the A-Ed-A group while it was rarely used in the US-N group. As a matter of fact, the US-N used the non-integral, non-reporting combination most of the time. This result conforms to Swales's observation about the common use of non-integral, non-reporting combination in English. Yet, both groups used more non-reporting strategy in their citations.

Move 2 was found to be especially interesting; A-Ed-A did not employ this move in four of its five introductions. The only introduction that used this move had it in one

sentence. However, the realization of the niche was based on the claim of the need for the research not based on any of the four options identified in the CARS model. The US-N group, however, employed this move in all of its five introductions and established their niches by clear indication of gaps in the literature cited in Move 1.

Move 3 was used in four of the introductions in the A-Ed-A group compared to five in the other group. Both groups used both options of step 3 – 1: 3-1a and 3-1b. Step 3-1a started three introductions in the A-Ed-A and four introductions in the other group. One introduction in each group employed option 3-1b as the only option in this move. One introduction in each move had the combination of both options where 3-1a started the introduction in a single sentence then a series of 3-1b followed. One of the other steps in Move 3 (Step 3-3) was only used in the US-N group in one of its introductions.

As for the linguistic features used, both groups employed the two structure options: standard and collapsed. There was also a single instance of the use of the passive in each group. Also, both the past and present tenses were used in both groups in almost similar ways. The differences, however, in this sphere could be recognized in the options used in some of the features studied. First, the deictic signals referred to the type of inquiry in all the four A-Ed-A texts compared to four of the five in the other group. Two of the four A-Ed-A texts had the deictic signals in the final position of the sentence compared to the initial position in the entire US-N group. This result reminds me of Swales's observation that novice writers tend to put their deictic signals at the sentence final position. And since the authors of the A-Ed-A group and the US-N group were not novice, the two groups are different in this regard.

In sum, the A-Ed-A group and the US-N group were found to have many differences at both the macrostructure level and the move-step level. Like the case in the previous comparison, the answer to the research question is that the two groups had more differences than similarities. The differences were found statistically significant when the relationship between the educational backgrounds and the number of sentences per move were accounted for in a contingency table procedure. All of the three moves were used differently in both groups. The A-Ed-A group seemed to emphasize establishing its territories more than establishing niches by its excessive use of Move 1 and its almost zero use of Move 2. The group made all its claims of importance in the real world and the use of its citations (1-3) were not meant to establish a niche but rather to reemphasize the importance of the topic. Whereas, in the US-N group, the claims were made about research and the literature review was done mainly to indicate gaps which Move 3 was going to occupy. Though, Move 3 had most of the similarities between the two groups, the differences were also detected. The weight of Move 3 in the US-N was much greater than the weight of this move in the other group, 34.52% to 11.1% respectively. Thus, the A-Ed-A organized their introductions differently from the way the US-N group tended to accomplish the same task.

Summary

In this chapter, I presented the results and discussion of the three questions of this study in three major sections. In the first section, the two Arabic groups were analyzed to explore the differences and the similarities. The two groups were found to be different at two levels of analysis: the macrostructure level and the move-step level. In the second

section, the differences of the two groups led to the conclusion that there are two models of rhetorical organization of Arabic RA introductions: a homegrown model and a hybrid model. Then, two proposed outlines of the two models were presented.

In the third section, an analysis of the US-N group was presented. This group was found to have followed the CARS model closely. Then a comparison between each of the two Arabic groups and the US-N group followed. The findings showed that both Arabic groups were different from the US-N group at the two levels of analysis mentioned earlier. However, the A-Ed-A group exhibited more differences than the US-Ed-A group when compared to the US-N group.

In the next chapter, the conclusions of this study are presented. The chapter is organized around the three questions of this study. The issues related to each question are presented under separate subsections. Then, the chapter concludes with some implications of the study to the field and to the future RA writers and a few suggestions for future research.

Chapter V

Conclusion

Introduction

In the previous chapter, the results and discussion of the three research questions were presented. This chapter draws conclusions to answer the three questions. First of all, a summary of the major findings is presented in three subsections where the findings of each question are addressed in the light of the present knowledge about the field. The first subsection presents the summary of the findings of the differences between the A-Ed-A group and the US-Ed-A group. The second subsection briefly describes the findings of the second question as it presents the general rhetorical organization of the two Arabic groups. The third subsection provides a summary of the results of the third question as it presents the differences/similarities between the two Arabic groups on the one hand and the US-N group on the other. The second section in this chapter provides the implications of the study to the field and to the writers of Arabic RA introductions and concludes with suggestions for future research.

Summary of findings

The answers to the three questions that were posed at the beginning of this study yielded insights into the specifics of the rhetorical structures of the selected Arabic RA introductions. First and foremost, the answer to the first question provided information

about the influence of different educational experiences on the way the two Arabic groups approached the same writing tasks. The answer to the second question outlined the actual macrostructure of the two groups. And the answer to the third question showed that in addition to the differences among the two Arabic groups, there were even differences when compared to the third group (the US-N group).

Differences between the A-Ed-A group and the US-Ed-A group

The differences found between the A-Ed-A group and the US-Ed-A group were at two levels: macrostructure level and move-step level. The macrostructure differences included the way in which the moves of the CARS model were employed. The A-Ed-A group did not practically use Move 2 as it was intended in the model whereas the US-Ed-A group used it by employing step 2-1b (indicating a gap) which is the most frequently used option in English RA introductions as asserted by Swales (1990). The A-Ed-A group used paragraphing to provide a visual transition marker between Move 1 and Move 3; the authors started Move 3 in new paragraphs while the US-Ed-A group did not use this strategy at all. Interestingly, the only introduction in the A-Ed-A that had Move 2 did not use paragraphing, which suggests that paragraphing was employed as a rhetorical device in the absence of Move 2.

The other macrostructural difference between the two Arabic groups is the weight given to each of the three moves. As both corpora gave Move 1 proportionately similar weight, the other two moves' distribution was different. Move 2, as mentioned earlier, was minimal in the A-Ed-A group, while it was higher in the US-Ed-A group. Move 3, however, was used in both corpora with little difference in the number of sentences

assigned to this move. Thus, the contingency table and the chi-square were calculated, and the results showed that the differences in the number of sentences in the two corpora were statistically significant at the $p < 0.05$ level.

The last macrostructure difference between the two Arabic groups was the fewer religious, irrelevant sentences found in the US-Ed-A group. The US-Ed-A had only one sentence in its 73 sentence corpus that was not assigned to any of the three moves in the CARS model. The sentence was a religious opening statement. On the other hand, the A-Ed-A group used 4 sentences in its 112 sentence corpus. Due to the difference in the number of sentences between the two corpora, the percentages of the use of religious sentences could show that the US-Ed-A group had 1.36% of its sentences assigned to religious statements compared to 3.5% in the A-Ed-A group.

The second level of differences was at the move-step level. The differences between the two Arabic groups were numerous. Step 1-1 had basically the same function in both groups which was to make claims of importance of the topic of the introduction in the real world rather than the research area. However, the two groups tended to use different linguistic devices to accomplish this goal. The US-Ed-A group used a stronger tone than the A-Ed-A when they claimed the importance of their topics. As the A-Ed-A group would claim that the topic is one of the important topics in the field, the US-Ed-A would claim that the topic is one of the most important not just important. This observation was found consistently in all of the introductions examined in this study. This finding suggests that the US-Ed-A group and the A-Ed-A group perceived the function of Step 1-1 differently. As the A-Ed-A thought that the reader's attention could

be attracted by a moderate tone of claiming importance, the US-Ed-A seemed to think that nothing less than the extreme expression would work to accomplish that function.

Step 1-3 was found to have been used differently. Though the two groups devoted a good deal of Move 1 to this step, each group had the step function to accomplish two different rhetorical goals. The US-Ed-A had this step to help indicate the place that the ensuing Move 3 would occupy. On the other hand, the A-Ed-A group used Step 1-3 to provide more evidence of the importance of the topic in addition to providing background knowledge about the topic. The conclusion is that each group employed Step 1-3 for different rhetorical purposes which could explain the difference in the degree of the use of Move 2 where the US-Ed-A group employed this move more than the A-Ed-A group.

The other difference in Step 1-3 is the use of integral-non-reporting citations by authors of the A-Ed-A group whereas the US-Ed-A group employed the non-integral, non-reporting citation most of the time. Also, the A-Ed-A group had more integral citations than the US-Ed-A group. This use of citation by the US-Ed-A group is the one that has been found to be the most frequently used in the corpora studied by Swales (1990). One might conclude that the US-Ed-A group acquired this usage from their western education.

There were many differences in the step options of Move 2. The A-Ed-A group did not practically use Move 2 except for one sentence that was loosely assigned to Step 2-1d (continuing a tradition). The sentence in this case did not actually build on the literature review (Step 1-3) as to continue the research tradition but rather the tradition was used to make a case for using parallel progression in a completely different area of

research that was not mentioned in the literature review, a case that had been observed by Najjar (1990). On the other hand, the US-Ed-A group employed option 2-1b (indicating a gap) in an unequivocal manner which was found to be the most frequent way of realizing Move 2 in the west (Swales, 1990). Thus, the conclusion that could be made from this difference is that the US-Ed-A group differed from the A-Ed-A group by using western means in realizing this move.

The steps in Move 3 exhibited differences between the two Arabic groups. The A-Ed-A group had greater variations than the US-Ed-A group. It used both options of Step 3-1: 3-1a and 3-1b whereas the US-Ed-A group used option 3-1a. The A-Ed-A group also used various linguistic devices to realize this move whereas the US-Ed-A group used one set of linguistic devices. This finding suggests that the authors of the A-Ed-A group had more options available to them compared to the other group who seemed to have a rhetorical organization that they attempted to follow all the time.

The two Arabic groups, therefore, were found to have been employing two different rhetorical organizations at both levels: the macrostructure level and the move-step level. The differences between the two groups were found statistically significant in terms of the number of sentences in each move for each group. It was also found that the two groups employed different strategies to realize their different moves. And at the move-step level, the two groups used different linguistic devices to realize their steps. Thus, I would conclude that the two groups were indeed different because of different educational backgrounds.

The general rhetorical organization of the two Arabic groups

The two Arabic groups were found to have employed two different models of rhetorical organization. The A-Ed-A group was a homegrown Arabian model, and the other was found to be a hybrid model that had features from the local model and other features from the American model. The homegrown model consisted of two moves: Move 1 and Move 2. Move 1 was renamed to become establishing the need for research since the authors in this group allocated all the three steps of Move 1 in the CARS model to establishing the need rather than a territory where the ensuing research would find a vacant place for itself. Claiming importance was based on the need of the real world, the topic generalizations made statements of knowledge and phenomena about the topic to justify the need, and the literature review was geared towards emphasizing the importance and the need of the topic.

Move 2 in the homegrown model is concerned with announcing research through outlining the purpose of the research or describing the main features of the present research. This move is the same as Move 3 in the CARS model except that it does not have the other two optional steps. Thus, the homegrown model establishes the need of the present research in the real world by proving its importance through Move 1's three steps. As the first step made the claim of importance, the second step provides supporting statement about general knowledge/practice/phenomena. The third step role is to provide evidence from previous research to support the main claims. After establishing the need, the writer presents his/her research in Move 2.

The hybrid model, on the other hand, has the three moves found in the CARS model. However, the model is not typical of the CARS model. The first two steps of

Move 1 are typical of the homegrown model, but the third step (1-3) works to prepare a place for the ensuing research which is followed by Move 2 to indicate that space. Then, Move 3 follows to outline the purpose of the research. Thus, the hybrid model as employed by the US-Ed-A group seemed to establish a territory rather than a need because of the roles of Step 1-3 in Move 1 and Move 2.

The conclusion, therefore, is that the two models, the homegrown and the hybrid, are acceptable in the academic writing of Arabic RAs despite the major differences between the two. Authors of the two groups published their studies in the same renowned journals in their field at the same period of time. The question that could be raised at this point is whether the general readership of the two models would prefer one over the other.

The differences/similarities between the two Arabic groups and the US-N group

The differences and the similarities between the two Arabic groups on the one hand and the US-N group on the other were found at both the macrostructure level and the move-step level. The two Arabic groups, as could be seen from the findings of the two previous questions, were found to be different, and thus, the groups were compared to the US-N group. Some similarities, to begin with, could be traced at the two levels of analysis. At the macrostructure level, the US-Ed-A group employed the three moves of the CARS model in almost the same way as the US-N group: both groups established their territories, indicated a gap in the literature most of the time, and announced their ensuing research.

At the move-step level, the similarities were found to be few among the three groups. One similarity that was found between the A-Ed-A and the US-N was the use of the two options of Step 3-1. Another similarity between these two groups was found in the degree of variations in the use of the six linguistic devices in the realization of Move 3. The two groups used comparable range of variation. Also, all of the three groups gave Step 1-3 more weight than the other two steps in Move 1 which means that the writers were aware of the role of reviewing previous literature of establishing the validity of their research in the eyes of their readers. Another similarity between the US-Ed-A group and the US-N group was the use of Step 2-1b (indicating a gap) in the realization of Move 2.

The differences among the three groups, however, were much greater than the above-mentioned similarities at both levels of analysis: the macrostructure and the move-step. At the macrostructure level, the relationships between the number of sentences allocated to each rhetorical move and the type of educational background were found different and statistically significant at the $p < 0.05$ level among the three groups. This result leads to the conclusion that the different educational backgrounds did account for the difference in the number of sentences at the macrostructure level.

Other differences at the macrostructure level included the numbers of general moves employed by the three groups. The US-N group employed all three of the moves in all of its five introductions, but there were variations in the other two Arabic groups. The US-Ed A group and the A-Ed-A group had only one introduction each that had the three moves. Most of the introductions in both Arabic groups had only two moves. Another macrostructure difference between the two Arabic groups and the US-N group is the weight given to Move 1 compared to the other two moves. The two Arabic groups

gave Move 1 most of the weight while the US-N group allocated almost similar weight between Move 1 and Move 3. Also, Move 2 was given much emphasis by the US-N group as it was used in all of the five introductions compared to three in the US-Ed-A and only one in the A-Ed-A group.

The inapplicable move that was observed in the two Arabic groups was nonexistent in the US-N group. Another macrostructure difference is the use of cycling between Move 2 and Move 1 that was observed in the longer introductions in the US-N group compared to a lack of cycling at all in the two Arabic groups even in lengthy introductions. These macrostructure differences signify that the two Arabic groups and the US-N group were very different at this level of analysis despite the few similarities that were observed earlier. We can conclude thus that the two Arabic groups and the US-N group are different at the macrostructure level, and that the two groups seemed to employ different rhetorical organizations when they wrote their RA introductions.

There were many move-step level differences between the two Arabic groups on the one hand and the US-N group on the other. The steps of Move 1 were given different weights. The two Arabic groups gave Steps 1-1 and 1-2 more weight than the US-N group. This result suggests that the two Arabic groups were aware of their attempts to establish the importance of their research based on these two steps as Step 1-2 was also geared to make a statement about knowledge in the real world. On the other hand, steps 1-1 and 1-2 were given much less weight by the US-N group. As a matter of fact, most of the weight in this move was given to Step 1-3 (literature review) in the US-N group in order to prepare a space for the ensuing research.

In addition, the functions of the steps 1-1 and 1-2 differed between the two Arabic groups and the US-N group. The two Arabic groups used these two steps to work together to add to the importance and provide information about the research topic in the real world. On the other hand the use of the two steps in the US-N group was limited to the research importance and information about the topic within the research field of study. Similar results were observed in Korean RA introductions as Shim (2005) observed that Koreans made their centrality claims about issues in the real world whereas American RA writers, like the US-N group here, made their claims of centrality about the research area of study.

The step options in Move 2, however, were found interesting for only the US-Ed-A group had this Move in three of its introductions used in the same way as the US-N group. However, the A-Ed-A group had only one introduction which used this move. The use was atypical to the use of the US-N group. The introduction indicated a sort of continuing a tradition option (2-1d) that was not quite the case. As mentioned earlier, the tradition that was established in Step 1-3 paralleled what the researcher wanted to do. In other words, step 2-1b did not function in the prescribed manner in the CARS model and thus differed from the US-N group.

The avoidance of establishing a niche that was detected in the A-Ed-A group has also been found in other languages other than Arabic. I think the reason was the lack of competition for research space as was found in some other cultures like Malaysian. Ahmad (1997) found that Malaysian writers refrain from employing Move 2 because of the lack of competitions for research space in that culture. Some other cultures like

Chinese refrain from using the move for a different reason such as avoiding being critical of others' work (Taylor & Tingguang, 1991).

However, there is a problem with the above explanation since the other group, the US-Ed-A, used Move 2 unequivocally. The problem could be explained in light of the results of this study which is that the cross-cultural influence of the US writing traditions had influenced the US-Ed-A group to the extent that they used this niche creating strategy as part of their RA introductions and thus became what I called the hybrid version of rhetorical organization. This result lends support to Kaplan's (1986) and Lee's (2001) claims of the educational background influence of English on Koreans' writings as the written products of US-educated Koreans became more like the Americans. What is even more interesting in the case of the US-Ed-A group is that some of the niches were established as authors referred to research studies that were conducted originally in the USA.

In the steps of Move 3, the two Arabic groups behaved differently between themselves and between the two groups and the US-N group. The first difference was discussed in the previous section; the second difference in general is that the US-N group used two steps from the Model compared to one step used by the two Arabic groups. In addition, the US-Ed-A and the US-N groups seemed to have used Move 3 to occupy a specific niche that was identified to some extent in Move 2 while, on the other hand, the A-Ed-A group presented its research topics as to satisfy a postulated need implied to the reader by strong emphases of the research topic in Move 1.

The two Arabic groups and the US-N group, therefore, were different at both the macrostructure level and the move-step level of analysis. Though the differences

between the two Arabic groups cannot be taken lightly as we have seen in the previous two sections, the differences between the two Arabic groups and the US-N group were also found significant.

Implications and future research

This study has many implications for the field and the future writers of Arabic RAs if they choose to publish their work in English. The implications for the fields of contrastive rhetoric and genre analysis include the validity of the CARS model as a tool of analysis that allowed the discovery of various rhetorical moves of Arabic RA introductions despite the fact that some of the moves did not fit the model well. As a matter of fact, the differences were detected because of their closeness and/or distance from the model.

The other implication is that because of different educational backgrounds hybrid versions of rhetorical organizations of RA introductions emerge. The organization draws on the rhetorical organization of both the homegrown version that was usually employed by local researchers and the rhetorical organization of the culture in which they had their education, in this case the United States. As we have seen the US-Ed-A group employed features from both cultures in which they had their education: the local Arabic writing tradition and the United States writing norms.

Within this domain, the question that should be considered for further research is to what extent this hybrid version of rhetorical organization is acceptable among the general population of readers. We know that the two versions (the homegrown and the hybrid) were accepted for publication in renowned journals at more or less the same time

in this study, but we do not know at this time which one is preferred by the common readers and why? The answer to such questions are definitely needed so that informed decisions about which rhetorical organization of the two presented in this study future writers had better employ.

Due to the qualitative nature of this study, the results may not be generalized beyond the RAs examined. Yet, the results were compelling to make some suggestions to those writers in both Arabic groups who might want to publish their work in English. As we have seen the two Arabic groups were different at both levels of analysis (the macrostructure and the move-step). The differences require two different sets of suggestions for each group. The only common suggestion is that the Arab RA writers should limit their claims and topic generalization statements to their research topic and refer the importance of their topics to their respected fields of study rather than the real world particularly in disciplinary fields with a long research tradition (cf. Samraj 2004).

Another suggestion to the A-Ed-A group concerning the homegrown version of the rhetorical organization of Arabic RA introductions is to use the literature review to help show space in the previous body of literature rather than just using it to convince the reader that their topic is important. Also, this group should explicitly justify their research in words by using any of the four options of Move 2 not just imply the need for the research as it was clearly the case in the A-Ed-A group. Further, this group should announce their research based on the space type identified in Move 2. If it was a question, Move 3 should be an answer, if it was a gap, the move should be filling that gap, and so on.

The specific suggestions for the hybrid organization writers (the US-Ed-A group) include the importance to provide more review of literature to show the exact space wherein the ensuing research would fit. Also, the writers in this group should be aware of other options of realizing their steps not just sticking to one option as was the case in their realization of Move 3 in this study; they only used one option of Step 3-1 and one set of linguistic devices.

As mentioned earlier, the qualitative nature of this study does not allow for broad generalization. Thus, the need for a quantitative study that is based on the findings of this study is undoubtedly needed. In addition, the finding that there are two versions of rhetorical organizations (hybrid organization and homegrown organization) in the Arabian context calls for further research in other languages/cultures to see if this is actually the case. As we have seen in this study, the hybrid version may have resulted from different educational backgrounds. Future research should, also, consider whether there are possible reasons other than education that could account for various aspects in the hybrid version of rhetorical organization.

References

- Ahmad, U. K. (1997). *Scientific research articles in Malay: A situated discourse analysis*. Unpublished doctoral dissertation, The University of Michigan, Ann Arbor.
- Anthony, L. (1999). Writing research article introductions in software engineering: How accurate is a standard model? *IEEE Transactions on Professional Communication*, 42 (1), 38-46.
- Al-Jubouri, A. (1984). The role of repetition in Arabic argumentative discourse. In J. Swales and H. Mustafa (Eds.), *English for specific purposes in the Arab world* (pp. 99-117). Birmingham, UK: The Language Studies Unit.
- Arvay, A. & Tanko, G. (2004). A contrastive analysis of English and Hungarian theoretical research article introductions. *IRAL*, 24 (1), 71-100.
- Bazerman, C. (1999). Introduction: Changing regularities of genre. *IEEE Transactions on Professional Communication*, 42 (1), 1-2.
- Belanger, M. (1982) A preliminary analysis of the structure of the discussion sections in ten neuroscience journal articles (mimeo).
- Bhatia, V. (1993). *Analyzing genre: language use in professional setting*. New York: Longman.
- Bickner, R. and Peyasantiwong, P. (1988). Cultural variation in reflecting writing. In A.

- C. Pruves (Eds.), *writing across languages and cultures: issues in contrastive rhetoric* (pp. 160-176). Newbury Park, CA: Sage.
- Bisenbach-Lucas, S. (1994). *A Comparative Genre Analysis: The Research Article and Its Popularization*. Unpublished doctoral dissertation, Georgetown University.
- Bley-Vroman, R. & Selinker, L. (1984). Research design in rhetorical/grammatical studies: A proposed optimal research strategy. *English for Specific Purposes*, 84, 1-6.
- Braine, G. (1995). Writing in the natural sciences and engineering. In D. Belcher & G. Braine (Eds.), *Academic writing in a second language* (pp.113-134). Norwood, NJ: Ablex Publishing Corporation.
- Cmejrkova, S. (1996). Academic writing in Czech and English. In E. Ventola & A. Mauranen (Eds.), *Academic Writing: Intercultural and Textual Issues* (pp. 137-152). Philadelphia: John Benjamins.
- Connor, U. (1996). *Contrastive rhetoric: Cross-cultural aspects of second-language Writing*. New York: Cambridge University Press.
- Connor, U. (1997). "Contrastive rhetoric: Implications for teachers of writing in multilingual classrooms. In C. Severino, J. Guerra & J. Butler (Eds.), *Writing in multicultural settings* (pp. 198-208). New York: MLA.
- Connor, U. (2004). Contrastive rhetoric: Old and new directions. In N. Kassabgy, Z.

- Ibrahim, & S. Aydelott (Eds.), *Contrastive rhetoric: Issues, insights and pedagogy* (pp.1-23). Cairo, Egypt: American University in Cairo Press.
- Cooper, C. (1985). *Aspects of Article Introductions in IEEE Publications*.
Unpublished masters thesis, University of Aston at Birmingham, U.K.
- Crookes, G. (1986). Toward a validated analysis of scientific text structure. *Applied Linguistics*, 7, 57-70.
- Dahman, A. (2000). *Rhetorical imagery to Abdulkqahir Al-Jarjani*. Damascus, Syria: Ministry of Culture Press.
- Duszak, A. (1994). Academic discourse and intellectual styles. *Journal of Pragmatics*, 21, 291-313.
- Ewer, J. (1979). *The modals in formal scientific discourse: Function, meaning, and use*. Santiago, Chile: research Report, Department of English.
- Harfmann, M. (2004). Contrasting German and Arabic school essays. In N. Kassabgy, Z. Ibrahim, & S. Aydelott (Eds.), *Contrastive rhetoric: Issues, insights and pedagogy* (pp.1-23). Cairo, Egypt: American University in Cairo Press.
- Hill, S., Soppelsa, B., & West, G. (1982). Teaching ESL students to read and write experimental research papers. *TESOL Quarterly* 16, 333-347.
- Hinds, J. (1983). Contrastive rhetoric: Japanese and English. *Text*, 3, 183-195.
- Hinds, J. (1984). Retention of information using a Japanese style of presentation. *Studies in Linguistics*, 8, 45 – 65.
- Hinds, J. (1990). Inductive, deductive, quasi-inductive: Expository writing in Japanese, Korean, Chinese, and Thai. In U. Connor & A. Johns (Eds.), *Coherence in writing* (pp. 89-101). Alexandria, VA: TESOL.

- Hinds, J. (1987). Reader versus writer responsibility: A new typology. In U. Connor & R. B. Kaplan (Eds.), *Writing Across Languages: Analysis of L2 text* (pp. 141-152). Reading, MA: Addison-Wesley.
- Hopkins, A. and Dudley-Evans, T. (1988). A genre-based investigation of the discussion sections in articles and dissertations. *English for Specific Purposes* 7, 113 -122.
- Hunt, E. and Agnoly, F. (1991). The Whorfian hypothesis: A cognitive psychology perspective. *Psychological Review* 98, 3, 377-389.
- Inman, M. (1978). Lexical analysis of scientific and technical prose. In M. Trimble and L. Trimble and K. Drobnic (Eds.). *English for Specific Purposes: Science and Technology* (pp.242 -256). Corvallis, OR: Oregon State University.
- Jogthong, C. (2001). *Research Article Introductions in Thai: Genre Analysis of Academic Writing*. Unpublished doctoral dissertation, West Virginia University, Morgantown.
- Kaplan, R. B. (1966). Cultural thought patterns in intercultural education. *Language Learning*, 16, 1-20.
- Kaplan, R. B. (1986). Culture and the written language. In J. M. Valdes (ed.), *Culture bound: Bridging cultural gap in language teaching* (pp. 8 -19). Cambridge, England: Cambridge University Press.
- Kaplan, R.B. (1987). Cultural thought patterns revisited. In U. Connor & R.B. Kaplan (Eds.), *Writing across languages: Analysis of L2 text* (pp. 9-21). Reading, MA: Addison-Wesley.
- Kubota, R. (1992). *Contrastive rhetoric of Japanese and English: A critical approach*.

- Unpublished doctoral dissertation, University of Toronto, Canada.
- Kubota, R. (1997). A reevaluation of the uniqueness of the Japanese written discourse: Implications for contrastive rhetoric. *Written Communication*, 14 (4), 460-480.
- Lackstrom, j., Selinker, L. & Trimble, L. (1972) Grammar and technical English, *English Teaching Forum*, X(5), pp. 127-136.
- Lackstrom, J., Selinker, L. & Trimble, L. (1973). Technical rhetorical principles and grammatical choice. *TESOL Quarterly*, 7, 127-136.
- Lee, S. (2001). *A contrastive rhetoric study of Korean and English research pare introductions*. Unpublished doctoral dissertation, The University of Illinois, Urbana Champaign.
- Lopez, G. S. (1982). Article Introduction in Spanish: A Study in Comparative Rhetoric. Unpublished doctoral dissertation, University of Aston at Birmingham, U.K.
- Matlane, C. (1985). Contrastive rhetoric: An American writing teacher in China. *College English* 47, 8, 789-808.
- Najjar, H. (1990). Arabic as a research language: The case of the agricultural sciences. Unpublished doctoral dissertation, University of Michigan.
- Ostler, S. E. (1987). English in parallels: A comparison of English and Arabic prose. In U. Connor & R.B. Kaplan (Eds.), *Writing across languages: Analysis of L2 text* (pp. 169-185). Reading, MA: Addison-Wesley.
- Purves, A. (1988). Introduction. In A.C. Purves (Eds.), *writing across languages and*

- cultures: issues in contrastive rhetoric* (pp. 160-176). Newbury Park, CA: Sage.
- Radwan, A. and Al-Furaih, O. (1997). *Arabic composition*. Riyadh, Saudi Arabia: King Saud University Press.
- Raimes, A. (1991). Out of the woods: Emerging traditions in the teaching of writing. *TESOL Quarterly* 25, 3, 407-430.
- Sa'adeddin, M.A.M. (1989). Text development and Arabic-English negative interference. *Applied Linguistics*, 10, 36-51.
- Samraj, B. (2002). Introductions in research articles: variations across disciplines. *English for Specific Purposes*, 21 (1), 1-17.
- Samraj, B. (2004). Discourse features of the student-produced academic research paper: Variations across disciplinary courses. *Journal of English for academic Purposes*, 3 (1), 5-22.
- Schiffrin, D. (1994). *Approaches to discourse*. Oxford: Blackwell.
- Shaikhulislami, C. & Makhlouf, N. (2000). The impact of Arabic on ESL expository writing. In Z. Ibrahim, N. Kassabgy, & S. Aydelott (Eds.), *Diversity in language: Contrastive studies in English and Arabic theoretical and applied linguistics* (pp. 127-146). Cairo, Egypt: American University in Cairo Press.
- Shim, E. (2005). *Explicit writing instruction in higher education context: Genre analysis of research article introductions from the English Teaching and the TESOL Quarterly Journals*. Unpublished doctoral dissertation, The University of Minnesota, Twin Cities.

- Swales, J. M. (1981). *Aspects of Article Introductions*. Birmingham, U.K.: University of Aston.
- Swales, J. (1984). Research into the structure of introductions to journal articles and its application to the teaching of academic writing. In R. Williams, J. Swales and J. Kirkman (Eds.) *Common Ground: Shared Interests in ESP and Communication Studies*. Oxford: Pergamon.
- Swales, J. (1990). *Genre Analysis: English in Academic and Research Settings*. New York : Cambridge University.
- Swales, J. M. & Najjar, H. (1987). The writing of research article introductions. *Written Communication*, 4, 175-190.
- Weissberg, R. (1984) Given and new: Paragraph development models for scientific English, *TESOL Quarterly* , 18, pp. 485-500.
- Taylor, G. & Tingguang, C. (1991). Linguistic, cultural, and subcultural issues in contrastive discourse analysis: Anglo-American and Chinese scientific texts. *Applied Linguistics*, 12, 319-336.
- Toulmin, S. (1972). *Human Understanding, Volume 1: The Collective Use and Development of Concepts*. Princeton, NJ: Princeton University Press.
- Trikkonen-Condit, S. (1996). Explicitness vs. implicitness in argumentation: An intercultural comparison. *Multilingua*, 15, 3, 274-275.
- Zappen, J. P. (1983). A rhetoric for research in science and technology. In P. V.

Anderson, R. J. Brockmann, & C. R. Miller (Eds.), *New essays in technical and scientific communication: Research, theory, practice* (pp.123-138). Farmingdale, NY: Baywood.

Zappen, J. P. (1985). Writing the introduction to a research paper: An assessment of alternatives. *The Technical Writing Teacher*, 12, 93-101.

APPENDICES

APPENDIX A
THE STYLE SHEET OF KING SAUD UNIVERSITY JOURNAL

This periodical is a publication of the Academic Publishing and Press Directorate of King Saud University. Its purpose is to provide an opportunity for scholars to publish their original research. The Editorial Board, through Division Editorial Boards, will consider manuscripts from all fields of knowledge. A manuscript may be submitted in either Arabic or English, and, if accepted for publication, it may not be published elsewhere without the written permission of the Editor-in-Chief.

The following is the manuscript type classification used by the Editorial Board:

- 1) Article: An account of an author's work in a particular field. It should contribute new knowledge to the field in which the research was conducted.
- 2) Review Article: A critical synthesis of the current literature in a particular field, or a synthesis of the literature in a particular field during an explicit period of time.
- 3) Brief Article: A short article (note) having the same characteristics as an article.
- 4) Forum: Letters to the Editor, comments and responses, preliminary results or findings, and miscellany.
- 5) Book Reviews

General Instructions

1. Submission of manuscripts for publication: Papers must be presented in final page format, along with a magnetic disk containing the contribution executed on an IBM compatible PC using Word 6 or any updated version of it. Pages are to be numbered consecutively and are to include all illustrative material, such as tables and figures, in their appropriate places in the text.

2. Abstracts: Manuscripts for articles, review articles, and brief articles require that both Arabic and English abstracts, using not more than 200 words in each version.

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For weights and measurements, and where appropriate, abbreviations rather than words are to be used, e.g., cm, mm, m, km, cc, ml, g, mg, kg, min, %, Fig., etc.

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Example:

[7] Hicks, Granville. "Literary Horizons: Gestations of a Brain Child." Saturday Review, 45, No. 62 (1962), 2-23.

b) Book citations in the text are to be enclosed in on-line brackets including the page(s), e.g., [8, p. 16]. Book references are to include the following: reference number (in on-line brackets []), author's surname followed by a given name and/or initials, title of the book (italicized), place of publication, publisher, and year of publication.

Example:

[8] Daiches, David. *Critical Approaches to Literature*. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1956.

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APPENDIX B

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B. Abstracts in both Arabic and English within 200 words each should be submitted.

C. Author's name and affiliation should be written on a separate sheet along with his/her c.v.

D. Original illustrations should be drawn on calc paper using black Chinese ink, or (on Microsoft word).

2. All reference citations within the text are to be identified. Last name of the author, year of Publication, and page number(s) have to be provided between brackets. For example, (Abu Sulaiman, 1415,p.15)If there are two authors, last names of both authors should be provided for example, (Al-Seryani, and Mirza, 1418,p.50)In case there are more than two authors for the same reference, citation should be in the following form:(Bajoudah, et al 1408,p.110)citations of two references for two authors should be as follows:(Mubarak, 1415, p.6: and Mukhtar, 1417,p.30)while citation of two references for one author having the same year of Publication should take the form, (Al-Ayed,1414 A,p. 120' 1414B,p.19).

3. All references are to be listed sequentially at the end of the manuscript in an alphabetical order according to the authors' last names: followed by the first names or their abbreviations; the book title (underlined), or article title (between quotations).The number of the edition, name of the publisher (for books)or journal place of publication (for books), and year of publication. In the case of articles, the volume of the journal; or the year, number, and pages number should be provided.

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VITA

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