# **CHAPTER 1**

#### **The Problem**

#### 1.0 Introduction

Swales (2004) observes that "English has become the language of research communication *par excellence* in a preponderance of disciplines and fields over the last two decades" (p.58). English as a world language, at least in the academic field, is more or less a *fait accompli* (Flowerdew, 2002). Thus, within the context of globalization and increasing international research collaborations, the ability to read and/or write research articles (RAs) in English is crucial for academic and professional success as the RA is seen as the most important channel or a "prestigious genre" for the presentation of new knowledge (Swales, 2004, p.217). Therefore, researchers nowadays, whatever their native origin, often have to communicate in English to gain acceptance and international recognition for their work.

As academics intend to publish their research findings internationally - in English - communicating their research in the language can be a considerable challenge, as a majority of them, are not native English speakers. In addition to linguistic and cultural challenges, they need to master a wide range of spoken and written genres of academic communication such as RAs, grant proposals, and conference presentations (Rowley-Jolivet & Carter-Thomas, 2005). Also, English native speaker- like competency does not guarantee that the individual has the skills to manipulate the production of academic genres which are essential components for success in the academia (Sengupta, Forey & Hamp-Lyons, 1999). To facilitate the reading and/or writing of RAs, both native and non-native speakers of English need to be aware of, among other things, the rhetorical

organization conventionally used in their fields of interest; to produce a discourse that is appropriate to the situation or context (Bazerman, 1994). This requires taking into account the target audience, the communicative purpose of the text, and the rules constructed by the discourse community, which in turn will impact on the way the writing choices are made (Swales, 1990).

Considering that English has been established as the language of international communication and considering that academic discourse varies across disciplines and cultures as recent research (Ozturk, 2007; Samraj, 2003, Jogthong, 2001,) has shown, the non-native English academic who wishes to obtain international recognition through publication will necessarily have to adopt the discourse conventions which characterize international academic writing. Although many students and academics turn to guidebooks and manuals on writing up research, very few of these describe satisfactorily the textual organization and linguistic features (Martin, 2003), cross cultural differences in text structures and reader expectations of academic genres. More important than that, as Bhatia asserts "it is difficult to claim that they are all based on any principled investigation of whatever interpretation of the term 'academic discourse' in which very little research has been undertaken" (Bhatia, 2002, p.25). Lack of awareness of such cross disciplinary and cultural differences in text structures and reader expectations is believed to be the main cause of non-native writers' lack of success in the international community (Connor, 1996, cited in Martin 2003). It is but recently that there has been a flow of interesting genre based studies of writing in academic and research situations for specific purposes (Martin, 2003; Swales, 2004) and this study is an effort to supplement this endeavor.

# **1.1** Background to the study

A recent development, in English Language Teaching (ELT) is the attention given to the notion of *genre*. This has been especially true in the case of English for Specific Purposes (ESP), but is increasingly so for other areas of language teaching. In Australia, for example, genre based approaches have been applied in academic writing; English in the workplace, adult second language literacy development and language development in schools (Paltridge, 1996: 237). Since the publication of Swales' (1990) *Genre Analysis* interest in genre analysis and pedagogy is gaining strength. Recent research has offered "new insights into the social purposes, rhetorical 'move' structures and linguistic features of spoken and written texts and ways of imparting relevant genre knowledge to non-native speakers in academic and professional contexts" (Hyon, 2001:418).

The emergence of genre theories in ELT is largely attributed to Systemic Functional Linguistics (SFL) which represents a fundamentally new paradigm in the way we view language. It is an understanding of language quite different from that of its predecessors, namely, traditional grammar and formal grammar.

This approach, adopted in genre theories, and subscribed to in this study, emphasizes the cultural and social dimensions, which enter into the formation and constitution of language. This approach does not deny the importance of psychological factors in language, but rather assumes that whatever is psychological is common to all human beings, and therefore to all cultures. In one sense, what is common is seen as less important and less interesting than those factors, which make languages different, and specific to particular cultures. In educational terms, this approach offers the possibility of understanding language-in-culture and language in society, to allow a focus on those factors which reveal matters of cultural and social significance, difference and relevance. Grammars, in this approach are much oriented towards meaning and function: what does this bit of language mean because of what it does? (Kress, 1993). Also known as functional grammar, it is an alternative twentieth century development and tries to explain the ways in which language is related to its social environment. Because of the the way in which people use language to live, we can refer to grammars of this kind as rhetorical (Martin & Rothery, 1993).

In such a social theory of language, the most important unit is the text, either spoken or written, that is, the socially and contextually complete unit of language. Language always happens as text; and as text, it inevitably occurs in a particular generic form. The generic form of a text is a consequent of the action of social subjects in particular social situations (Kress, 1993). Applied to writing, the outcome of the writing process may be the text, but such texts are also instantiations of some agreed practice; indeed as Candlin (2000: xvii) posits, "they may not only reflect such practices but actively construct them". The idea is that texts are patterned in reasonably predictable ways according to patterns of social interaction in a particular culture, meaning, texts are where readers and writers meet, linguistically and cognitively. The meeting is a social-interactional process and as such the writer reader relationship is always socially accomplished. Social patterning and textual patterning meet as genres. Genres are textual interventions in society. Genres are not simply created by individuals in the moment of their utterance; to have meaning, they must be social. Thus, individual speakers and writers act within a cultural context and with knowledge of the different social effects of different types of oral and written text (Cope & Kalantzis, 1993). The crux of the argument, as Kress clearly explains, is that, in any society there are regular recurring

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situations in which a number of people interact to perform or carry out certain tasks. Where these are accompanied by language, of whatever kind, the regularity of the situation will give rise to regularities in the texts, which are produced in that situation. Hence, the social factors provide the categories which produce linguistic form; the social factors are the generative categories out of which textual forms - genres - are produced. In essence, genres are always the result of the realization in linguistic form of complex social factors (Kress, 1993).

One way by which written texts are grounded in the social world, as Hyland tells us, is by revealing interaction as a collection of rhetorical choices. The writer in this instance, he says, is seen as not a creator working through a set of cognitive processes nor as an interactant engaging with a reader, but a member of a community. Writers typically position themselves and their ideas in relation to other ideas and texts in their communities, and this helps them both to legitimate their membership and establish their individual identities through discourse. This notion of a discourse community, drawing our attention to the existence of disciplinary groups and practices, joins writers, texts and readers in a particular discursive space (Hyland, 2002), viewing each discipline as an academic tribe (Becher, 1989) with its particular norm, nomenclature, bodies of knowledge, sets of conventions and modes of inquiry, constituting a separate culture (Swales, 1990). Within each culture, individuals acquire specialized discourse competencies that allow them to participate as group members. These cultures differ along social and cognitive dimensions, offering contrasts not only in their fields of knowledge, but in their aims, social behaviours, power relations, political interest, ways of talking and structures of argument (Toulmin, 1972; Whitely, 1984, cited in Hyland, 2000). Through the code of their specialized languages, these 'tribes' consecrate their cultural privilege (Bourdieu & Passeron, 1996, cited in Hyland, 2000). In other words,

the discourse community provides a set of norms or conventions concerning textual forms, roles and acts. Writers internalize these norms and draw on them and on their readers' awareness of them, in producing texts, and readers draw on these norms, and writers' awareness of them, in interpreting texts. When they do this, the text reproduces the norms in the discourse community.

Viewed from these perspectives, writing then, cannot be regarded as simply an act of putting words onto a page. It can no more be regarded as a creation of isolated minds. Writing has now to be viewed as a process of "situated rhetorical action" (Candlin, 2000: xv). Such a process involves complex cognitive and linguistic activity whereby writers construct ideal texts with particular reading audiences in mind, and seeking, in realizing those ideal texts, to design their discursive structures and to realize their lexico-grammatical textualizations to match the conventions of the genres within which they are writing (Candlin, 2000). In other words, as Candlin further asserts, every act of writing is ineluctably connected to a message with a sense of purpose, a sense of belonging and a sense of personal identity. This identity is not singular, since writing serves as much to seek, to acknowledge and to retain writers' membership of communities as it does to express individual and personal creativity. Writing, then, he says, is textual, processual and a matter of social and, often institutional practices.

Applying this perspective to academic writing, as Hyland (2002) explains, we find that it is not just a matter of constructing and proclaiming research. It is evidencing a sophisticated awareness of how disciplinary cultures textualize that research into knowledge, and how they do this in consequence and in reflection of their understanding of the academy as a social forum, and their perceived position within that forum. Thus, academic writing does not only provide evidence of author's knowledge, research and scholarship, it evidences also authors' awareness of the presence of an international community with its own approved and esteemed literacy practices (Hyland, 2000). The means by which academics present knowledge claims and account for their actions involves not only cognitive factors but also social and affective elements. To be unaware of the rhetorically effective practices of such literacy based communities is to handicap the key research purposes of persuasion of one's peers and establishing in them a sense of conviction about one's work (Candlin, 2000). As such, it can be concluded that, much of academic writing is one's response to somewhat predictable rhetorical contexts, often to fulfill certain communicative purposes, for a particular readership (Bhatia, 1999) and therefore it is my intention, in this study, to determine how the particular discourse community of academic writers and readers of the research article genre co-construct their writing conventions.

#### **1.2** Statement of the Problem

Although research on academic writing has included a variety of genres such as textbooks, lectures, tutorials, research reports, research grant applications and other written work, the research article (RA) seems to have gained the most attention among researchers. Researchers have concerned themselves with the historical development of the RA (Bazerman, 1988; Atkinson 1993; Salager-Meyer,1999; Vande Kopple, 1998) and its social construction (Myers, 1990) other than having examined texts written in different languages and cultures as well, such as Thai (Jogthong, 2001), Slovene (Peterlin, 2005), Malay (Ahmad, 1997) Arabic (Fakhri, 2004).

Move based studies have also been conducted on the structure of RAs and most appear to treat each of its sections as an independent entity. The structure of the various sections of the RA, such as the introduction (e.g. Swales, 1981, 1990; Swales & Najjar, 1987, Ozturk, 2007; Kanoksilapatham, 2007), the results sections (e.g. Brett, 1994; Thompson,1993,) and discussions (e.g. Hopkins & Dudley-Evans, 1998, Holmes, 1997) is widely reported in the mainstream genre literature. However, to my knowledge, studies done on the complete rhetorical structure of RAs are limited with the exception of Nwogu, (1997) on the medical research paper, Posteguillo (1999) in computer science and Kanoksilapatham (2005) on RAs in biochemistry, and these studies have excluded the abstract in their analysis. It is noted that if a move based study is to be maximally beneficial to practitioners in their attempts to write effective RAs, the rhetorical structure of all the sections of RAs has to be described (Kanoksilapatham, 2003).

Moreover, these studies are confined to disciplines in the hard sciences. RAs in the soft sciences remain under-explored (Ruiying & Allison, 2004). This is perhaps unfortunate, since a large and increasing number of non-native speaker students are studying social science subjects in English (Holmes, 1997). In addition, if experimental sciences are prone to show more similarities in textual patterns, writings in the humanities and social sciences evidence more prominent variation. This may be due to, as Canagarajah (2002) notes, certain social scientific fields have not yet evolved a strong discursive identity. In these research fields, communication styles respond most strongly to language and culture bound discoursal preferences and constraints (Duszak, 1997:11, cited in Fakhri, 2004). Bazerman (1998) had noted that in political science and psychology the discourses jostle inconsistently and clumsily with those of natural scientific fields and disregarding their own unique tradition and focus, these emergent fields display much "instability in their professional status" and their "unsettled nature makes some of the

humanistic and social scientific fields interesting to explore (Canagarajah, 2002, p.48). There is therefore a rationale for extending the genre analysis of the RA in the soft sciences.

More important is Bhatia's observation in 2002 regarding the emergent interdisciplinary nature of knowledge and that academic programmes that are being designed, offered and evaluated have become multidisciplinary to cater for the needs of an interdisciplinary and multicultural contexts of the workplace. Thus, he proposes that the concept of academic discourse, especially for the designing of specialist language teaching programmes, needs to be viewed in the light of present day trends. Therefore, the EAP paradigm, to be accountable and accepted, needs to develop a discourse and genre based cross-disciplinary approach, taking into account the dynamic aspects of disciplinary boundaries, to create appropriate conditions for meeting the interdisciplinary discourse based demands placed on apprentices in the academy (Bhatia, 2002).

To fulfill this need in relation to research on the genre of the RA, genre analysts of academic writing in particular, have to extend their research, away from individual disciplines to interdisciplinary areas. Since most studies done on both the individual sections and complete rhetorical structure of RAs have been confined mainly to single disciplines and in the hard sciences, it therefore becomes necessary to extend the research on structural analyses of RAs into interdisciplinary subject areas. As the writing of RAs in educational psychology (EdP), environmental psychology (EnP) and economic psychology (EcP), which are indeed interdisciplinary, has not yet been examined and reported in the mainstream genre literature, in this study, I will attempt to describe the rhetorical structure inherent in these RAs to fulfill this research niche.

Apart from the structural analysis of the RA in genre analysis, particular linguistic features have also caught the attention of researchers. Lately, these studies, to name a few, have been on elements such as lexical bundles (Hyland, 2008), self mention (Duenas, 2007), metatext (Peterlin, 2005), engagement (Hyland, 2002), new knowledge claims (Dahl, 2008) and titles (Haggan, 2004). Of particular interest in this study are the recent studies on RA titles and new knowledge claims. Haggan (2004) confined her titles to those in the sciences, literature and linguistics and Dahl's (2008) analysis of new knowledge claims was confined to applied linguistics and economics. These researchers have found variations in the way titles and new knowledge claims are structured in their areas of interest. It is therefore necessary, due to observed disciplinary variations in the way linguistic elements are utilized for title and propagation of new knowledge claim purposes, to examine closely, how these elements are manifested in the interdisciplinary areas selected for this study.

# **1.3 Research Objectives**

- 1. To use the structural move analysis to determine the rhetorical move structure and internal elements within these moves in educational psychology, environmental psychology, and economic psychology RA abstracts.
- 2. To describe the rhetorical structure of the various sections in RAs in educational psychology, environmental psychology, and economic psychology.
- To discern how titles are cast and how new knowledge is proclaimed within RAs in these disciplines.

## 1.4 Significance of the study

This study appears to be the first attempt to investigate the complete macro-structure of RAs, including abstracts, in three interdisciplinary areas. In view of the unavailability of studies conducted specifically on these disciplines, this study will focus and explore the terrain of the various sections of RAs in EdP, EnP and EcP. The overarching purpose of this study is to define the structure of RAs in these disciplines through their rhetorical strategies - to give a detailed analysis, to reveal the salience of particular practices of the disciplinary communities under investigation because as we know "the ideology within which a text is written constrains choices in discourse organization, grammar and lexis" (Hunston, 1993;57) This description of the rhetorical moves of abstracts and the various sections of the RAs in EdP, EnP, and EcP and the two linguistic features selected for the study can be used as a basis for comparison with future studies on RAs in other disciplines which are multidisciplinary and also with RAs from other cultures.

Pedagogically, the results obtained may assist teachers in designing instructional materials that support the acquisition of generic skills among students in these disciplines. The literature is vehement in noting that students should be taught according to the conventions of writing in their own fields. For instance, it is not useful to teach students of literary criticism or history the rhetorical structure suggested by guidebooks because as Swales and Najjar (1987) have indicated that there are the distinct mismatches between prescriptions offered in published guides and what happens in actual practice. Much of what had been written is often very general in its description and where generalizations are made, they tend "not to be borne out in reality" (Swales 1984:77, cited in Paltridge, 2002). As such students should be analyzing RAs in

journals of their own disciplines. The teaching of writing the RA is best done at a stage when students have concrete data to draw material from for writing the various sections. Ideally, the students are the authors and collectors of their data. However, in the early stages of studying the learning and practicing of writing can naturally be done on the basis of other scholars' research (Stotesbury, 2003). It is known that ESP instruction and materials development have to a large extent, been affected by the results of analyses of both oral and written discourses that students need to learn to produce and comprehend, and our understanding of textual norms in different disciplines enables us to provide instruction that better prepares students for the disciplinary communities in which they are seeking membership (Samraj, 2002). Dudley-Evans (1994) notes that the strongest argument for genre research is that it provides input for important and popular courses on academic writing, particularly for those who want to join the academic discourse community. The results of this study can have implications for the teaching of academic writing to native and non-native speakers of English in these disciplines as the rhetorical structures captured by the move and linguistic analysis can be presented to learners to raise their consciousness of discipline specific reading and writing skills as the results will feed directly into the design of such courses.

#### **1.5** Outline of the Dissertation

This chapter has delineated various aspects of the research problem. Chapter 2 deals with genre theory within the ESP tradition and reviews some related studies on abstracts and the various sections of RAs. Chapter 3 will describe aspects of the methodological design of the study and these include explication of the overall research design, compilation of corpus, and data analysis procedures. Chapters 4, 5 and 6 present the results of the study and a discussion of the various sets of findings procured, to arrive at

a generalised finding that can inform the research objectives that were set. The final chapter, Chapter 7, sums up the dissertation by drawing conclusions from the main findings in the light of the objectives and concludes with limitations and suggestions for further research.

## **CHAPTER 2**

#### **Literature Review**

## 2.1 Introduction

Flowerdew (2002) notes that with the great expansion in the international use of English, there has been a parallel growth in the preparation of non-native speakers for study in English through English for academic purposes (EAP). In parallel to the development of EAP programmes over the last four decades or so, is the considerable amount of activity in the description of academic discourse in English, in view of it providing insights and frameworks for EAP pedagogy. Academic discourse analysis is said to basically operate on four different research paradigms - contrastive rhetoric, corpus linguistics, ethnographically influenced methods, and genre analysis - the four paradigms which are probably the most used in academic discourse analysis and which have had the most direct pedagogic application at the tertiary level.

Pertinent to this study is the genre paradigm to academic discourse analysis. Pertinent because the incredible growth of academic disciplines has caused a growth in genre development and modifications, and it is clearly known that the way one discipline uses a genre is not the same as the way a different uses a similar genre. (e.g. Samraj, 2002, Ozturk, 2006). Furthermore, knowledge is becoming more fragmented and specialized, especially in the realms of science, academia and business (Bhatia, 2002). Each field, each discipline and each area of specialty has its acknowledged experts and special organizations that are the gatekeepers and guardians of their special interests. With all the areas of specialty that exist and with the different types of specialized discourses that are around we need to draw better more accurate maps and genre analysis appears