**Faculty of Cognitive Sciences and Human Development**

**ANALYSIS OF METHODOLOGY SECTION IN EMPIRICAL RESEARCH ARTICLES BY THE NON-NATIVE ENGLISH SPEAKERS IN MALAYSIA**

**NOR AZMA MANAN**

**Bachelor of Education with Honours**
**(Teaching English as Second Language)**
**2009**

# BORANG PENYERAHAN TESIS

Judul: **ANALYSIS OF METHODOLOGY SECTION IN EMPIRICAL RESEARCH ARTICLES BY THE NON-NATIVE ENGLISH SPEAKERS IN MALAYSIA**

**SESI PENGAJIAN: 2005 – 2009**

Saya                         **NOR AZMA MANAN**
                                 **(HURUF BESAR)**

mengakui membenarkan laporan projek ini disimpan di Pusat Khidmat Maklumat Akademik, Universiti Malaysia Sarawak dengan syarat-syarat seperti berikut:

1. Hakmilik kertas projek adalah di bawah nama penulis melainkan penulisan sebagai projek bersama dan dibiayai oleh UNIMAS, hakmiliknya adalah kepunyaan UNIMAS.
2. Naskhah salinan di dalam bentuk kertas atau mikro hanya boleh dibuat dengan kebenaran bertulis daripada penulis.
3. Pusat Khidmat Maklumat Akademik, UNIMAS dibenarkan membuat salinan untuk pengajian mereka.
4. Kertas projek hanya boleh diterbitkan dengan kebenaran penulis. Bayaran royalti adalah mengikut kadar yang dipersetujui kelak.
5. * Saya membenarkan/tidak membenarkan Perpustakaan membuat salinan kertas projek ini sebagai bahan pertukaran di antara institusi pengajian tinggi.
6. ** Sila tandakan (√)

☐ SULIT          (Mengandungi maklumat yang berdarjah keselamatan atau kepentingan Malaysia seperti yang termaktub di dalam AKTA RAHSIA RASMI 1972).

☐ TERHAD        (Mengandungi maklumat TERHAD yang telah ditentukan oleh organisasi/   badan di mana penyelidikan dijalankan).

☐ TIDAK TERHAD

Disahkan oleh

_____                    _____
(TANDATANGAN PENULIS)                        (TANDATANGAN PENYELIA)

Alamat tetap:                                              DR. TING SU HIE
NO 11, LORONG 15, SEMAMBU BARU,          (Nama Penyelia)
25350 KUANTAN,
PAHANG DARUL MAKMUR.

Tarikh:  8 MAY 2009                              Tarikh: 8 MAY 2009

CATATAN     *     **Potong yang tidak berkenaan.**
                    **     **Jika Kertas Projek ini SULIT atau TERHAD, sila lampirkan surat daripada pihak  berkuasa/ organisasi berkenaan dengan menyertakan sekali tempoh kertas projek. Ini perlu dikelaskan sebagai SULIT atau TERHAD.**

**ANALYSIS OF METHODOLOGY SECTION IN EMPIRICAL RESEARCH
ARTICLES BY THE NON-NATIVE ENGLISH SPEAKERS IN MALAYSIA**

NOR AZMA MANAN

This project is submitted in partial fulfilment of the requirements for a
Bachelor of Education with Honours
(Teaching English as Second Language)

Faculty of Cognitive Sciences and Human Development
UNIVERSITI MALAYSIA SARAWAK
2009

The project entitled 'Analysis of Methodology Section in Empirical Research Articles by the Non-Native English Speakers in Malaysia' was prepared by Nor Azma Manan and submitted to the Faculty of Cognitive Sciences and Human Development in partial fulfillment of the requirements for a Bachelor of Education with Honours (Teaching English as Second Language).

It is hereby confirmed that the student has done all necessary amendments of the project for acceptance:

_____

**(Dr. Ting Su Hie)**

Date: **8 MAY 2009**

**Statement of Originality**

The work described in this Final Year Project, entitled
**"Analysis of Methodology Section in Empirical Research Articles by the
Non-Native English Speakers in Malaysia"**
is to the best of the author's knowledge that of the author except
where due reference is made.

_____

**8 MAY 2009**                                      **NOR AZMA MANAN**
                                                     **14749**

# ABSTRACT

ANALYSIS OF METHODOLOGY SECTION IN EMPIRICAL RESEARCH
ARTICLES BY THE NON-NATIVE ENGLISH SPEAKERS IN MALAYSIA

Nor Azma Manan

Presently, not much research has focused on the methodology section in research articles. Researchers like Brett (1994), Nwogu (1997), Bloor (1998), Lim (2006), and Bruce (2008) advocate further research to analyze this particular section. The aim of this study was to identify the generic structure and the language features of the Methodology section in Non-Native English Speakers' (NNES) research articles. The objectives of this study were to: (1) identify the ways on how the existing NNES researchers' structuring of their Methodology section in research articles; (2) to determine the frequency and the use of passive and active voice in Methodology section; and (3) to determine the frequency and functions of first personal pronouns in Methodology section. 50 research articles produced by the local NNES researchers were analyzed. For the structure, analysis using Lim's (2006) framework revealed that only 42% of 50 research articles follow the typical conventions proposed by Lim (2006), which is *describing data collection procedures* (Move 1), *delineating procedures of measuring variables* (Move 2), and *elucidating data analysis procedures* (Move 3). For the language features, 61.18% of the research articles preferred to use active voice rather than passive voice in constructing the Methodology section. Analysis of the functions of first personal pronouns using Kuo's (1999) framework showed that 'Explaining what was done' was the function that most frequently used in the Methodology section from the research articles studied. Several shortfalls were identified from the analysis. For generic structure, *elucidating data analysis procedures* (Move 3) was often omitted. The results indicated the need to extend the use of first personal pronouns to other higher level functions, such as 'Proposing the theory' and 'Comparing approaches'. These findings provide areas to focus on in research writing courses.

# ABSTRAK

*ANALISA SEKSYEN METODOLOGI DALAM KERTAS KAJIAN EMPIRIKAL OLEH BUKAN PENUTUR NATIF BAHASA INGGERIS DI MALAYSIA*

*Nor Azma Manan*

*Dewasa ini, tidak banyak kajian yang memberi fokus kepada analisa seksyen Metodologi dalam kertas kajian. Kajian yang dijalankan oleh hanya beberapa penyelidik, iaitu Brett (1994), Nwogu (1997), Bloor (1998), Lim (2006), dan Bruce (2008) menunjukkan perlunya kajian selanjutnya dibuat untuk menganalisa seksyen ini. Matlamat kajian ini adalah untuk mengenal pasti struktur generik dan laras bahasa dalam seksyen Metodologi daripada kertas kajian yang dihasilkan oleh bukan penutur bahasa Inggeris natif. Objektif kajian ini adalah untuk: (1) mengenalpasti cara bagaimana bukan penutur bahasa Inggeris natif menstruktur seksyen Metodologi dalam kertas kajian; (2) menentukan frekuensi dan penggunaan kata kerja pasif dan aktif dalam seksyen Metodologi; dan (3) menentukan frekuensi dan fungsi penggunaan kata ganti diri pertama. 50 kertas kajian yang dihasilkan oleh bukan penutur bahasa Inggeris natif tempatan telah dipilih. Untuk bahagian struktur, dapatan dari analisis yang menggunakan senarai semak daripada Lim (2006) menunjukkan hanya 42% daripada 50 kertas kajian yang selaras dengan konvensyen tipikal yang dicadangkan oleh Lim (2006), iaitu menerangkan prosedur pungutan data (Pergerakan 1), menerangkan prosedur mengukur pembolehubah (Pergerakan 2), dan menerangkan prosedur menganalisa data (Pergerakan 3). Dari segi bahasa pula, 61.18% daripada kertas kajian menggunakan kata kerja aktif berbanding kata kerja pasif. Dapatan dari analisis fungsi kata ganti diri pertama yang menggunakan senarai semak daripada Kuo (1999) menunjukkan 'Menerangkan apa yang telah dilakukan' merupakan fungsi yang paling kerap digunakan dalam seksyen Metodologi. Beberapa kekurangan telah dikenal pasti daripada analisa yang dijalankan. Bagi analisa struktur generik, kebanyakan penyelidik tidak memberi perhatian terhadap menerangkan prosedur menganalisa data (Pergerakan 3). Bagi kata ganti diri pertama, dapatan menunjukkan perlunya memperluas penggunaan tersebut misalnya dalam 'Merangka teori' dan 'Membandingkan pendekatan'. Hasil dapatan secara keseluruhannya memberi ruang tentang perlunya untuk mewujudkan kursus khas bagi penulisan kajian.*

# ACKNOWLEDGEMENT

This final year project took a year from conception to completion. It involved countless cycles of exploration, inquiry, doubt, confusion, and uncertainty. After all, praise be to the Almighty God for His perseverance and the strengths given for me to complete this final year project.

This final year project would never have come to fruition without the support of the individuals, and it is with pleasure and gratitude that I acknowledge their efforts. First and foremost, I am highly indebted to the guidance and patience of my supervisor, Dr. Ting Su Hie, who consistently give the precious advice, motivation, and intellectual help for me to complete this final year project. I would also like to express my gratitude to my Research Methodology team for the sharing of resources, help, and thoughtful ideas to improve my Final Year Project. Not forgetting, I would like to acknowledge my beloved parents, family and my fellow friends for the moral support throughout the difficult moments and my ups and downs. Without all of you, I am not sure whether I could endure all these challenging episodes. Thank you so much.

# TABLE OF CONTENTS

# LIST OF TABLES

# LIST OF ABBREVIATIONS

RA                              Research article

RAs                           Research articles

NNES                       Non - native English speakers

NES                         Native English speakers

# CHAPTER 1

# INTRODUCTION

This chapter starts off with the overview of the study, the statement of the problem and the objectives of the study. After that, the significance of the study and the operational definitions of terms will be addressed. The scope of the study will also be looked into at the end of this chapter.

## 1.1    Writing at tertiary level

Writing in tertiary level can be difficult for some of the students. This is because they find that the conventions of writing are different from their secondary education. The difference can be said in terms of the requirements for them to argue and discuss the particular issue critically, supporting their ideas with evidence and putting on their own judgements towards certain idea. This is supported by Cullip and Carol (2003), who stated that the "traumatic experiences" (p. 1) is caused by the transition from formal education at school to formal education at tertiary level. The transition concerns with the process of writing, for example, writing in tertiary level is no longer just for the sake of responding to questions, but as one of the means for

students to express and make meanings for themselves, as well as to learn how to think and communicate in their particular domains (Hammann, 2005). This clearly shows the higher demands of writing ability among the students as compared to their school writing.

Several types of writing that the students are required to produce in tertiary level comprise the written assignments, proposals, and academic texts related to their respective disciplines. These various types of writing require certain kinds of language features and generic structure respectively. In writing assignments, for example, the students need to have the knowledge on text organization, such as title, headings, introductions and conclusions where each of the ideas presented must have link to one and another. In response with this issue, Lea and Street (1998) had carried out an interview with 23 lecturers and 46 students at one university in England in the year 1996, where the research aimed to find out the students' and lecturers' understanding towards the process and nature of writing in higher education. The findings of the study revealed that the content of the students' product, such as the structure and argument of the individual academic text differs across the disciplines, types, and the lecturer's expectations. Lea and Street (1998) also suggested the term "course switching" which means that the tertiary level students need to switch their assumptions and their way of presenting the information through writing according to the course units, modules, tutors and lecturers. The lecturers' part, on the other hand, is to make clear their own expectations and requirements for students to conform to in order to meet the standard, as well as to achieve better writing quality.

Instead of the attention given to the text organization, the language aspects should also be given consideration. According to Bowker (2006), the rules of punctuation and grammar are two vital elements in academic writing at tertiary level in order to maintain the clarity of ideas and to avoid any ambiguity in expression. In addition. Hall and Birkerts (1991) also added that clarity, coherence, and unity are the

three crucial aspects that are compulsory in every academic writing in tertiary level, in order to have comprehensive ideas and thus to successfully achieve the communicative purposes. The language rules, the specific features of academic writing and the organization of the ideas as mentioned are the important technical aspects in academic writing in tertiary level that should be given particular attention to make clear and reflect the different degrees between the academic writing in tertiary level and other levels of study.

Looking at the more serious written text before the students complete the university degree, where they have to produce a research, in a form of research reports, research paper, thesis or dissertations, depending on the particular institutions. As stated in the position paper by Rinner (2001), doing research is one of the argumentation processes that require the researcher to analyze, discover, use, and archive the rationale in decision making problems. This is the first, initial step to expose the students to the real world of being in the academic setting and clearly an on-going process that demands the students' cognitive level to be pushed at the highest level as well as requiring them to keep on reading and improving their work from time to time.

However, doing research does not end after the students graduated from their tertiary institution. As in Gay (1996), the endless point of research is as follows:

> Despite a popular stereotype that depicts researchers as spectacled, stoop shouldered, elderly gentleman who endlessly add chemicals to test tubes, everyday thousands of men and women of all ages, shapes, and sized conduct educational research in a wide variety of settings. (p. 7)

From the statement, this shows that research is an ongoing task done by anyone regardless of their age, gender or other factors. Ary, Jacobs and Razavieh (2002) stated that research article uses simple language and acts as one of the channels to communicate with other people, sharing the knowledge, and providing

the source of information to other people about particular area of study. The endless lists of research articles done all over the world by the researchers in various languages, be they native or non-native speaker of the particular language, had attracted particular researchers to analyze the way the individual researcher write or structure their research article to serve the specific communicative purposes for the particular readers in a country.

There are numbers of research done on Research Methodology by other people outside of Malaysia. Taking the examples of the research done in the particular section of Research Methodology area, the Abstract section has been studied extensively during the past few years, such as in arts (e.g. Santos, 1996; Stotesbury, 2003; Martin, 2003; Pho, 2008) and science field (e.g. Stotesbury, 2003; Cross & Oppenheim, 2006). There are also vast research done for Introduction section, which are Fakhri (2004), Xu (2005), and Samraj (2005) in arts field and Anthony (1999), Samraj (2002), Kanoksilapatham, (2007) and Samraj (2008) in science field. A study is also done in Literature Review in arts field by Kwan (2006). The immense numbers of research also goes to Result section in arts field (e.g. Brett, 1994; Yang & Allison, 2003) and for Discussions section (e.g. Holmes, 1997; Peacock, 2002) in arts and science field (e.g. Peacock, 2002). However, there is handful study done in Methodology section, which only represented by Brett (1994), Nwogu (1997), Bloor (1998), Lim (2006), and Bruce (2008).

In addition, there is also lack of existing research on Research Methodology done in Malaysia. Several examples was a study conducted by Ahmad (1997), who examined the scientific research articles in Malay; and Ting (2006) who examined the research writing skills among the ESL learners in tertiary education. From the lists of studies conducted, it can be seen that more research in Methodology section, particularly in Applied Linguistics need to be done as it is one of the disciplines that is comparatively under explored (Yang & Allison, 2003). This is important because

lots of previous research has focused on other fields, particularly in science and less attention given to Applied Linguistics centered on Malaysian setting. Realizing the need to minimize the gap, it is the interest of this present study to analyze the Applied Linguistics' research articles produced by the Non-Native English Speakers (NNES) in Malaysia.

## 1.2 Purpose of the study

This study aims to identify the generic structure and the language features of the Methodology section in Non-Native English Speakers' (NNES) research articles.

In conducting this study, three main objectives are listed, which are:

1. to identify the ways on how the existing NNES researchers' structuring of their Methodology section in research articles.
2. to determine the frequency and the use of passive and active voice in Methodology section.
3. to determine the frequency and functions of first personal pronouns in Methodology section, such as *I*, *Me*, *My*, *We*, *Us* and *Our*.

## 1.3 Operational definitions of terms

### 1.3.1 Non-Native English speakers (NNES)

In this study, NNES refers to one's first language is in a language other than English. In particular, it focuses on the NNES publishing of empirical, Applied Linguistics research articles in selected Malaysian journals by using English as a medium of interaction. In this study as well, NNES researchers are determined by their NNES name and having the local institutional affiliations, for example *Universiti Kebangsaan Malaysia.*

### 1.3.2 Research articles

Research articles can be defined as the nonfictional prose that forms an independent part of a publication (Hall & Birkerts, 1991). Flowerdew (1999) added that research articles are the preferred medium of exchanging knowledge among members of the academic community. In this study, research articles are defined as the written paper by NNES researchers in Applied Linguistics' field published in Malaysian journals, which has the limited length and specific structure such as Abstract, Introduction, Methodology, Results and Discussion section.

### 1.3.3 Empirical study

In this study, the empirical study refers to the study that involves the data collection and data analysis by using the specific techniques such as experiments, interviews, questionnaires and observations by means of reporting the findings. The data gained from the study are used to provide the concrete evidence of the particular problems that the researcher intends to investigate in the study.

### 1.3.4 Methodology Section

In this study that concerns with the context of producing the research articles, Methodology section refers to the specific section after the Introduction section and before the Results and Discussion section, regardless of the headings used. Methodology section also describes the steps in conducting the study and the materials used at each step. This section is useful for the readers to provide the information on how the study affects the results, or who are interested in replicating or extending the particular study (Weissberg & Buker, 1990).

### 1.3.5 Generic structure of Methodology Section

The generic structure concerns with the orderliness of the structure in Methodology section (Swales, 1990). In this study, it relates with whether the researchers use the three major rhetorical moves, which are the segment of text, comprise of describing data collection procedures, delineating procedures for measuring variables, and elucidating data analysis procedures (Lim, 2006). In each of these moves, there are constituent step that is more specialized in examining the rhetorical organizations in Methodology chapter, such as describing the sample, recounting steps in data collection, justifying the data collection procedures and so forth (Lim, 2006). Simply put it as whether the researchers include the sample and sampling technique, data collection procedures, the use of the instruments, and procedures for measuring the variable/data analysis.

### 1.3.6 Language features of Methodology Section

This refers to several grammatical conventions that the researchers used to write their Methodology section (Weissberg & Buker, 1990). In this study, the language features of Methodology section concerns with the passive and active voice and the use of first personal pronouns, such as *I*, *Me*, *My*, *We*, *Our*, and *Us*.

## 1.4 Significance of the study

By analyzing the Methodology section in Malaysian research articles of Applied Linguistic, it is hoped that this study may supply the beneficial information and useful data concerning with the structure and language features in Methodology section. The data gained from this study is purposely to minimize the gap where there is handful of study done in Methodology section, particularly in local setting, instead of the research by Brett (1994), Nwogu (1997), Bloor (1998), Lim (2006) and Bruce

(2008). Thus, it is hoped that the findings gained from this study that focuses on local environment may add to the existing body of knowledge in constructing the Methodology section in research articles, particularly in Applied Linguistics.

The findings gained from this study as well may indirectly give the implication to the teaching of English for Specific Purposes (ESP) and research writing courses. In some other way, it may help the teacher or the instructor to design the teaching material for NNES for them to perform well in their own individual task of their respective discipline and educational level. It is also hoped to enhance the students' understanding about the important element in Research Methodology, especially in Methodology section. In addition, it may as well assist the teacher, instructor or the students to structure the Methodology section and hence adding it to the existing information that they have had. The data presented in this study which gives attention to the NNES researchers may able to provide practical use for teaching those novice researchers in the university in order to have the adequate knowledge and hence, obtaining the recognition from international community.

Finally but not least, this study is hoped to give some insights to the university undergraduates and the novice researchers on how to use the right structure and appropriate language features in presenting the information, particularly in Methodology section. This is because having the linguistic proficiency alone is inadequate and it has to be substantiated with the knowledge of genre as well. By knowing both linguistic features and genre, they will somewhat help the undergraduates and the novice researchers to produce clear, coherent, and effective Methodology section.

**1.5     Scope of the study**

This study only includes the ideational, interpersonal, and textual functions of English language in academic and research writing used by the NNES researchers in their research articles. This study does not examine the writing process of NNES researchers in writing the research articles. This study also does not investigate the interference and the effects of mother tongue and dialects of NNES researchers, either they are bilingual or multilingual throughout the process of writing the research articles. This study does not take into account the experience of NNES researchers in composing the research articles. This study also does not investigate the problems and coping strategies utilized by the NNES researchers in writing the research articles, which may due to the lack of the competency and proficiency in English. This study does not examine the extrinsic and intrinsic factors that affect the production of the good and not so good research articles by NNES researchers. The present study is also not a comparative study that compares the quality of the research articles produced by the institutions in Malaysia and outside of Malaysia.

For the types of research articles analyzed, this study analyzes the empirical research articles written by the NNES researchers published in Malaysian journals. It does not include the literary analysis and position papers that was written to convey the researchers' point of view, discussion, responses, and reactions to previous studies conducted. This study also does not take into account the empirical research articles written by the Native English Speakers (NES) researchers.

Looking at the characteristics of the researchers for the chosen research articles, this study consists of the bilinguals and multilinguals NNES researchers in Malaysia, regardless of their races and religions. This study also includes the NNES researchers who learned English as Second Language and Foreign Language, in which learning English as Foreign Language may happen due to the background of the NNES researchers and other possible environmental factors. In addition, this

study covers the academicians and researchers who received their academic qualifications locally, overseas, or both local and overseas. However, this study does not include the NES researchers who published their journals in Malaysia.

For the research articles chosen in this study, they were written by the NNES researchers published in Malaysian journals. The research articles consist of the articles published by the tertiary education and non-profit organization. This study excludes the research articles published by the private university colleges, colleges, and polytechnics. This study also does not examine the written texts submitted by the undergraduates or graduates as requirement of their course; theses and dissertations that were written as partial fulfillment of degrees, master degrees, and doctoral degrees; conference and the meeting papers presented by the NNES researchers in and outside of Malaysia.

This study only examines the generic structure of the Methodology section in the research articles of Applied Linguistics, and not the other sections in the research articles of other fields. This study also identifies the language features that comprise the use of passive and active voice and the use of first personal pronouns, such as *I*, *Me*, *My*, *We*, *Our* and *Us* by the NNES researchers who published the empirical research articles. The other aspects of language features are not included in this study.

This chapter had covered all the necessary information regarding the present study, such as the introduction and background of the study, purpose and objectives of the study, significance of the study, the definitions of concepts and the scope of the study. Chapter 1 functioned as to give the general overview about the present study. The following chapter, which is Chapter 2, deals with the literature review of the study, where in-depth discussion about the element of Methodology section and the others related are addressed.

# CHAPTER 2
# LITERATURE REVIEW

This chapter is concerned with the review of the process of writing as a whole and its interrelation with the academic settings. Other than that, the function of writing in tertiary education, especially in writing research reports are given the attention. Then, the concept of genre and the element in the Methodology section are explored.

## 2.1    The process of writing

Writing is a skill that is required in many contexts. It is a system for interpersonal communication using visible signs or graphic symbols on a flat surface, such as paper, cloth, or even stone slabs (Lim, 2002). Written form is totally different from the spoken form in a sense that it is non-linear as the writer is able to go back and forth in the process of producing a piece of writing. This is in line with Hayes and Flower (1981) where most of the composing process in writing is non-linear, complex, multi-layered, and recursive in which the information can flow back and forth at once. One of the three general phases in writing operations is reviewing, aims to improve the quality of the text in order to produce a coherent and well-organized content (Spring, 1997). This is a cyclical process in which the writer is able to

"reexamine any material written with the goal of correcting anything that would prevent the text from meeting the established goals such as the grammatical errors, altering the contents, and improving the clarity of the writing" (Spring, 1997)

In order to produce a piece of writing, it involves the cognitive process that demands the writer to use various strategies in order to engage in more extensive processing of information. This is because when individuals engage in elaborating the knowledge on a piece of paper, their memory will benefit (Terry, 2003). They will try to relate the information with their own experience or personal associations to make the writing more meaningful and able to achieve the particular communicative purposes. The complexity of writing is also supported by Pilus (1993), where the complicated process of writing "range from mechanical control to creativity, with good grammar, knowledge of subject matter, and awareness of stylistic conventions" (p. 2).

Looking at the function of writing in more specific context, which is at the tertiary level, some of the universities require the students to produce more serious academic tasks, such as research papers, research reports, proposal, final year projects, and others. This kind of tasks may cause the students to feel a bit inadequate in terms of knowledge when thinking about their college-level research. This is where lots of reading comes, where it can somewhat helps the 'novice writer' to have some ideas in producing the research and to have a concrete support when presenting the information.

Research done by Lea and Street (1998) found out that some of the students feel uncomfortable towards the academic writing because of the discrepancies between the lecturers' expectations and the students themselves regarding undergraduates' written assignments. The findings show that the students get confused with the lecturers' comment as what may be good for the particular course