

UNIVERSITI PUTRA MALAYSIA

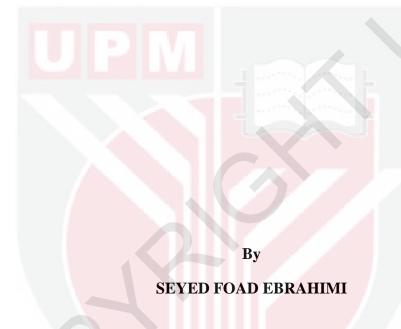
THEMATICITY IN ENGLISH ACADEMIC RESEARCH ARTICLES ACROSS DISCIPLINES IN HARD AND SOFT SCIENCES

SEYED FOAD EBRAHIMI

FBMK 2014 15



THEMATICITY IN ENGLISH ACADEMIC RESEARCH ARTICLES ACROSS DISCIPLINES IN HARD AND SOFT SCIENCES



Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia, in Fulfilment of the Requirements for the Degree of Doctor of Philosophy

All material contained within the thesis, including without limitation text, logos, icons, photographs and all other artwork, is copyright material of Universiti Putra Malaysia unless otherwise stated. Use may be made of any material contained within the thesis for non-commercial purposes from the copyright holder. Commercial use of material may only be made with the express, prior, written permission of Universiti Putra Malaysia.

Copyright © Universiti Putra Malaysia



Specially Dedicated to:

My beloved Family
My Aunt, My Parents, My wife and My son

This is just a small token of my love & affection and underlying gratitude & appreciation for all you have done for me.

Thank you and God bless you always

Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfilment of the requirement for the degree of Doctor of Philosophy

THEMATICITY IN ENGLISH ACADEMIC RESEARCH ARTICLES ACROSS DISCIPLINES IN HARD AND SOFT SCIENCES

By

SEYED FOAD EBRAHIMI

July 2014

Chairperson: Prof. Chan Swee Heng, PhD

Faculty: Modern Languages and Communication

Theme which is defined as the starting point of the message and the element which the clause is mainly about plays a major role in text organization (Halliday, 1994). This study explores the types and discourse functions of theme in the research articles and its four rhetorical sections (introduction, method, result and discussion) across four disciplines: Applied Linguistics and Psychology representing soft science and Chemistry and Environmental Engineering representing hard science. This cross-disciplinary study was carried out on a corpus of 40 (10 from each discipline) research articles. The research articles sourced from 12 ISI journals (3 from each discipline) published from 2008 to 2012. The corpus was analyzed based on the modified model of the available models in relation to theme types and discourse functions. The results revealed that the theme type selections were guided by the nature of the rhetorical sections of the research article. However, the frequency of use of the theme types was constrained by the nature of the discipline. Discourse functions in relation to theme types were predominantly determined by the divisions of the hard and soft sciences, the specific disciplines within, and the internal structure of the rhetorical sections of the research articles. In addition, the results of this study manifest a new framework for the analysis of discourse functions of theme types in research articles. The results and analysis establish that the theme is an important means of highlighting the disciplinary variations in the writing of the rhetorical sections of the research article. The study has implications for novice research article writers, EAP instructors and EAP text developers. These results could be used to target at the awareness of linguistic features such as theme as a crucial element in dispensing of discourse functions of the rhetorical sections of the research article.

Keywords: Theme, discourse function, disciplinary variation, research article, rhetorical sections of research article

Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk ijazah Doktor Falsafah

TEMA DALAM ARTIKEL PENYELIDIKAN AKADEMIK BAHASA INGGERIS MERENTAS DISIPLIN SAINS DAN SASTERA

Oleh

SEYED FOAD EBRAHIMI

Julai 2014

Pengerusi: Prof. Chan Swee Heng, PhD

Fakulti: Bahasa Moden dan Komunikasi

Tema merupakan titik permulaan dalam ayat dan memainkan peranan penting dalam organisasi sesebuah teks (Halliday,1994). Kajian ini bertujuan untuk mengkaji jenis dan fungsi bagi setiap Tema dalam artikel penyelidikan merangkumi 4 bahagian retorik (pengenalan, kaedah kajian, dapatan dan perbincangan) yang meliputi empat disiplin berbeza, iaitu Linguistik Terapan dan Psikologi mewakili bidang Sastera manakala Kimia dan Kejuruteraan Alam Sekitar mewakili bidang Sains. Kajian merentas disiplin ini, menganalisis 40 artikel penyelidikan (10 artikel daripada setiap subjek). Artikel-artikel ini adalah hasil eksperimen dan penyelidikan yang diperoleh daripada 12 jurnal ISI (3 daripada setiap disiplin) yang diterbitkan dari tahun 2008 hinggan 2012. Korpus dianalisis berasaskan model yang diubahsuai daripada model terdahulu yang memiliki hubungan dengan jenis Tema dan fungsinya dalam wacana. Keputusan memperlihatkan bahawa, pilihan Tema bergantung pada sifat setiap bahagian retorik artikel penyelidikan. Walau bagaimanapun, kekerapan penggunaan jenis Tema telah terkekang oleh sifat disiplin artikel penyelidikan tersebut. Oleh itu, fungsi wacana berhubung dengan jenis Tema kebanyakannya ditentukan oleh perbezaan dalam disiplin artikel sama ada Sastera atau Sains dan struktur dalam retorik artikel penyelidikan. Sesungguhnya hasil kajian ini, merupakan satu rangka kerja baharu dalam analisis fungsi wacana jenis Tema artikel penyelidikan. Keputusan dan analisis membuktikan bahawa Tema adalah wahana penting bagi menonjolkan variasi dalam penulisan artikel penyelidikan. Kajian ini juga mendatangkan implikasi untuk penulis artikel baharu, tenaga pengajar EAP dan pembina teks EAP. Dapatan kajian boleh digunakan bagi membuktikan kesedaran ciri-ciri linguistik seperti Tema merupakan elemen penting dalam pendeskriptifan fungsi wacana dalam retorik penyelidikan artikel.

Kata kunci: tema, fungsi wacana, perbezaan disiplin, artikel pengajian, bahagian retorik dalam artikel penyelidikan

ACKNOWLEDGEMENTS

There are many people I wish to thank, without whose help and support this thesis would not have been possible. First and foremost, my heartfelt thanks go to my supervisor **Prof. Dr. Chan Swee Heng** and my committee member **Assoc. Dr. Ain Nadzimah Abdullah** and **Dr. Helen Tan**. They have given me invaluable help, guidance, and support throughout the course of the research and the writing of the thesis.

My deepest gratitude goes to my family and my friends. Without their love and support, I would not have overcome the difficulties encountered while conducting this research and writing this thesis.

This thesis was submitted to the Senate of Universiti Putra Malaysia and has been accepted as fulfillment of the requirement for the degree of Doctor of Philosophy. The members of the Supervisory Committee were as follows:

Chan Swee Heng, PhD

Professor Faculty of Modern Languages and Communication Universiti Putra Malaysia (Chairperson)

Ain Nadzimah Abdullah, PhD

Associate Professor
Faculty of Modern Languages and Communication
Universiti Putra Malaysia
(Member)

Helen Tan, PhD

Lecturer
Faculty of Modern Languages and Communication
Universiti Putra Malaysia
(Member)

BUJANG BIN KIM HUAT, PhD

Professor and Dean School of Graduate Studies Universiti Putra Malaysia

Date:

Declaration by graduate student

I hereby confirm that:

- this thesis is my original work;
- quotations, illustrations and citations have been duly references;
- this thesis has not been submitted previously or concurrently for any other degree at any other institutions;
- intellectual property from the thesis and copyright of thesis are fully-owned by Universiti Putra Malaysia, as according to the Universiti Putra Malaysia (Research) Rules 2012:
- written permission must be obtained from supervisor and the office of Deputy Vice-Chancellor (Research and Innovation) before thesis is published (in the form of written, printed or in electronic form) including books, journals, modules, proceedings, popular writings, seminar papers, manuscripts, posters, reports, lecture notes, learning modules or any other materials as stated in the university Putra Malaysia (Research) Rules 2012;
- there is no plagiarism or data falsification/fabrication in the thesis, and scholarly integrity is upheld as according to the Universiti Putra Malaysia (Graduate Studies) Rules 2003 (Revision 2012-2013) and the Universiti Putra Malaysia (Research) Rules 2012. The thesis has undergone plagiarism detection software.

Signature:	Date:
Name and Matric No.: -	

Declaration by Members of Supervisory Committee

This is to confirm that:

- the research conducted and the writing of this thesis was under our supervision;
- supervision responsibilities as stated in the Universiti Putra Malaysia (Graduate Studies) Rules 2003 (Revision 2012-2013) are adhered to.

Signature: —	Signature:
Name of	Name of
Chairman of	Member of
Supervisory	Supervisory
Committee: Professor. Chan Swee	Heng, PhD Committee: Dr. Helen Tan
Signature:	
Name of	
Chairman of	
Member of	
Supervisory	
Committee: Associate Professor. Dr	: Ain Nadzimah Abdullah

TABLE OF CONTENTS

	Page
ABSTRACT	i
ABSTRAK	ii
ACKNOWLEDGEMENTS	iii
APPROVAL	v
DECLARATION	vi
LIST OF TABLES	X
LIST OF ABBRIVIATIONS	XV
CHAPTER	
1 INTRODUCTION	1
1.1 Background of the Study	1
1.1.1 Discourse Community	1
1.1.2 Disciplinary Community and EAP	2
1.1.3 Genre	4
1.1.4 Research Article as a Genre	4
1.1.5 Research Article and Theme	6
1.2 Statement of the Problem	6
1.3 Objectives of the Study	9
1.4 Research Question	9
1.5 Significance of the Study	9
1.6 Definition of Key Terms	10
2 LITERATURE REVIEW	12
2.1 Introduction	12
2.2 Systemic Functional Grammar	12
2.3 Systemic Functional Grammar and Information Organization	13
2.4 Concept of Theme	14
2.5 Review of Related Literature	16
2.5.1 Disciplinary Studies	16
2.5.2 Cross-disciplinary Studies	22
2.5.3 Cross-linguistics Studies	28
2.6 Comments on most Relevant Findings	30
3 METHODOLOGY	32
3.1 Introduction	32
3.2 Research Design	32
3.3 The Corpus	32
3.4 Description of the Sampling Procedure	33
3.5 Unit of Analysis	34
3.6 Theme Identification	35
3.7 Conceptual Framework	36

3.7.1 Theme Identification	36
3.7.2 Discussion of the available Frameworks	36
3.7.3 Conceptual Framework of Current Study	37
3.7.3.1 Comprehensive Conceptual Framework	37
3.7.3.2 Modifying Comprehensive Conceptual Framework	38
3.7.3.3 Modified Comprehensive Conceptual Framework	38
3.8 Analysis Procedure	42
3.9 Summary	43
4 RESULTS AND DISCUSSION	44
4.1 Introduction	44
4.1 Theme Types and Discourse Functions in Introduction Section	44
4.1.1 Grammatical Subject Types and Discourse functions in Introduction	45
4.1.2 Marked Theme Types and Discourse functions in Introduction	61
4.1.3 Textual Theme Types and Discourse functions in Introduction	80
4.2 Theme Types and Discourse Functions in Method Section	86
4.2.1 Grammatical Subject Types and Discourse functions in Method	86
4.2.2 Marked Theme Types and Discourse functions in Method	91
4.2.3 Textual Theme Types and Discourse functions in Method	100
4.3 Theme Types and Discourse Functions in Result and Discussion Sections	108
4.3.1 Grammatical Subject Types and Discourse functions in R and D	108
4.3.2 Marked Theme Types and Discourse functions in R and D	121
4.3.3 Textual Theme Types and Discourse functions in R and D	136
4.4 Theme Types in Research Article	142
4.4.1 Grammatical Subject Types in Research Article	142
4.4.2 Marked Theme Types in Research Article	145
4.4.3 Textual Theme Types in Research Article	149
5 CONCLUSION AND IMPLICATION	152
5.1 Conclusion	152
5.2 Limitations and Suggestions	156
5.3 Implications	156
REFERNCES	158
APPENDICES	166
BIODATA OF STUDENT	178
LIST OF PUBLICATIONS	179