



UNIVERSITI PUTRA MALAYSIA

***AUTHORIAL STANCE IN MEDICAL RESEARCH ARTICLES AND
MEDICAL CASE REPORTS WRITTEN IN ENGLISH BY
NATIVE AND NON-NATIVE AUTHORS***

MUNA ABDULHUSSEIN

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By

MUNA ABDULHUSSEIN

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

December 2016

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Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfillment of the requirement for the Degree of Doctor of Philosophy

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December 2016

Chairman : Chan Meit Yuit, PhD
Faculty : Modern Language and Communication

Authorial stance, or stance-taking, in written texts expresses the interpersonal meaning of language, where authors position themselves with regard to the message being written about as well as to the readers. It has also been defined as how the author projects his or her own voice and engages with other voices brought into the text. Authorial stance has been identified as an important skill in effective writing, not only in clearly argumentative texts often associated with the arts and social sciences, but is equally important in scientific writing making for “objective” claims. Two issues provide the basis for this study. First, while authorial stance has been studied widely in a variety of texts, including scientific research texts, little is known about how authorial stance is manifested in medical genres as medical research articles and medical case reports, which are the two most published written genres in the discipline. Second, within the area of medical research writing, the patterns of authorial stance may be influenced by genre in which the writing is done, as well as by the author’s familiarity with the language represented by the author’s native or non-native speaker status. This thesis examined the patterns of authorial stance in two genres of written medical discourse, medical research articles and medical case reports published in three medical journals within the branch of “Family Medicine.” The texts in English were authored by two groups of medical researchers, native and non-native speakers of English, with Malaysian medical researchers as the non-native group selected for the study. The analysis sought to describe how medical researchers negotiate dialogically with other voices in the texts, argue for specific positions as well as highlight and critique others’ work in the course of advancing their claims. The study adopted the discourse semantic framework of Appraisal (Martin & White, 2005), particularly the Engagement and Graduation subsystems, to identify and describe the stance patterns used by authors in the two genres analysed. Apart from a qualitative analysis of a small portion of the data, a quantitative orientation to the analysis was also adopted utilizing corpus-based methodology in comparing authorial stance patterns found across the individual rhetorical sections of the texts, across genres, and across the native and non-native groups. The overall findings suggest that

native speaker authors use relatively more contractive stance in their writing than non-native speaker authors in their writing. However, the two groups of authors demonstrated different preferences in their use of stance resources in the medical research articles and medical case reports, indicating that genre plays an important role in the author's interpretation of what and how stance strategies should be deployed to successfully meet the communication purposes and rationale of the genre.



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

**PENDIRIAN PENGARANG DALAM ARTIKEL PENYELIDIKAN DAN
LAPORAN KES MEDIKAL BERTULIS DALAM BAHASA INGGERIS
OLEH PENGARANG NATIF DAN BUKAN NATIF**

Oleh

MUNA ABDULHUSSEIN

Disember 2016

Pengerusi : Chan Meit Yuit, PhD
Fakulti : Bahasa Moden dan Komunikasi

Pendirian pengarang atau pengambilan pendirian dalam teks bertulis memperlihatkan makna interpersonal sesuatu bahasa, iaitu pengarang menempatkan diri mereka dengan mesej yang ditulis, dan juga dengan pembaca. Pendirian pengarang juga didefinisikan sebagai bagaimana pengarang memprojek suara mereka dan keterlibatan mereka dengan suara lain yang dibawa ke dalam sesuatu teks. Ia juga telah dikenal pasti sebagai kemahiran yang penting dalam penulisan efektif, bukan hanya dalam teks argumentatif yang jelas yang biasanya dikaitkan dengan sains sosial dan sastera, tetapi sebagai sesuatu yang sama pentingnya dalam penulisan saintifik bagi tuntutan “objektif”. Dua isu memberikan asas bagi kajian ini. Pertama, walaupun pendirian pengarang telah dikaji secara meluas dalam pelbagai teks, termasuk teks penyelidikan saintifik, sedikit maklumat diketahui mengenai bagaimana pendirian pengarang dimanifestasikan dalam genre perubatan sebagai artikel penyelidikan perubatan dan laporan kes perubatan, yang merupakan dua genre bertulis yang kurang diketahui mengenai bagaimana pendirian pengarang dimanifestasikan sebagai artikel perubatan dan laporan kes perubatan yang merupakan dua buah genre penulisan yang paling banyak diterbitkan dalam disiplin tersebut. Kedua, dalam lingkungan bidang penulisan penyelidikan perubatan, pola pendirian pengarang mungkin dipengaruhi oleh genre penulisan yang dibuat, di samping familiariti pengarang dengan bahasa yang diwakili oleh status penutur natif atau bukan natif pengarang. Kajian ini meneliti pola pendirian pengarang dalam dua genre wacana perubatan bertulis, artikel penyelidikan perubatan dan laporan kes perubatan yang diterbitkan dalam tiga jurnal perubatan dalam cabang Perubatan Famili. Teks dalam bahasa Inggeris yang dikarang oleh dua kumpulan penyelidik perubatan, penutur natif dan bukan natif Inggeris, dengan penyelidik perubatan Malaysia sebagai kumpulan bukan natif dipilih bagi kajian ini. Analisis bertujuan untuk menerangkan bagaimana penyelidik perubatan berunding secara berdialog dengan suara lain dalam teks, berbincang bagi kedudukan yang spesifik di samping menegaskan dan mengkritik kerja pengarang lain di sepanjang tempoh memajukan tuntutan mereka. Kajian ini menerima pakai Kerangka

Penilaian Semantik Wacana (Martin & White, 2005), terutamanya subsistem Graduasi dan Engagemen, bagi mengenal pasti dan menerangkan pola pendirian yang digunakan oleh pengarang dalam dua genre yang dianalisis. Di samping analisis kualitatif sebahagian kecil data, orientasi kuantitatif pada analisis tersebut juga menerima pakai metodologi berasaskan korpus yang dimanfaatkan dalam membandingkan pola pendirian pengarang yang ditemui merentasi seksyen retorikal individual teks, merentasi genre dan merentasi kumpulan natif dan bukan natif. Dapatan keseluruhan memperlihatkan bahawa pengarang penutur natif menggunakan pendirian kontraktif yang secara relatifnya lebih dalam penulisan mereka berbanding dengan pengarang penutur bukan natif dalam penulisan mereka. Walau bagaimanapun, kedua-dua kumpulan pengarang memperlihatkan keutamaan yang berbeza dalam penggunaan sumber pendirian mereka dalam artikel penyelidikan perubatan dan laporan kes perubatan, yang menandakan bahawa genre memainkan peranan yang penting dalam interpretasi pengarang mengenai apa dan bagaimana strategi pendirian seharusnya digunakan bagi memenuhi tujuan komunikasi dengan jayanya dan rasional genre tersebut.

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This thesis was submitted to the Senate of the 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 Meit Yuit, PhD

Senior Lecturer

Faculty of Modern Languages and Communication

Universiti Putra Malaysia

(Chairman)

Shameem Begum binti Mohd Rafik Khan, PhD

Professor

Faculty of Modern Languages and Communication

Universiti Putra Malaysia

(Member)

Helen Tan, PhD

Senior Lecturer

Faculty of Modern Languages and Communication

Universiti Putra Malaysia

(Member)

ROBIAH BINTI YUNUS, PhD

Professor and Dean

School of Graduate Studies

Universiti Putra Malaysia

Date:

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Signature: _____
Name of Chairman
of Supervisory
Committee: Dr. Chan Meit Yuit

Signature: _____
Name of Member
of Supervisory
Committee: Professor Dr. Shameem Begum Bt Mohd Rafik Khan

Signature: _____
Name of Member
of Supervisory
Committee: Dr. Helen Tan

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LIST OF ABBREVIATIONS

SFL	Systemic Functional Linguistic
NS	Native English Speaking
NNS	Non-native English Speaking
MRA	Medical research article
MCR	Medical case reports
NS/MRA	Native medical research articles
NS/MCR	Native medical case report
NNS/MRA	Non-native medical research article
NNS/MCR	Non-native medical case report

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Academic writing mainly deals with ways of conveying intellectual information and knowledge. Through writing, writers provide a plethora of expertise, and negotiate space for their contributions. In doing so, they tend to position themselves in pertinent and persuasive research. In other words, writers tend to interact and engage dialogically, construct solidarity, and align with external voices in the text. Authors are expected to demonstrate a voice and position in the text. This characteristic of authors has been extensively researched in different contexts, and scholars have deployed different terms to define and explain phenomena such as evaluation (Hunston & Thompson, 2000), authorial stance (Biber & Finegan, 1989; Hyland, 1999), metadiscourse (Crismore, 1989; Hyland, 2005), attitude (Halliday, 1994), and appraisal (Martin, 2000).

Demonstrating a voice and position in the text means taking an authorial stance, which in this context, implies the author's viewpoint or expressed beliefs with respect to external voices communicated to putative readers. Biber (1988) defines authorial stance as the ways in which authors or speakers overtly express attitudes, feelings, and judgments towards thoughts or opinions (Biber, 1988, p. 204). This suggests that authorial stance involves the use of linguistic patterns by writers to consciously or unconsciously encode and convey attitude, and adopt a position in the text.

It is pertinent to state that authors and public speakers in various fields have unique rhetorical approaches to express their thoughts and communicate their stance to others. Rhetoric denotes the entire field of discursive structures and strategies used to set arguments. For instance, scientists have to adhere to certain accepted structures and styles, such as logic and clarity, among others, in order to give rhetorical shape to their writing. Holton (1993) stated that to persuade themselves, authors begin by weighing the persuasiveness of their ideas and then convince their readers. Holton called this "a proactive rhetoric of assertion" (Holton, 1993, p. 77). This implies that when scientists agree or are convinced about something, they aim to bridge the gap between their work and community knowledge in order to persuade other community members about the idea or phenomenon through their publications (Allen, 2004, p. 96).

In a similar way, authors in the field of medicine use various rhetorical approaches, referred to as emphasising styles, to express their opinions in published medical genres. Medical genres, as referred to above, mean medical research articles, medical case reports, medical research reviews, editorials, and so on. Authorial stance, then refers to a style of writing which indicates how medical writers engage dialogically and interact with their readers, and negotiate their positions in what they typically focus on.

It is important to state that very few studies have been conducted to explore the ways that native speaking (NS) and Malaysian non-native speaking (NNS) medical writers construct authorial stance in medical research articles (MRA) and medical case reports (MCR) in English. To this end, the present study employed the Appraisal Theory, which is a recent development of the principles of Systemic Functional Linguistics (SFL), and also employed Corpus Linguistics methods. The Appraisal system (Martin & White, 2005) encompasses all the linguistic resources employed by medical authors in the two medical genres in adopting stance. The Engagement and Graduation subsystems of the Appraisal Theory are the focal points of the current study. This is because Engagement categories and subcategories offer a comprehensive conceptual basis for analysing how a wide variety of linguistic resources cooperate in the construction of the authorial stance. The Engagement category focuses on the heteroglossic or multi-voiced patterns. Then by using the Graduation subsystem, the analysis shows the degree of the writers' commitment to the proposition in terms of the preciseness and intensity of these linguistic resources. The third subsystem of Appraisal, the Attitude subsystem, did not include in this study since its categories and subcategories focus on meaning related to emotions and effective responses in terms of Affect, judging human behaviour in terms of Judgement, and the appreciation of things and processes in terms of Appreciation. Consequently, the main concern of the present study is to examine how medical writers dialogically negotiate their voices in text by seeking a specific position to demonstrate, discuss, and critique other works. More specifically, the aim is to discover how skilful medical writers enter the dialogue with respect to previous texts as represented by the evidence, arguments, and suggestions made by pioneers, previous writers, or even colleagues in the world of research.

1.2 Definition of Authorial Stance

Authorial stance involves the interaction between the authorial voice and other voices in the text, including the putative reader. The process of interaction is accomplished when the writer carefully chooses certain linguistic patterns during the writing process. This enables him/her to meet the expectations of the discourse community in exchanging information, while at the same time, demonstrating the skills in expressing his/her thoughts in discussing, affirming, inviting other voices in the text, and creating solidarity with readers. In addition, authorial stance expresses the author's viewpoint on the material they are referring to with different lexical items (Hyland, 2008).

Gaining reader acceptance about an argument which is deemed reasonable depends on the type of claims recognized by the disciplinary community. Reasonable claims contribute to adopting the most certain and general position that readers are likely to accept (Hyland, 1997, p. 23). Consequently, professional writers such as medical writers mainly need to consider specific norms and conventions in their discipline, including certain constraints, to ensure that readers, as well as specialists of their discourse community accept their work. Hyland and Tse (2004) stated that academic writing implies an engagement between the writer and the reader, and that writers need to project themselves into discourse to show their commitment to the content as well as to the reader in the text (Hyland & Tse, 2004, p. 157).

Consequently, skilled writers do not only adopt a variety of sentence structures and vocabulary with respect to specific readers but also modify their style and procedures in accordance with particular requirements of the discourse. That is, to show their ability or skill to explain complex issues, they tend to provide and support their opinions via developing discussions and hypotheses (ACTFL, 2012, p. 11). The American Council on the Teaching of Foreign Languages (ACTFL) views skilful authors as not merely those who communicate information regarding a proposition, but who also employ their writing skills to build a relationship with their readers, and evaluate and assess each other's contributions. In other words, authors are expected to employ language to position authority in their own propositions and respond to other voices through engaging dialogically (i.e., positioning an authorial voice with respect to other voices which exist in the text as well as the propositional content, which is discussed constantly, and known as stance).

It is likely that the patterns of authorial stance could be influenced by many factors, such as writing experience, or the purpose of the writing, among others. It is important to state that for writers who are non-native speakers, their language backgrounds and writing genres might also serve as important factors. In fact, the definition of native is difficult, specifically regarding English native speakers, because the English language has become increasingly accessible to knowledge seekers and is mainly used by scholars in all areas of knowledge. However, despite the universal appeal of the English language among professional writers, many studies have been carried out to compare the use of authorial stance markers in the academic contexts of native and non-native writers.

In this vein, Schleppegrel (2004) found that non-native writers express monotonous, implicit, subjective authorial stance by overusing the personal pronoun 'I' in combination with modal verbs (e.g., could, may). In contrast, native writers tend to implicitly express an objective authorial stance by using multiple resources. Hyland (1997) affirmed that native writers show a full commitment to their writing by using modifiers (Chang, 2010, p. 11). Additionally, non-natives were less likely to express meanings by representing a wide range of possibilities. They appeared to be unwilling to mobilize "endorsement" resources and the incorporation of citations as a way of producing convincing authorship (Mei, 2007, p. 268).

The above arguments imply that there are challenges and complexities in the area of advanced academic writing, particularly in interpreting the interpersonal meaning associated with claims and authorial stance to establish credible authorship. It is important to acknowledge that there has been great interest in literature on authorial stance in different social areas as well as ESL and EFL contexts. Many models have been proposed, and scholars have used various terms to express stance. However, the number of studies which have focused on authorial stance in scientific areas, particularly in medicine, is quite limited. For instance, Herrando (2014) used Hyland's (2005) model of interaction to analyse online English-language urology research articles. Pérez-Llantada Auria (2011) used White's (2003) model of Engagement to examine how native English-speaking authors and Spanish authors, who write in English or Spanish medical research articles, express inter-subjective stance. Finally,

Fryer (2013) annotated Engagement patterns in medical research articles written by native medical writers. The scarcity of research on authorial stance in medical writing, therefore, motivated the researcher to focus on the medical writers' abilities to deploy authorial stance in their writing. In this study, data were collected from the archives of three native and non-native medical journals which postulate certain instructions on medical publications, including high levels of English language proficiency for medical writers.

1.3 Theoretical Construct of Stance

It has been mentioned earlier that the concept of "stance" has been discussed by many theorists and writers under different terms and definitions, each of which is mobilized by different levels of linguistic resources (i.e., lexical, grammatical, lexico-grammatical). These concepts represent different notions when they correlate with other concepts, such as identity and grammatical functions as in the use of first-person pronouns. When the voice is aligned with another stance, it is concerned with the construction of a convincing argument, and this is the focus of the current study.

In recent years, a significant body of research has focused on the notion of stance, showing the sequential implications of its indicators as mobilized in different genres. Stance features express the interpersonal meanings of language that have been considered as a focus of scholarly investigations in various disciplines, such as Linguistics, Sociology, and Anthropology. Additionally, the focus on stance in research has increased rapidly over the past decades in "multiple book publications, conference panels, and special journal issues devoted to the topic" (Englebretson, 2007, p. 1).

Biber and his colleagues (Biber & Finegan, 1988; 1989; Biber, Johansson, Leech, Conrad, and Finegan, 1999; Conrad & Biber, 2000) adopted the term "Stance" to denote the conveyance of evaluation around the propositions in a clause and offered a very important theoretical contribution and model for the analysis of stance in discourse. The model was developed through obtaining robust quantitative evidence, supported by corpus studies. It introduces six major types of tasks: ideational, textual, personal, interpersonal, contextual, and aesthetic. These tasks are performed by linguistic features in different communicative events, rather than occurring simultaneously in any interaction. The stance features fall under the category of "personal tasks," which show the speaker's attitudes, thoughts, and feelings. They only deal with overt lexico-grammatical patterns of stance "by means of grammatical devices, word choice and paralinguistic devices" without communicating reference of the mechanisms used to adopt the stance (Jullain, 2008, p. 63).

Du Bois (2007) assembled an analytical toolkit for a stance triangle. A stance triangle posits that stance has three acts in one, rather than in three different types of stance as suggested in other studies. For Du Bois, evaluation, positioning, and alignment represent different aspects of the same stance act. Hence, taking a stance means that the stance taker: 1) evaluates an object, 2) positions a subject (usually the self), and 3)

aligns with other subjects. In assembling the stance triangle, Du Bois expressed the process of stance taking as follows: “I evaluate something, and thereby position myself, and in that way align with you” (Englebreston, 2007, p. 163).

Hyland (2005) defined stance as the way academics interpret their texts to comment on the possible accuracy or creditability of a claim. This could be expressed through any of the following statements: 1) “The extent they want to commit themselves to it,” 2) “The attitude they want to convey to an entity,” and 3) “a proposition or the reader.” (Hyland, 2008, p. 6). Hyland clearly outlined stance and its various features, as well as functions, in the “Model of Interaction in Academic Discourse.” This model of stance includes four elements: Hedges, Boosters, Attitudinal Markers, and Self-Mentions. He further refers to stance as textual voice, which is represented by the ways writers select and deploy community-sensitive linguistic resources to present themselves, their positions, and their readers.

Finally, stance in the Appraisal Theory (Martin, 2000; Martin & Rose, 2003; Martin & White, 2005), which is based on Systemic Functional Linguistics (SFL), identifies the elements that people use while negotiating stance processes, classifies them, and provides a description of how these elements function in real life situations. The current study employs Martin and White’s model of Appraisal (2005), which is shown in Figure (1.1).

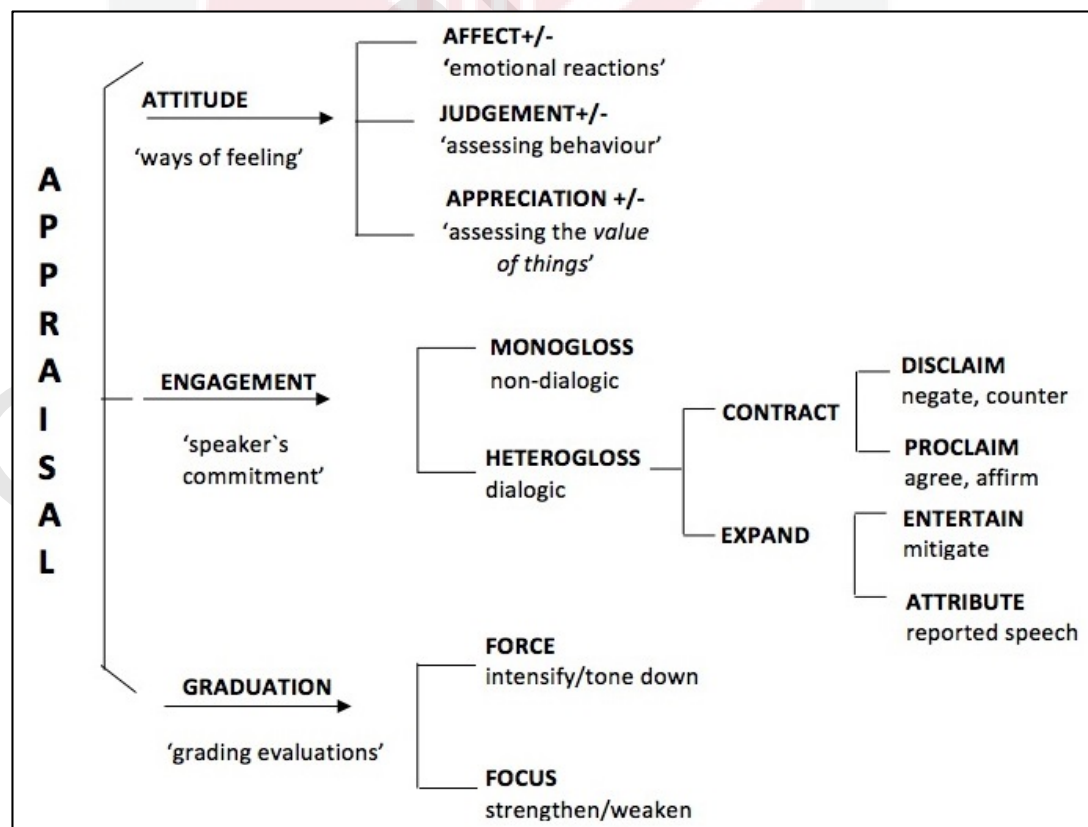


Figure 1.1 : Appraisal system proposed by Martin & White (2005).

Three elements, or subsystems, are introduced in the Appraisal model. Attitude encompasses altered options to express positive or negative evaluation. Engagement addresses options to Expand and Contract the dialogic space in relation to other voices. Graduation is the adjustment of Attitude and Engagement in terms of intensity and preciseness. The main focus of this thesis as mentioned earlier in (section 1.1) is on the evaluative strategies used by writers to adopt authorial stance. This includes determining the strategies used by the authors to show commitment to propositions being advanced, and the ways they are used to engage with their readers. Engagement, in fact, offers a comprehensive analysis tool which to deal with how a wide variety of linguistic resources cooperate in the construction of dialogic stance. Its resources in the traditional discourse analysis literature fall under the constructs of evidentiality, hedging, negation, concession, attribution, and modality (Lancaster, 2011, p.16). Another reason for employing Engagement and Graduation in this study is drawn from previous Appraisal analyses at the level of academic argumentative writing (Derewianka, 2009; Mei, 2007; Swain, 2009). Such analyses show that the Engagement subsystem offers means for tracking in detail, the ways in which writers use language to position their assertions vis-à-vis their anticipated readers. Martin and White (2005) explained that writers' usage of these resources is meant to provide:

the means to characterize a speaker/writer's interpersonal style and their rhetorical strategies according to what sort of heteroglossic backdrop of other voices and alternative viewpoints they construct for their text and according to the way in which they engage with that backdrop. (Martin & White, 2005, p. 93)

Consequently, the specific set of procedures used to analyze the linguistic resources and their function in the text are based largely on the Engagement subsystem of Appraisal but the analysis also allows authors to intensify the degree of commitment to the proposition being advanced, by using the Graduation subsystem linguistic resources in terms of their preciseness and intensity.

1.4 Statement of the Problem

Recently, scholars have developed keen interest in studying the methods used by writers to adopt authorial stance in their writing. Authorial stance in text is a central feature of language that paves the way for writers to position themselves in the area of research and plays a noticeable role in negotiating the relationship between the writer and the discourse community (Hyland, 2001). It allows writers to exhibit authority as they evaluate others' contributions, show commitment to their ideas in order to gain the acceptance of their community, and present themselves as experienced contributors in the area of research.

Despite the fact that the writer's self-representation and engagement with external voices in the text have become an essential area of research, studies that examined the authorial stance in professional academic writing have been significantly rare, specifically in medical discourse (Herrando-Rodrigo, 2014; Fryer 2013; Pérez-Llantada Auria, 2011). It is fair to say that medical discourse has become an area of

research interest among scholars, who have focused on a variety of features of language for example; Biber & Finegan (1994) focus on various linguistic cues that allow the addresser to present his/ her purpose at a given point, Thomas & Hawes, (1994) examined reporting verbs in medical research articles, Salager-Meyer (1994) focused on hedging in medical written discourse, Varttala (1999) examined the communicative purposes of hedging in popular and specialist medical research articles, Breivega, Dahl & Flottum (2002) focused on the authorial presence and stance in three different genres including Medicine, and Pahta (2006) examined the amplifiers/intensifiers in medical writing. These studies have shown the function of variety of linguistic resources used by authors in deploying their voices in relation to other voices brought into or alluded to in the text. For example, hedging not only indicates degrees of certainty but may also offer “room for disagreement” (Salager-Meyer, 1994, p. 163), and syntactic negation may be used to indicate that “several voices or points of view are signalled in [the] discourse” (Breivega, Dahl, & Flottum, 2002, p. 223). Apart from the researchers’ interest in professional writing, two issues provide the basis of this study and contribute to the gap in the literature regarding authorial stance in professional medical writing:

First, very little is known about how authorial stance is deployed and managed by medical researchers who are non-native speakers of English when writing research articles. Since the effective use of authorial stance requires familiarity with the written language, it is conceivable that there would be differences in the ways authorial stance is expressed between native and non-native authors. These differences particularly those that relate to the use of authorial stance linguistic resources, have been rarely studied, much less systematically examined. A comprehensive description of these differences would be an important resource for understanding not only the native speaker models that have received much attention but also the patterns of authorial stance exhibited by non-native authors.

Second, with regard to medical discourse, while authorial stance in medical research articles has been examined, stance in the case report genre has been less well-researched. Currently, not much is known about how authorial stance taken by authors differ between these two genres, especially when the authors are native speakers of English or otherwise. As genres in medical written discourse, the medical research article and the case report have been shown to have their own communicative purposes, structures, and language. Hence, it is expected that authors would deploy different stance strategies to achieve their goals when writing for these different genres. By focusing on authorial stance in these two genres, this study seeks to examine how medical researchers go about presenting their authorial voices and manage other voices in the process of promoting and convincing their readers of their claims in these genres.

Additionally, this study uses published articles and case reports written by Malaysian authors as the non-native speakers of English. With regard to studies in the Malaysian context, and as far as the researcher’s knowledge goes, no study has been conducted to investigate authorial stance in written medical discourse. This study represents a

pioneer study on Malaysian medical authors' use of authorial stance in their published works.

1.5 Purpose and Scope of the Study

The main purpose of this study is to investigate how medical writers use language to position themselves in relation to external voices in texts. Given the focus on linguistic choice, this study uses the Appraisal Theory, which offers a systematic and comprehensive approach to the description of language use from a social perspective and allows for a close analysis of linguistic choice patterns in selected texts (Martin & Rose, 2003; Martin & White, 2005). The analytical framework of this study, Appraisal Theory, focuses on the means by which the authorial voice shapes a stance, specifically through the ways that the writer engages, aligns/disaligns, evaluates, and/or comments on other external voices in the context.

In particular, this study is underpinned by Martin and White's (2005) model of Appraisal by focusing on the system of Engagement, which covers the aspects of interpersonal meaning as dialogic exchange. The Attitude subsystem, however, is not covered in this study, since it is concerned with the linguistic expression of positive and negative evaluations. In other words, it deals mostly with emotional responses, judgement of human behaviour, and evaluations of products and processes.

In Appraisal Theory, the Engagement subsystem is drawn from Bakhtin's (1981, 1986) notions of dialogism and heteroglossia (the presence of two or more voices in a text or other artistic work). The Engagement subsystem comprises networks of options for opening up or closing down the heteroglossic space for voices in a text. Engagement resources cover a wide range of devices that construe a heteroglossic communicative setting for a text, including alternative viewpoints and anticipatory responses from the audience. The Engagement network covers both monoglossic and heteroglossic aspects. According to Martin and White (2005), the Engagement network covers "all those locutions which provide the means for the authorial voice to position itself with respect to, and hence to engage with, the other voices and alternative positions construed as being in play in the current communicative context" (p. 94).

In general, the Engagement and Graduation subsystems are seen as resources for dialogue. They enable the writer to map the negotiation of prior texts in a forthcoming text in order to show his/her negotiation and engagement in the chain of written texts. They also help to explain the balance and exchange in medical discourse, as the writer's negotiation of heteroglossically-varied positions is presented by the chain of texts and is introduced in the text, in addition to the putative readers. Dialogues can be opened up and closed down to varying degrees. Attributing alternative positions to other texts and including others into the writer's own text provide the arguments needed to adopt self-representation and authority in the discourse community.

The current study, in its essence, tries to enrich the literature on research in applied linguistics, discourse analysis, and corpus linguistics in the Malaysian context. It aims to investigate the authorial stance in written medical discourse as an important linguistic phenomenon that has rarely been targeted. More specifically, it highlights how medical writers hold an effective authorial stance by manipulating specific linguistic patterns in the context to contract or close down the dialogic space of utterance and to expand or open up the dialogic space of utterance. In the current study, authorial stance is associated with the ability through which medical writers engage dialogically with alternative voices in the text which also include the putative readers, to share information among members of the same community. The medical context being investigated in this study involves a corpus of two published genres of written medical discourse - medical research articles (MRA) and medical case reports (MCR), which are deemed a genre of “highly conventionalized nature with respect to syntax and lexis” (Helán, 2012, p. 2). The corpus of this study, consisting of 538,472 words, represents the rhetorical sections of the 400 medical texts written by NS and NNS (Malaysian) medical authors, who used English as a means of communication. Corpus analysis was used to perform the functions of quantifying the occurrences of Engagement and Graduation patterns, providing the basis for the comparisons in the employment of these patterns between the two groups of researchers.

A review of the literature related to studies on discourse and linguistics revealed that less attention has been paid to discussing the authorial stance in professional academic writing, especially in the field of medicine. To fill this gap, this study attempts to shed more light on written medical discourse by focusing on the ability of NS and NNS medical writers to use interpersonal linguistic patterns in adopting authorial stance. The study further aims to generate a comprehensive list comprising the key resources of Engagement and Graduation, which would be of great help in future teaching and instruction.

1.6 Research Questions

For purposes of the present study, and in order to examine the use of authorial stance by English native (NS) and Malaysian non-native (NNS) authors in written medical discourse, the following research questions were raised:

Q1: In what ways, and by what means is authorial stance encoded through Engagement and Graduation linguistic resources in medical research articles (MRA) and medical case reports (MCR) written in English by native (NS) and Malaysian non-native (NNS) authors?

- a) What are the linguistic expressions used to realise Engagement and Graduation in medical research articles and medical case reports?
- b) What patterns or sequences of Engagement and Graduation strategies can be discerned in the claims or arguments presented in medical research articles and medical case reports? How are these strategies used to serve the authors' goals in writing the research article and case report genres?

Q2: What are the frequencies of Engagement and Graduation linguistic resources used to adopt authorial stance in the different rhetorical sections of medical research articles (MRA) and medical case reports (MCR)?

Q3: Are there any significant differences between the MRA and the MCR genres in the authors' deployment of authorial stance?

Q4: Are there any significant differences between NS and Malaysian NNS authors in deploying authorial stance in the different rhetorical sections of medical research articles and medical case reports?

1.7 Significance of the Study

Language is considered as the most important means of daily communication. By using language, people not only describe the world they are living in but also interact with each other dialogically in order to establish and maintain appropriate relationships. In fact, this is the function of the interpersonal meaning of language. In medical language, producing a full understanding and an appropriate correlation between the writer and readers has proved to be not only essential in achieving awareness in science, but also crucial for creating self-representation, identity, and attachment, which can be expressed by evaluation, Engagement, appreciation, and so forth.

The current study endeavours to contribute to two distinct and comprehensive fields of study: Linguistics and Education. The findings of the study might help to improve medical writing for Malaysian medical students by familiarizing them with writing of native and non-native authors. This would then enable them to have their manuscripts accepted and published in national and/or international journals. In the case of Linguistics, there is another implication, which is to provide empirical evidence in support of Appraisal Theory and corpus linguistic studies, specifically in the area of medical discourse.

In spite of its novelty, Appraisal Theory has proved to be a very effective social theory. A large body of research in different disciplines, although rarely in medical discourse, has been informed by this theory. The generality of this theory encourages writers to apply it in outstanding studies in Media, Academic Writing, Politics, Juridical threatening and violence, Narratives, and Psychology. Some of these studies have utilized the whole Appraisal system or only a part of it as their analytical framework, according to the objective of their studies. The main aim of these studies was to analyse and/or compare texts to explore the language use of different disciplines and/or cultures. However, a review of the literature reveals that there are a limited number of studies which focused on the role of authorial stance in medical discourse, especially in the Malaysian context. In this sense, this study adds new contributions, especially to the study of linguistics and literature in Malaysia since it focuses on the ways that Malaysian medical writers adopt authorial stance in comparison to their NS counterparts.

Finally, this study could provide valuable insight into the knowledge of interpersonal meaning in the written medical discourse of Malaysian medical writers, based on their ability to appropriately employ or not employ Engagement and Graduation patterns compared to their NS counterparts. Primarily, this study may raise the awareness of novice writers, medical students and others to implement authorial stance as an interpersonal device in their writing because many of them benefit from Malaysian professional medical research. Additionally, this study offers insights into the characteristic features of medical writing by analysing the distinctive aspects of these patterns in the language of medicine, represented by two important genres of medical research articles: MRAs and MCRs.

1.8 Limitations of the Study

Two essential limitations of this study address the corpus of the study and the methodology. First, the corpus includes 400 medical research articles and medical case reports written in English by native and non-native medical authors. Much effort was made by the researcher to contact authors through emails to inquire about their English status as NS. However, only a few authors responded. Thus, the researcher had to adopt Salager-Meyer's (2001) criterion to determine the NS authors' status of English. Although the criterion is not the best, it is the only practical method for this in the absence of verification from the authors. The basic description of this criterion is as follows:

for the corpus under study to be representative of native English scientific writing, articles were included only if the authors (at least the first author) had an English surname and was affiliated to a British, Canadian, Australian or North American hospital, university or institution. (Salager-Meyer, 2001, p. 67)

Additionally, NNS authors were chosen according to their non-English or European names and according to their affiliation to one of the Malaysian hospitals, universities or institutions, regardless of their ethnicity.

Second, this study used a systematic and detailed approach towards the analysis of stance in two genres of written medical discourse, which addresses the investigated issues of how those writers have used language in their writing to construct authorial stance. The main argument advanced by this methodological approach is that close linguistic analyses of professional writing can reveal key resources of stance that are considerably valuable and may confirm writers' genre knowledge. Despite the methodological strength that includes both qualitative and quantitative analyses in addition to the long process of the data collection procedure, this study did not incorporate methods and data that would allow for investigation of various questions that arose during the analysis. For one, it did not incorporate interviews with the writers to ask about how they modelled their writing; how, in their opinions, they could express authority and commitment to a proposition; to what extent they could benefit from others research in the field of medicine and perhaps other fields; and how, in

their opinions, a relation can be built with readers through writing to gain acceptance by the discourse community.

Even though there were limitations, the analysis was strong in its combination of both quantitative and qualitative analyses which included hand-coding of authorial stance resources indicated by the Engagement and Graduation subsystems of appraisal, besides inductive scans of output from concordance software. Hence, the study successfully demonstrated some authorial stance key resources in two genres of medical written discourse that can compensate for gaps in the research literature on stance in appraisal studies. It also shows how medical authors utilize these resources to cover genre expectations and engage with external sources and putative readers.

1.9 Definitions of Key Terms

The following are the most important key term definitions used in the current study:

Authorial Stance

This is the textual instantiation of personal attitudes, feelings, or positions that a speaker or writer has towards a proposition. It is a linguistic phenomenon that marks the degree of commitment to the proposition deployed through certain strategies to build solidarity with the external sources in the text, including putative readers. To Hyland (2004a), an effective authorial stance enables an author to claim solidarity with readers, evaluate and critique the work of others, acknowledge alternative views, and argue for a position. Consequently, failure to present such an effective authorial stance often results in poor evaluation, which compromises a writer's research potential (Barton, 1993; Hyland, 1998a; Schleppegrell, 2004; Wu, 2007).

Medical Research Articles (MRAs)

The most important genre in medicine is the original medical research article. MRAs provide new information based on original research. This medical genre is typically supported by in-depth statistical analysis. A medical research paper is a highly technical, information giving standard format. This format is either categorised into the following sections: "introduction, methods, results and discussion" or the traditional IMRD sections of the research paper. Most research article writers are familiar with the IMRD format and the internal ordering of the information existing in different sections of a research article (Nwogu, 1997).

Medical Case Reports (MCRs)

Published medical case reports are written reports of single and unusual medical cases with unique features. The unique features may consist of previously unreported observations of a recognized disease, unique use of diagnostic tests to reveal diseases, previously unreported clinical conditions, previously unreported treatments of

recognized diseases, and previously unreported complications of procedures. Case Reports are normally short with no abstract, have brief introductions, reports, and discussions (Peh & Ng, 2010).

Native Speaker (NS)

Native authors can be defined as people whose first language is English. A native speaker is defined as someone whose nationality belongs to England, the United States, Canada, and Australia. Being a native speaker does not necessarily mean being always proficient in the English language.. Cook (1999, p. 186) asserts that “many native speakers are unaware how their speech differs from the status form, as shown, for example, in the growing use of the nonstandard “between you and I” for “between you and me,” even in professional speakers such as news readers.” In the current study, NS medical writers’ texts are chosen according to Salager-Meyer’s criterion (mentioned in section 1.8), which is based on the author’s English surname and affiliation to one of the American, English, Canadian, or Australian medical hospitals, universities, or institutes.

Non-Native Speaker (NNS)

Non-native authors are defined as people who acquire English as a foreign language in their country. A NNS is a person who learns other than his/her language after gaining a native command of his/her mother tongue. NNS medical authors in the current study are Malaysian academics, practitioners, and physicians who are affiliated with Malaysian hospitals, universities, and medical institutes and use English for academic and research purposes.

1.10 Outline of the Thesis

This thesis is structured into five chapters, including their sections and related subsections. The first chapter involves a description of the main concepts and theories used in the study. It also presents the main problem investigated along with introducing the purposes and significance of the study. In addition, it raises the research questions and provides some definitions for the key terms used in the study. The literature review in Chapter 2 offers some theoretical background about the stance with an overview of the development of this linguistic phenomenon that different traditions have made in this area (Biber et al, 1999; Hunston & Thompson 2000; Du Bois, 2007, Hyland, 2005 Appraisal Theory e.g. Martin & White 2005). The chapter also provides an account of the two genres MRA and MCR. It is argued that they constitute features of interest as authorial stance features that are important in pertinent research. Finally, corpus- based studies presented in terms of how it relates to medical discourse and Appraisal. In Chapter Three within an overall description of the research design, a comprehensive description to the data collection and compilation of the two medical genres, a corpus of 400 medical research articles and medical case reports that total over 538,472 words, on which the analyses for this dissertation research were performed. In Chapter Four, the application of the two subsystems of Appraisal theory to an investigation of how professional authors construe evaluative stance by

employing a qualitative comprehensive interpretation to the evaluative resources of the authorial stance and their functions in reference to genre expectation and the authors' roles, and a corpus- based analysis to show the frequency and differences between the two genres and the two groups. The final Chapter Five concludes a summary of the major findings of the study and discusses the contribution of the study to both the linguistic study of evaluation in the two medical genres, and to pedagogy of academic writing in English.



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