

CHAPTER 3

RESEARCH METHODOLOGY AND THEORETICAL FRAMEWORK

3.0 Introduction

This chapter presents the theoretical framework and research methodology carried out in the study. The study is based on the notion of lexical cohesion in English language texts as proposed in Halliday and Hasan's (1976) cohesion theory. Martin's (1981, 1985b & 1992) network of lexical relations and the schematic structure framework of Martin et al. 1983 and Martin (1985b) are integrated for use as the theoretical framework.

3.1 Selection and collection of data

The selection of data began with the scouring of newspaper commentaries for issues on a surgery performed on Iranian conjoined twins, Ladan and Laleh Bijani. Two texts, which are expository in nature from the genre of newspaper commentaries, were found to be suitable for the purpose of analysis. Text 1, entitled 'A Pandora's box of ethical paradoxes' written by Askiah Adam was featured on 13th of July, 2003 under *Soapbox* appearing in *Sunday Mail*, which occasionally features the writer's viewpoint on current issues in the nation. Text 2, entitled 'Struggle to be free' written by Anthony Thanasayan was published on 17th of July, 2003 in *Wheel Power* appearing in the *Star*, which features the author's comments on certain issues that take place locally and internationally.

A corpus of Malaysian newspapers in English was scanned for newspaper commentaries on the issue of the Iranian conjoined twins, Ladan and Laleh Bijani. Two texts were chosen out of eleven found and the texts chosen were authentic as well as current at the time when the selection and collection of data was carried out by the researcher. Both texts have a purpose in the Malaysian culture because they are used in the social context of newspaper commentaries.

A closer look at the data shows that Text 1 has 1026 words in total while Text 2 has 884 words. The texts have been carefully chosen to be approximately similar in length and share the same issue. Both texts focus on the ethical and medical issues involved in the outcome of the surgery

performed on Iranian conjoined twins, Ladan and Laleh Bijani, which unfortunately resulted in their deaths.

Following that, some sentences in Text 1 and 2 have been omitted for the analysis part. Sentences omitted were quoted speech and quoted ideas from other people. Sentences used in the analysis are shown in the appendix. The omission of those sentences was necessary to ensure that only words representing the writer's thoughts were analysed.

3.2 Context of situation

Halliday's context of situation consisting of "Field", "Tenor" and "Mode" is applied to Text 1 and 2. The language used in a text is not intended to detach itself from the environment it was created in. A text carries context with it. It is this context that enables us as readers or listeners to deduce meaning from it. Malinowski first introduced the idea of context in 1923 in his work 'The Meaning of Meaning'. Malinowski (1923:466) held the opinion that "written statements are set down with the purpose of being self-contained and self-explanatory." Naturally, texts have to be understood in relation to their context of situation and context of culture.

Later, Firth took over and elaborated further on this idea in his paper in 1950 called 'Personality and Language in Society'. Firth (1950:183) explains, "The context of situation is a convenient abstraction at the social level of analysis and forms the basis of the hierarchy of

techniques for the statement of meaning." He proposed that context was one of a number of levels of analysis required for linguistics to make statements of meaning about text. Halliday continued Firth's work on context by refining the theory. His description of context of situation is based on field, tenor and mode as mentioned in Chapter 2. Table 3.2.1 further describes Halliday's theory on context.

Table 3.2.1 Halliday's context of situation (1985/1989)

Context of Situation	Description
FIELD-the social action: 'what is actually taking place'	Refers to what is happening, to the nature of the social action that is taking place: what is it [sic] that the participants are engaged in, in which the language figures as some essential component.
TENOR-the role structure: 'who is taking part'	Refers to who is taking part, to the nature of the participants, their statuses and roles: what kinds of role relationship obtain [sic] among the participants, including permanent and temporary relationships of one kind or another, both the types of speech role that they are taking on in the dialogue and the whole cluster of socially significant relationships in which they are involved.
MODE-the symbolic organization: 'what role language is playing'	Refers to what part language is playing, what is it [sic] that the participants are expecting the language to do for them in the situation: the symbolic organisation of the text, the status that it has, and its function in the context, including the channel (is it spoken or written or some combination of the two?) and also rhetorical mode, what is being achieved by the text in terms of such categories as persuasive, expository, didactic, and the like.

(Source: Martin, J. R. , *English Text*, 1992:499-500)

The following section will exemplify the application of Halliday's context of situation comprising "Field", "Tenor" and "Mode" on the two texts analysed in this study.

3.2.1 Field

Text 1 : 'A Pandora's box of ethical paradoxes'

This text is about a surgery conducted to separate a pair of 29-year-old conjoined Iranian twins, Ladan and Laleh Bijani, which resulted in their deaths. It highlights the issue of whether the twins' lives could have been saved if they had been counselled properly. It questions ethical aspects of the decision taken by the surgeons to operate the twins. It also points out that life should not be gambled with for the purpose of leading a normal life. This text also proposes that more thought should be put into issues similar to this in the future.

Text 2 : 'Struggle to be free'

This text is about the medical and ethical factors involved in the outcome of an attempted surgery on a pair of conjoined Iranian twins, Ladan and Ladeh Bijani. It questions the practice of some people trying to "fix" people with a disability, and whether they should be considered disabled in the first place. The text basically proposes that society should accept people who are born with 'birth defects' and not try to 'correct' them.

3.2.2 Tenor

Tenor of a text represents the role of the participants in the text. The participants in this text hold the position as newspaper commentary writers, either as a freelancer or employed by the newspaper company. The writers are free to express their opinions in writing so long as they do not tread on controversial grounds that may be considered as sensitive issues by the Malaysian government. The writers convey a message in print to a large number of unknown readers of newspapers. The readers do not have a face-to-face contact with the commentary writers. The role of the commentary writers is quite obvious in the culture, as eloquent language users who speak their minds (in most cases) in their writing, usually on current issues circulating the nation.

3.2.3 Mode

Both texts were written to be read in print by newspaper readers at another time and place. They are persuasive in nature, raising controversial issues in the minds of the public. In other words, thought provoking ideas were expounded. Although the commentary writers were found to have quoted people's thoughts from various disciplines, this did not hinder them from formulating their own opinions. The quotes act as supporting arguments to make the stand firmer.

3.3 Data type

The texts chosen for analysis in this study are expository in nature. Expository writing can also be called factual writing. In Martin's words (1985b:49), "Factual writing is an interpretation of the world, not its reflection." The norm of factual writing or expository texts is that thesis statements are put forward in the introductory part. This is followed by arguments and reasoning before conclusions are made. In other words, expositions interpret and explain the thesis statements put forward in a text. Martin (1985b:9) describes factual writing as writing which

"...is designed not to amuse us, but to explore the world around us. It focuses on how things get done and what things are like. So successful factual writing is about the world; it is not primarily intended to entertain."

Martin (1985b:17) further categorizes expository writing into two categories, which are Analytical and Hortatory exposition.

Analytical exposition aims to persuade readers that the thesis is well formulated. It also functions to persuade people that the judgment is correct. Feelings and attitudes are omitted in writing. In other words, it is impersonal.

Hortatory exposition persuades its readers or listeners to do what the thesis statement proposes. Normally, hortatory exposition is structured with the reason for writing the text supporting the thesis statement. Next come the arguments and examples in the body paragraphs of the text, expanding the thesis mentioned. Most importantly, it tells the readers or

listeners what to do, or rather, to do what the thesis statement recommends so that it brings about some changes. Hortatory exposition is found mostly in editorials, letters to the editor, sermons, political speeches and debates, office memos about employees' behaviour, and so on.

In the initial stage of the study, the researcher chooses a suitable theoretical framework to work on while providing justification for her decision at the same time. Then, she formulates her research questions. Finally, she presents arguments to support the findings from her analysis. In doing all these, the researcher has to be impartial and impersonal in her writing. The point of this example is that a research report is an example of analytical expository writing. Other examples of the same category are lectures, seminars, tutorials, scholarly papers, essays, and examination answers.

The texts chosen for the analysis of the present study are hortatory in nature. They are newspaper commentaries expressing the writers' opinions about certain issues. Each text presents a thesis statement and provides arguments and examples supporting the stand the writer takes. Furthermore, the style of writing is persuasive because the writer wants the reader to act in the way he or she proposes.

3.4 Theoretical framework of the study

The framework adopted for this study is based on Halliday and Hasan's (1976) cohesion theory and Martin's (1981, 1985b & 1992) network of lexical relations. Martin et al. 1983 and Martin's (1985b) work on expository texts in terms of schematic structure has also been integrated into the research design of this study. Halliday and Hasan's (1976) notion of cohesive force is given detailed treatment in section 3.5 of this chapter. The study also draws insights from research on lexical cohesion by Pappas (1985), Myers (1991), Parsons (1991) and Srinivass (1996). Research on schematic structure was largely initiated by Hasan (1979). Ventola's research on schematic structure is based on Martin's (1979) work, which he elaborated later in his 1983 work with his peers and on his own in 1985b.

Halliday and Hasan first brought the idea of cohesion in English texts to the attention of fellow linguists in 1976 through a joint effort, their book 'Cohesion in English'. What they had set out to highlight in this book was that a text hangs together because there is an element called *cohesion* in it. Their concept of cohesion is a "semantic" one, hence unrestricted by sentence boundaries. According to Halliday and Hasan (1976:4) "Cohesion occurs where the INTERPRETATION of some element in the discourse is dependent on that of another."

When a text is unified, readers can expect to see that sentences show some relationships through the lexical items used. Consequently,

when two elements that are rather significant appear, a relation of cohesion is formed. These elements are the *presupposing* and the *presupposed* elements. Halliday and Hasan provide us with the example below to illustrate this point.

Wash and core six cooking apples. Put them into a fireproof dish.

In the above example, Halliday and Hasan point out that in order to interpret *them*, we have to deduce its meaning from a presupposition on something other than itself. Here, the phrase *six cooking apples* that appears in the preceding or previous sentence helps us by providing a clue that *them* is actually referring to the phrase mentioned. Clues as such exist in texts and their function is to provide us with information about the relation between two sentences or clauses while creating cohesion in the process. The result of cohesion in a text is what in fact creates text.

There are two types of cohesion, grammatical and lexical. Reference, substitution and ellipsis are grammatical cohesion. Conjunction is on the borderline of the two; mainly grammatical but with a lexical component in it. This study looks at the analysis of lexical cohesion.

Subsequently, many scholars expanded on Halliday and Hasan's pioneer model of lexical cohesion. One of them is Martin, whose 1981, 1985b & 1992 theoretical framework of lexical cohesion is adopted for the purpose of analysis in this study.

3.5 Research methodology

The present research evolves through many stages. Stage one is on the analysis of lexical cohesion. Stage two explores the schematic structure of Texts 1 and 2. Stage three encodes the interaction between lexical cohesion and schematic structure in the two texts mentioned. Finally, stage four measures the cohesive force between cohesive items in the texts.

3.5.1 Stage one

The researcher first analyses the semantic relationships that create a bond between lexical items in the texts. These lexical relations are based on Martin's (1981, 1985b & 1992) taxonomy of lexical relations, as described in Chapter 2. The semantic relationships proposed by Martin are analogous to Halliday and Hasan's (1976) semantic relations with some additions on the relations done by Martin. Martin's (1981, 1985b & 1992) network of lexical relations consists of semantic ties such as repetition, synonymy, antonymy, hyponymy, co-hyponymy, meronymy, and co-meronymy. A separate category is established for collocation. An application of these relations was shown in Chapter 2.

These semantic relations form a chain of presuppositions. This is what Martin labels as lexical strings. A lexical string represents all lexical items that presuppose each other through a taxonomic or expectancy (collocation) relation shown in a vertical string. This study however, only

considers taxonomic relations. The lexical strings provide us with information about what is being talked about in the text and the length of the lexical strings. In the present study, the lexical strings are given a general heading according to the type of lexical items that they carry. They also carry the label **LS_n**, with **n** representing a number. For instance, the lexical string *Twins* (**LS 1**) in Text 1 is labelled as such due to the lexical items *the twins* and *Bijani twins*.

3.5.2 Stage two

Subsequently, the lexical strings are observed for the role they play in the schematic structure analysis (Martin's term is borrowed here). Martin (1989:86) considers the term schematic structure as referring to "the beginning, middle and end structure of texts." Martin adds that the structure of essays or expository writing usually begins with an Introduction where the thesis statement is present. Traditionally, an essay contains three parts; the introduction, body of paragraphs and conclusion. On the other hand, unlike the traditional view on essay structures, a schematic structure analysis will show that a written text has many stages occurring in it and may not necessarily consist of only three parts (introduction, body of paragraphs and conclusion).

3.5.3 Stage three

In this stage, the interaction of lexical cohesion and schematic structure in Text 1 and 2 is tabulated. The lexical strings that run through the stages in the texts are shown in table form. This table shows how the lexical strings mingle with the stages in the texts. The table also demonstrates the frequency of merging points between the strings and the stages in the texts.

3.5.4 Stage four

The distance between lexical items in Text 1 and 2 are analysed to observe the cohesive force they create. Cohesive force is a term proposed by Halliday and Hasan (1976). This phenomenon occurs when a lexical item coheres with a preceding occurrence of the same item whether or not the two have the same referent or whether or not there is any referential relationship between them.

A lexical item can presuppose an item in a contiguous sentence forming an immediate tie. A lexical item can be mediated by having one or more intervening sentences that enter into a chain of presupposition. An item can have one or more intervening sentences not involved in the presupposition creating a remote tie. Finally, an item can be formed of both a mediated and remote tie. Typically, a lexical item presupposing another lexical item in a preceding sentence constructs an anaphoric relationship. In contrast, when a lexical item in a sentence refers to a

lexical item that occurs in the following sentence, this phenomenon is called cataphora or is cataphoric in nature.

Table 3.5.4.1 presents the system of coding distance between lexical items used in this study and is taken from Halliday and Hasan (1976:339).

Table 3.5.4.1 System of coding distance between lexical items

Direction and distance of cohesion	Coding
Immediate	0
Not immediate:	
Mediated [number of intervening sentences]	M[n]
Remote non-mediated [number of intervening sentences]	N[n]
Cataphoric [A tie is assumed to be anaphoric unless marked 'K']	K

(Source: Halliday and Hasan, *Cohesion in English*, 1976:339)

3.6 Exemplification of data analysis

The analysis of the present study is on the "intersentential" level. This study considers only the paradigmatic axis as it represents the choice of words the writer in the texts chose. Martin (1981) pointed out that although collocation can be problematic, "its contribution to coherence in text is so significant that it cannot be ignored." Here, the present study is in contradiction with Martin's view that expectancy relations need to be included with taxonomic relations in the analysis of lexical cohesion. Martin et al. 1983 and Martin (1985b) appear to combine the above relations in their analysis of lexical cohesion. Expectancy relations are based on the likelihood of lexical items to co-occur in a sentence. An analysis of such a nature would not depict the choice of words the writer

makes. Since the texts in this study are expository, the flow of the texts depends largely on the choice of words the writers make. The issue in both texts analysed is controversial because ethical and medical factors are involved in the outcome of the surgery of Ladan and Laleh and they were focused on. Therefore, a paradigmatic analysis is seen to be more appropriate here.

An exemplification of the lexical cohesion analysis was shown in Chapter 2. An exemplification of schematic structure analysis in Text 1 is captured in Table 3.6.1 with three columns. The first column names the stages that occur in the text. The second column shows the sentence boundaries of where the stages begin and end. An interpretation describing the stages is placed in the third column.

Table 3.6.1 An exemplification of schematic structure analysis in Text 1.

Stages	Sentence boundaries	Interpretation
Introduction and background to the issue	S 1 – S 4	At this stage, the writer provides her reader with some information regarding the surgery that attempted to separate the Iranian conjoined twins, Ladan and Laleh Bijani. She starts by saying that if the surgery had been successful, the surgeons involved might have received a lot of admiration. The researcher is of the opinion that the writer's previous statement was to imply that the surgery on the twins should not have been carried out. The writer also brings the twins' father into the picture that had always held the belief that any operation on his daughters would be fatal. This is a strategy employed by the writer to show that she is not alone in her opinion.

In Table 3.6.1, the Introduction is the first stage in Text 1. It begins with sentence 1 and ends with sentence 4. This stage shows the writer trying to feed the reader with some background information to the issue.

The researcher arrives at the conclusion that the stage mentioned assists the reader who is assumed to have zero or little knowledge on the issue. Finally, the writer expresses her opinion that the surgery on the twins should not have been performed.

The analysis on cohesive force involves measuring the distance between two lexical items. For instance, in Text 2 the word *broadcast* found in paragraph 2, sentence 2 is considered to be a cohesive item to *news over the radio* in paragraph 1, sentence 1. Since, *broadcast* (S 2) presupposes *news over the radio* (S 1), which appears in the immediate preceding sentence, the tie formed is an immediate one. The table of analysis for cohesive force between lexical items used in Chapter 4 contains six columns. The first column contains the paragraph number of which the item appears in. The second column consists of the item's sentence number. The next column carries the cohesive item. The fourth one notes the distance of the cohesive element from its presupposed item. The fifth column contains the cohesive item's presupposing item. Finally, an interpretation is provided on how the distance between the cohesive items is attained. Table 3.6.2 is an exemplification of cohesive force analysis in Text 2.

Table 3.6.2 An exemplification of cohesive force analysis in Text 2.

Paragraph no.	Sentence no.	Cohesive Item	Distance	Presupposed Item	Interpretation
2	2	broadcast	0	news over the radio (S 1)	The item <i>broadcast</i> (S 2) presupposes <i>news over the radio</i> (S 1) of which appears in the immediate preceding sentence. This makes the tie an immediate one.

3.7 Conclusion

This chapter focused on the theoretical framework adopted and adapted for the study as well as the research methodology carried out. The next chapter presents the findings acquired from the data analysis of the present study.