CHAPTER 2

REVIEW OF RELATED LITERATURE

2.0 Introduction

Chapter 2 is an overview of the review of related literature, which begins with the contribution of De Saussure, Malinowski, Firth and Halliday to the development of Modern Linguistics. It also looks at the concepts of context of situation and culture in more detail. The Hallidayan approach to language is illustrated as well. Contributions of neo-Firthian scholars are also presented. A description of lexical cohesion following Halliday and Hasan's (1976) model and Martin's (1981, 1985b & 1992) lexical relations network is provided, whilst

incorporating Halliday and Hasan's notion of cohesive force, following their 1976 work on cohesion in English. Following this, literature on schematic structure reviewing the work of Hasan (1979), Ventola (1983, 1984 & 1989), Martin et al. 1983 and Martin (1985a & 1985b) are provided. Finally, critical opinions and support toward Halliday and Hasan's (1976) cohesion model are illustrated accompanied by a number of studies on lexical cohesion based primarily on the two functional linguists' cohesion theory.

2.1 Contributions to Modern Linguistics

In the discussion of the development of Modern Linguistics, four scholars' names come to mind, namely Ferdinand de Saussure, Bronislaw Malinowski, J.R. Firth and M. A. K. Halliday. The turn from Traditional Linguistics to Modern Linguistics can be traced back to de Saussure's era. Ferdinand de Saussure (1857-1913) was a Swiss scholar whose work entitled *Course in general linguistics* was put together by his students and colleagues and published in 1916. In this course, Saussure proposed the "synchronic" analysis of contemporary language, which means analysing language at a particular point of time and "diachronic" analysis of language, which means an analysis through historical time. He also argued that a language in general could never be fully explained. However, it can be perceived as *langue* representing the collectively inherited set of signs, the language system; or as *parole* representing the individual's use of the system (Bloor and Bloor, 1995).

Many linguists would agree that Saussure's most celebrated contribution to Modern Linguistics is the distinction between *syntagmatic* and *paradigmatic* dimensions. Saussure explains that language is systematically organized along two axes: horizontal and vertical. Figure 2.1.1 illustrates this point.

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                                          ─────────────────────────────────►  Syntagmatic
                                                                              axis

              I        ate        an      apple.

                       bought

                       sold

                       took



Paradigmatic
Axis
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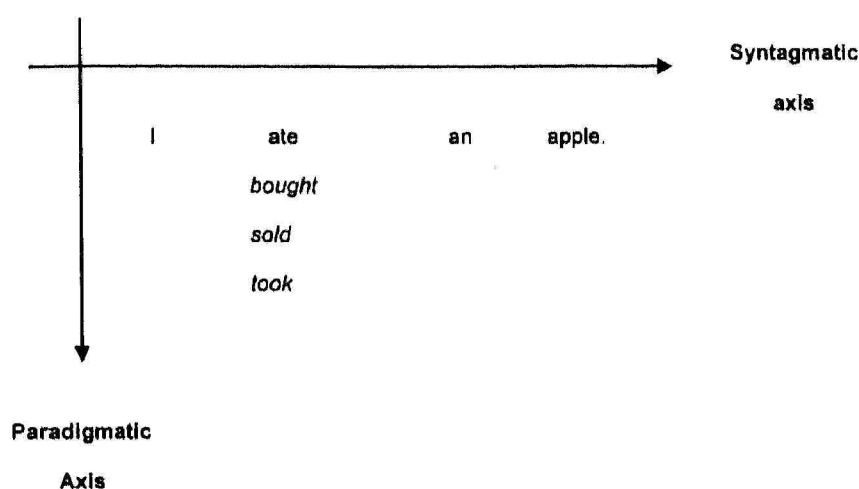
Fig. 2.1.1

Bloor and Bloor (1995) explain that in the sequence *I ate an apple*, each word has a *syntagmatic* relation to every other word: *I + ate + an + apple*. Therefore, the phenomena such as Subject-Finite agreement and word order are syntagmatic. On the other hand, items are also significant as they relate to other items on the *paradigmatic* axis. When we say *ate*, we choose not to say *bought*. The same can be said for verbs like *sold* and *took*. The relation between these items is a paradigmatic one whereby these items are alternatives within sets.

Bronislaw Malinowski's work also sparked off the development of modern linguistics. Malinowski was an anthropologist of Polish origin but his professional career was mainly in Britain. He was a colleague of

J.R. Firth's at London University, where he held the position of Professor of Anthropology from 1927. Malinowski's biggest achievement was the coinage of the terms "Context of Situation" and "Context of Culture" (1923). This concept played a large part in Firth's thinking and, later, in Halliday's. Malinowski claimed that in order to understand an utterance; we need to know not only the literal meanings of the words but also the social situation in which the utterance occurs.

Following Malinowski, J.R. Firth is another linguist that created the path for the emergence of Systemic Functional Linguistics, which is part of Modern Linguistics. One very important contribution of Firth's thinking that has influenced Halliday's work is the concept of the system, which is a paradigmatic set of choices. Firth proposed that the grammar of a language is polysystemic, a system of systems. He extended Malinowski's 'context of situation' stressing that the complete meaning of a word is always contextual, and no study of meaning apart from a complete context can be taken seriously. Firth categorized "Context of Situation" in his paper 'Personality and Language' in Papers in Linguistics (1934-1951:182) as the following:

A. The relevant features of participants: persons, personalities.

    (i)   The verbal action of the participants.

    (ii)   The non-verbal action of the participants.

B. The relevant objects.

C. The effect of the verbal action.

Subsequently, M. A. K. Halliday adopted Firth's context of situation and elaborated on it giving us the notion of "Field", "Tenor" and "Mode". According to Halliday, "Field" refers to the social action – what is actually taking place. "Tenor" refers to who is taking part in the above social action. The status and roles of the participants are discussed here. "Mode" refers to the role the language in that situation is playing.

An exemplification of this concept can be conveyed through this very research report. The "Field" of this report is academic in nature. It follows the format of academic writing and its purpose is to present a study undertaken by the researcher.

The "Tenor" of this report is between two parties. One party represents the writer of this report, i.e. the researcher whilst the other party represents the supervisor. The researcher is a post-graduate student writing this report as partial fulfilment of the MESL course whilst the supervisor is an academic professional well versed in Systemic Functional Linguistics who evaluates the end product of this study.

The "Mode" of this report is persuasive writing as the researcher tries to persuade her readers that her judgment on her analysis is correct. It also functions as a channel for the researcher to convey what she has discovered in her study to an audience in the academic world. Further application of Halliday's field, tenor and mode is described in Chapter 3 using the data of this study.

2.2 Context of Situation and Context of Culture

The concept of context of situation was introduced by Malinowski in 1923 through his book 'The Problem of Meaning in Primitive Languages'. This concept was formulated in the course of his Ethnographic researches among some Melanesian tribes of Eastern New Guinea. He encountered a lot of difficulties in his attempts to try and construe the texts collected which were magical formulae, items of folklore, narratives, fragments of conversation, and statements of the informants in those so-called "primitive" tribes. This led him to conclude that those texts needed to be studied in the situation they occurred in. Hence, Malinowski (1923:465) stresses that "in a primitive language, the meaning of any single word is to a very high degree dependent on its context." Malinowski (ibid:467) adds that "a word without *linguistic context* is a mere figment and stands for nothing by itself, so in the reality of a spoken living tongue, the utterance has no meaning except in the *context of situation*." In other words, when a language studied is spoken by people living in different conditions and culture from our own, the study of their culture and environment has to be included.

Apart from context of situation, context of culture of the participants in a study is also of importance. In the paper 'The Techniques of Semantics' in Papers in Linguistics (1934-1951:27), Firth mentions that the study of semantics has to take into consideration the general cultural background, which includes the contexts of experience of the participants whereby "every man carries his culture and much of his social reality about him wherever he goes."

In the study of collocation items in a text, context of culture plays an important role in determining the relevance of such a relationship to the culture studied. For instance, *bread* and *butter* may be considered as collocative items in the Anglo-Saxon culture but may not have the same implication in an Asian culture.

2.3 The Hallidayan approach to language

A 'product' of Firth, Malinowski and de Saussure's thinking, Halliday developed what is known today as Systemic Functional Theory, which in its initial development was known as the "Scale-and-Category Grammar." In his paper on 'Categories of the Theory of Grammar' in 1961, Halliday describes how language works. According to Halliday, the primary levels of linguistics events are *form*, *substance* and *context*. The *form* is the organization of the *substance* (which is the material of language) into meaningful events. The *context* relates the *form* to non-linguistic features in the situations in which they occur. Grammar to Halliday is a level of linguistic form, which operates on closed systems. Halliday (ibid:163) also draws attention to lexis, proposing "For this reason General Linguistic theory must provide both a theory of grammar and a theory of lexis and also a means of relating the two." He stresses that when grammar and lexis have been described separately, the next stage is to relate them.

Subsequently, five years later Halliday presented a paper in 1966 on 'Lexis as a Linguistic Level'. A significant point in lexis study, Halliday (ibid:148) suggests the need to devise methods appropriate to

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the description of lexical patterns in the light of a lexical theory that will

be complementary to, but not part of grammatical theory.

2.4 Contributions of other neo-Firthian scholars

Like Halliday, Firth had other scholars following in his footsteps

as well. These linguists are known as the neo-Firthian scholars. In the

study of semantics in the Firthian sense, John Lyons's contribution to

the field is much talked about. Lyons (1968) "structural semantics"

refers to logical "sense-relations" among lexical items that consist of

relationships such as synonymy, hyponymy (inclusion), incompatibility

and three kinds of oppositeness, which are complementarity, antonymy

and converseness. These semantic relations are confined to truth-

value relations between sentences. In addition, Lyons (ibid) adheres to

the notion of structural semantics to cognitive meanings. Lyons' view of

language is complementary to Firth's in the sense that he calls for a

"restricted context" for the study of statements. Lyons (ibid:445)

proposes "the semantic relations that hold between sentences by virtue

of the sense of the lexical items in them are to be interpreted in the

light of this notion." Similarly, Firth also called for the study of

semantics in his "context of situation".

In the study of collocation, Sinclair's 1966 paper on 'Beginning

the Study of Lexis' is prominent. A descendant of Firthian thinking as

well, Sinclair proposes a study of lexis that takes into account the

tendencies of items to collocate with each other. The predictive power

of items in a text need to be measured in each environment they

appear. Collocation occurs on a syntagmatic level of a sentence. It is the phenomenon of lexical items co-occurring in a similar context. The harmony they create when they co-occur is called collocates. For example, in Sinclair's (1966:413) example, **I posted the letter in the pillar-box**, we might expect the items *post, letter, pillar-box* to predict each other much more than *drop, letter, puddle* in **I dropped the letter in a puddle**. Sinclair states the limitations and problems that arise from a small corpus. Thus, he advocates the need for analysis on a larger scale.

In 1987, Sinclair wrote an article called 'Collocation: a progress report'. In this article, he proposed two principles in analysing collocation. One is known as *the open choice principle* and the other is called *the idiom principle*. According to Sinclair (ibid:319) the open choice principle is "a way of seeing language text as the result of a very large number of complex choices. At each point where a unit is completed (a word or a phrase or a clause), a large range of choice opens up, and the only restraint is grammaticalness". Sinclair (ibid:325) also provides definition for the idiom principle whereby the choice of a word affects the choice of others around it. He also equates the idiom principle to collocation.

Later, in Sinclair's 1991 book 'Corpus, Concordance and Collocation', he dedicates an entire chapter on the study of collocation. In this chapter, Sinclair maintains the same general idea on the two principles as mentioned in the previous paragraph.

Martin is another scholar who emerged in the neo-Firthian period. Many of his theoretical views are complementary to Halliday and Hasan's (1976) work. The lexical relations network proposed by Martin (1981, 1985b & 1992) is adopted for the purpose of lexical cohesion analysis in this study (as mentioned in Chapter 1). This network is an elaboration of Halliday and Hasan's (1976) cohesion model. Unlike Martin's view of accepting both paradigmatic and syntagmatic axes in the analysis of lexical cohesion, this study confines itself to a paradigmatic analysis only. This argument is presented in Chapter 3. Martin et al. 1983 framework on schematic structure analysis on expositions and Martin's (1985b) research design on the analysis of expository texts on literary criticisms is adopted as well in this study. An exemplification of Martin's (1981, 1985b & 1992) network of lexical relations is shown in the next section. Martin et al. 1983 work on schematic structure and Martin's in 1985b is reviewed in section 2.6 of this chapter whilst the application of the theory is shown in Chapter 3.

2.5 Lexical cohesion and cohesive force

Halliday (1966:153) defines lexis as "a very simple set of relations into which enters a large number of items." What Halliday means here is that lexical items of different classes can be considered to be a lexical set as long as they have a common identity. These lexical items may also relate to each other on a semantic level. Thus, when two lexical items are semantically related, they form a relationship called lexical cohesion.

Martin (1981, 1985b & 1992) expanded on Halliday and Hasan's work on lexical cohesion by establishing a set of categories for lexical relations that he labels as "a network" as shown in Figure 2.5.1. It is this framework that is employed primarily in the lexical cohesion analysis.
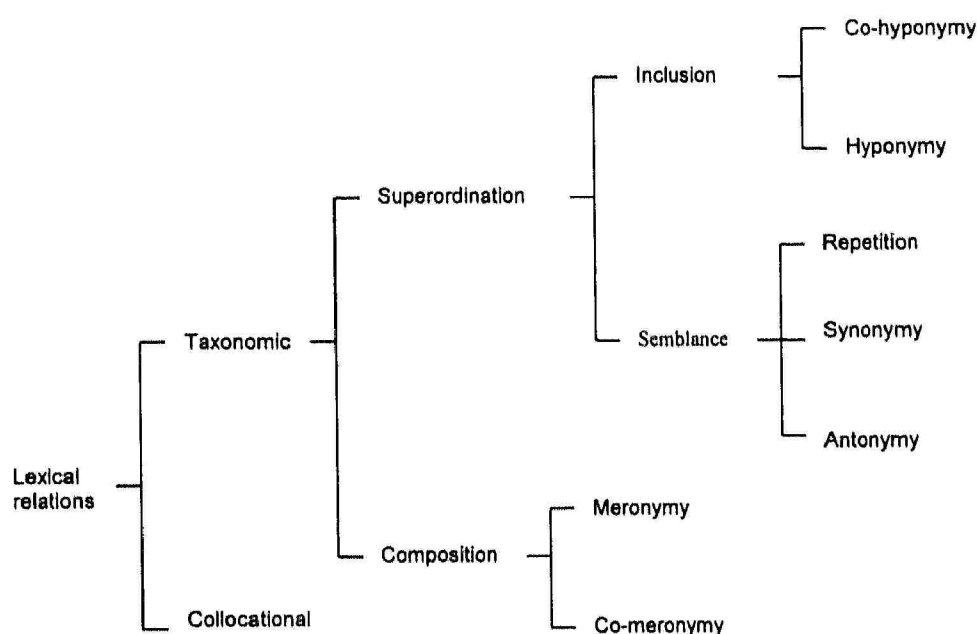

Fig. 2.5.1

Lexical relations are divided into taxonomic and collocational relations. Taxonomic relations are divided into two categories, superordination and composition. Superordination taxonomies are built up around the principle of subclassification (Martin, 1992: 295). Under this heading, technical terms to name relationships among classes and subclasses that have emerged are hyponymy, hypernymy and co-

hyponymy. The following examples exemplify these relations. *Doctor* is a hyponym of *medical team*. *Medical team* is a hypernym or superordinate of *doctor*. *Surgeons, doctor and medical practitioners* are co-hyponyms.

Synonyms are lexical items that are similar in meaning. For example, the phrase *news over the radio* is similar in meaning to the word *broadcast*.

Twins, the twins and *Bijani twins* are repetitions of the word *twins*. Martin (1992:290) points out that "in principle, cohesion analysis is not tied to orthographic word boundaries." The phrases *the twins* and *Bijani twins* are considered as one lexical item respectively. Hence, *twins, the twins* and *Bijani twins* are considered to be repetitions of the root word they all derived from, which is *twin*. Although these lexical items experience change in parts of speech (for instance, noun, verb and adjective), they are still considered to be a form of repetition.

Antonyms usually come in pairs. These are two lexical items that are opposed in meaning rather than complementing each other. Antonyms have gradable and non-gradable qualities. Antonyms have to be tested if they can be intensified or compared. For example, we can ask how *successful* or *extraordinary* something is or how *friendly* or *adamant* or *devastated* someone is, but we don't say how *surgically* or how *doctor* something or someone is.

Next, composition taxonomies organise people, places and things in a given field with respect to part/whole rather than

class/subclass relations (Martin, 1992). This is where meronymy and co-meronymy are found.

Collocational items are likely to occur simultaneously in the same context, as there is 'mutual expectancy' between them. Often we can predict the occurrence of one lexical item based on the other. For example, when the word *surgeon* occurs in a sentence, we can expect the word *operation* to appear in the same sentence. These two words have a collocative relationship in the way they "jive" with each other on a syntagmatic level.

In the analysis of lexical cohesion, Halliday and Hasan (1976) proposed that cohesive items could be analysed for their cohesive force. Cohesive force simply means the distance between two lexical items that are cohesive in a text. The distance may be immediate, mediated, remote, or both mediated and remote. The coding system devised by the two linguists mentioned is given in chapter 3 as well as an exemplification of its application to the texts in this study. The next section reviews the concept of schematic structures in texts.

2.6 Schematic structure

Apart from the analysis of lexical cohesion and cohesive force, the present study is also involved in exploring the schematic structures in the texts chosen. In 1985a, Martin presented a paper entitled 'Process and Text: Two Aspects of Human Semiosis' in which, he describes the term "schematic structure". This term was developed by the same author in his lecture entitled 'Conjunction and Conversational

Structure' in 1979, which was adopted later by Ventola (1983, 1984 & 1989). Martin (1985a:251) enumerates that "all genres have a beginning-middle-end structure of some kind." These structures are what he labels as schematic structures. Martin (ibid) adds that schematic structure is "a way of getting from A to B in the way a given culture accomplishes whatever the genre in question is functioning to do in that culture".

Martin's theory on schematic structure is similar to Hasan's general "structure potential", which she illustrates in her 1979 paper entitled 'On the notion of text'. Hasan (ibid) states that in general, structure potential is the total set of optional and obligatory elements in a social process of an event. She provides an example of buying and selling at a small fruit stall to show the stages that are optional and obligatory, which the buyer and the seller go through in their business transaction.

Ventola (1983, 1984 & 1989) developed schematic structures using service encounters in a travel agency in Australia and in a post office in Finland. She borrowed Martin's 1979 term of schematic structure and her works mentioned previously are complementary to Martin (1985a). While Hasan (1979) and Martin (1985a) use linear representation in their schematic structure diagrams, Ventola (1983, 1984 & 1989) proposes a flow chart to represent those diagrams. She argues that these flow charts correspond more closely to the interactive nature of service encounters. Ventola (1989) views a text as a dynamic process, not as a static process, similar to Martin (1985a). Ventola

claims that in her own study of service encounter, her flow chart helped to represent the various possibilities of how service encounter instances are generated.

Martin's (1985a) and Ventola's (1983, 1984 & 1987) framework proposed for schematic structure analysis is based on service encounters that involve two-way interactions. Therefore, the framework they propose is not applicable to this study because the present texts analysed are expository in nature and do not involve any kind of dialogue or interaction that is face to face. The framework suitable for this study's schematic structure analysis is based on a paper by Martin et al. 1983, entitled 'On the analysis of exposition'. A similar framework on expository texts on literary criticisms was illustrated in Martin's 1985b book entitled 'Factual Writing: exploring and challenging social reality'. This framework proposes the interaction of lexical cohesion and schematic structure, which tabulates the correspondence between the lexical strings and the stages occurring in the texts. Exemplification of this framework on schematic structure is shown in Chapter 3.

2.7 Criticisms and support towards the 1976 model of cohesion

Halliday and Hasan's 1976 model of cohesion received a lot of accolades. However, it sustained a fair share of criticisms too. Linguists such as Doyle (1982), Carrel (1982), Bambaerg (1983), Stotsky (1983), Tierney and Mosenthal (1984) and Myers (1991) have expressed their dissatisfaction towards Halliday and Hasan's pioneer cohesion model since it first made its appearance.

Doyle (1982) for instance argues that Halliday and Hasan's framework for analysing cohesion should have dealt more with the question of coherence in texts. Doyle (ibid:390) adds, "the relationships among propositions in the textual world created by the writer and re-created by the reader, remain unexamined."

Carrell (1982) criticizes Halliday and Hasan's cohesion model from a schema-theoretical point of view. She argues that cohesion is not the cause of coherence but rather the effect of coherence. Carrell (ibid) adopts the opinion that textual coherence should look at reading and writing as interactive processes involving the writer and the reader, as well as the text.

Meanwhile, Bamberg (1983) is interested in the notion of coherence within the realms of pedagogic implications. She argues that cohesive ties are not by themselves enough to create coherence in a text. She suggests that in theoretical discussions of coherence, instead of using hypothetical texts, passages that resemble students' writing should be analysed.

Stotsky (1983) feels that an analysis of expository essay writing texts might be more helpful to composition teachers. She argues that considering any derivative as simply a repetition of its base words may not provide an accurate description of the semantic relationship between two words.

Tierney and Mosenthal (1984) argue that cohesion does not necessitate the unity of a text. A tie could sometimes be used ambiguously by the writer. Subsequently, whether a tie is ambiguous or

not is a consequence of its use, not its mere presence. They acknowledge the view that the presence of a tie signals the reader to assume that a tie is used coherently, thus produces the production of a coherent text.

Myers (1991) states that Halliday and Hasan do not describe how sentences are connected and what kinds of connections are possible and not possible. They also did not show how different kinds of cohesion might carry different semantic relations.

Contrary to the opinions and research findings of these scholars about Halliday and Hasan's (1976) cohesion model, a number of studies have used the theoretical foundation proposed by Halliday and Hasan. These scholars are Pappas (1985), Myers (1991), Parsons (1991) and Sriniwass (1996). Under the general broad umbrella of cohesion, many researchers seem to agree that research on lexical cohesion produces more fruitful insights.

Pappas (1985) conducted a study using cohesive harmony in 1981 analysing story texts produced in three contexts by eleven children who were beginning first grade. The first context was a retelling of the story 'The Magic Porridge Pot'. The second context was a dictation and the third was a written context. Pappas (ibid) applied primarily Halliday and Hasan's (1976) theoretical framework on her cohesion analysis. Moreover, she employed Hasan's (1980) work using "componential devices" such as reference, substitution, ellipsis and lexical cohesion. Pappas sought computer assistance by using a one-factor repeated design Multivariate Analysis of Variance (MANOVA).

Her findings reveal that the cohesive harmony index is significantly higher in the retelling context than it is in the dictation and writing contexts. On the other hand, the cohesive density is higher in the retelling context than it is in the writing context. However, there are no differences in the measure of cohesive density between the retelling and dictation context or the dictation and the writing context. A major finding from her study revealed that assessing children's language capabilities based upon the language behaviour in a single context should be avoided.

Still in the realms of scientific genre, Myers (1991) conducted a study on scientific journal articles and popular science texts using Halliday and Hasan's (1976) cohesion model. His data was limited to introductions of specialized knowledge in science and popular science texts. From the data analysis, Myers (ibid) discovered that cohesive ties such as synonyms are not common in scientific articles but common in popular science texts. Oppositions were found in both texts as well. Other than these cohesive devices, superordinates are not so common in scientific texts but found a lot in popularisations. The findings also suggest that scientific texts readers need to posses knowledge of lexical relations in order to see the cohesion within the text. Meanwhile, readers of popular science texts need to see the explicitly marked cohesive relations and to link the semantic field of the specialized domain to those of everyday texts.

Differing from Pappas from the aspect of genre, Parsons (1991) study was on academic writing of post-graduate science

students. The students were asked to produce a written text describing the process involved in the growing and harvesting of coffee. He also employed Hasan's (1980) concept of cohesive harmony. The quantitative analysis from his study revealed that a control group of native speakers of English write better-organised texts than an equivalent group of overseas students.

Sharing a similarity in scientific genre with Myers, Sriniwass (1996) did an exhaustive lexical cohesion study on chemistry texts used primarily by beginning tertiary science students. She adopted primarily Martin's (1981, 1985b & 1992) theoretical framework in her analysis. The analysis of her data revealed a similar trend of simple and complex relations between the two chapters analysed. The findings of her study also revealed that repetition, hyponymy and hyponymy/repetition relations were favoured most. Other than that, repetition of a lexical item is also favoured over the use of a synonym. Her study on lexical cohesion also led to the development of system networks to conceptualise the knowledge of chemistry.

The research findings of researchers mentioned above denote the significance of Halliday and Hasan's (1976) work in cohesion studies, especially involving lexis. The two authors have provided us with a justifiable cohesion theory that is applicable for the preparation of instructional materials for ESL students, especially at the secondary and tertiary level. Their description of coherence or texture function as a unity with respect to their environment. A text coheres because it is made up of semantic relations making it a semantic unit. A coherent

interpretation is thus created by the reader with the expectations of these semantic relations or cohesive relations brought in from the context of situation and of culture.

2.8 Conclusion

Chapter 2 began with the contributions made to modern linguistics, in particular reference to De Saussure, Malinowski, Firth and Halliday. The context of situation and context of culture was given detailed treatment in this chapter. Halliday's approach to language and contributions from other neo-Firthian scholars was also discussed. The terms lexical cohesion, cohesive force and schematic structure were elaborated. Criticisms towards the 1976 cohesion model were presented and subsequently followed by studies conducted in lexical cohesion. Chapter 3 presents the research methodology employed in this study.