Chapter Two

Review of Related Literature

2.0 Introduction

This chapter examines the literature that has helped define and mould the theoretical and conceptual background of the study.

The first part of the chapter concentrates on a brief introduction of Systemic Functional Grammar with a description of its metafunctions and Nominal Group as propounded by systemic linguists. This gives an overall view of why the Nominal Groups are analysed as such in this paper. The second part concentrates on the related works involving the Nominal Group.
2.1 Systemic-Functional Grammar

Systemic Functional Grammar (SFG) originates from the ideas and theories of linguist M. A. K. Halliday who sees language as a resource for making and exchanging meaning (Halliday 1994). SFG's basic linguistic unit is a semantic one rather than grammatical; it is text working in context. (Text here is referred to as both spoken and written texts, unless otherwise specified.)

For Halliday, his construction of grammar must be one that recognises meaning and function as central features of language. Thus his grammar is semantic (concerned with meaning) and functional (concerned with how language is used).

The systemic-functional approach is seen as providing a very useful, descriptive and interpretative framework for viewing language as a strategic, meaning-making resource. In the preface to his book, *An Introduction To Functional Grammar* (1994), Halliday gives an open-ended list of 21 possible applications of systemic theory.

These applications include theoretical concerns ("to understand the nature and functions of language", etc), historical ones ("to understand how language evolve through time", etc), developmental ones ("to understand how a child develops language", etc) and educational ones ("to help people learn their mother tongue", etc) (Halliday, 1994: xxix).

In fact, systemic linguistics has been successfully applied in a number of fields such as: language education, (Christie 1991, Macken and Rothery 1991, and Rothery 1991), semiotics of visual art, (O'Toole 1989, Kress and van Leeuwen 1990),
stylistics (Thibault 1991), artificial intelligence (Bateman et al 1991), and speech pathology (Armstrong 1991).

In the Faculty of Languages and Linguistics, University of Malaya, works on systemic linguistics have been done: on phonology of a native Sabahan language by Wong T. K. (1994); on discourse semantics by Sridevi (1996) in chemistry texts, by Vijaya L. (200) in agricultural texts, and by Hashim A. (1996) in medical texts.

The study of lexical cohesion by Sridevi (1996) and Vijaya L. (2000) on technical texts from SFL point of view helped to steer this research onto inspirational texts, although the methodologies and analyses differ.

2.2 Metafunctions

Halliday (1968, 1969, 1970, 1980, 1985a & 1994) finds that language is realised according to three kinds of metafunctions: (1) ideational, (2) interpersonal, and (3) textual. These metafunctions are the functional principles of the internal organisation of semantics and lexicogrammar.

According to Halliday (1978: 48), "the significance of a functional system of this kind is that you can use it to explain the nature of language, because you find that language is in fact structured along these three dimensions. So the system is as it were both extrinsic and intrinsic at the same time. It is designed to explain the internal nature of language in such a way as to relate it to its external environment."

A clearer view of how the metafunctions work would help understand why Nominal Groups are studied as such in this paper:
(1) **Ideational.** Language is used to represent our experience, ideationally, and it allows us to encode meanings of our experience. Ideational meaning consists of two components: experiential and logical.

For example, in an abridged sentence taken from the texts (Extract One, Sentence 38), *Jack had three children in school*, meaning is construed through the organisation of experience. The sentence is about a person (*Jack*) possessing in the past (*had*) three other younger persons who are related to him (*three children*) and are in an institution of learning (*in school*). Meaning in this sense is known as experiential.

Experiential meaning is concerned with the ways language represents both actual and imagined experience of the outer world and the inner world of thoughts and emotions. In short, experiential meaning is concerned with how we talk about actions, happenings, feelings, beliefs, etc; the people and things involved; and the circumstances of time, manner, etc.

Not only is the ideational concerned with the representation or phenomena of our experience, it also encompasses the expression of the logical relations within the language. For example, the abridged aforesaid sentence, *Jack had three children in school, so we felt that we ought to pay him at least $850 a month*, is now connected to another clause, which expands its meaning. Thus, this meaning is known as logical.

(2) **Interpersonal.** Language also has an interpersonal function and it allows us to encode meanings of our attitudes, interaction and relationships.

If we study the aforesaid abridged sentence, *Jack had three children in school*, the following sentences are also possible: *Did Jack have three children in*
school? and Jack might have had three children in school. These three sentences may have the same experiential meaning, but they differ in interpersonal meaning.

The first sentence is a statement – informing the listener that the event has taken place, while the second sentence is a question – asking the listener to confirm or deny that the event took place. And the third sentence is still a statement, but it introduces an assessment by the speaker of the likelihood of the event actually having taken place.

Thus, both the second and third sentences differ from the first and each other in terms of their interpersonal meaning. Interpersonal meaning has to do with the ways in which we act upon one another in language – relaying and receiving information, getting people to do things and offering to do things ourselves – and the ways in which we express our judgments and attitudes – such things as possibility, necessity and desirability.

(3) Textual. Language also has a textual function and we use it to organise our ideational and interpersonal meanings into a linear and coherent whole. It allows us to encode meanings of text development.

There are also other expressions of the experiential meaning of the sentence Jack had three children in school. For instance, He had three children in school, and It was Jack who had three children in school. In the first instance, Jack has been replaced by the pronoun He. The listener would need to refer to the previous sentence in context to find out who He is.

In the second instance, the experiential meaning has been re-organised so that emphasis is now on Jack. Again, the listener has to refer to the context to fully
grasp the structure used. The previous sentence before that could have another speaker saying *I think Jim had three children in school* and the subsequent sentence is used to affirm that it was Jack, and not Jim, who had three children in school.

The two instances differ from the first sentence and from each other in their textual meaning – the ways in which language is organised in relation to its context. Textual meaning is important in the creation of coherence in spoken and written text.

Newcomers to SFG may presume that these three metafunctions act independently and discretely, but in almost every instant of language use, the three metafunctions operate simultaneously in the expression of meaning. These three functional components of meaning – ideational (experiential and logical), interpersonal and textual – are realised through the lexis and grammar of the language. The metafunctions are the functional principles of the internal organisation of semantics and lexicogrammar. They are simultaneously principles of semantic organisation of the texts.

Even so, Gomex-Gonzalez (1998) notes that in theory, SFG allows for intrinsically functionalist accounts of language and of the three metafunctions it serves, but in practice, it is a most arduous task because the SFG model is far from being complete or well-settled. Halliday himself (1994: xxxv) concedes that “our understanding of the meaning system is itself very deficient; so the face of a grammar turned towards semantics is still hardly illuminated.”

Gomez-Gonzalez concludes in his paper by providing some moot point discussions that he hopes would bridge some gaps in SFG and serve as a stepping stone to the process of rapprochement of different functional models. He also acknowledges
The experiential structure comprises six elements (in that order): Deictic, Numerative, Epithet, Classifier, Thing and Qualifier. Each element, as its name implies, functions in a particular manner.

Deictic, as its meaning in Greek connotes, points to determine; Numerative numbers; Epithet describes qualities; Classifier subclasses; Thing is an entity; and Qualifier further adds description. In this multivariate structure, each of the elements before (and after) the Thing has a distinct function with respect to the whole.

The analysis of the Nominal Groups in this paper is also based on the findings of Butt (1990), which give a better perspective on what constitutes a Nominal Group.

In his thesis, *A Functional Interpretation Of Grammar*, Butt (1990) indicates that though the experiential has six elements, not all of its possible roles need to be actualised in a particular instance. A Nominal Group does not necessarily have to have all the elements in its structure to be considered as a Nominal Group. He uses two examples:

**Figure 2.1 Examples of Nominal Group in experiential structure (Butt 1990: 20).**

<table>
<thead>
<tr>
<th>Deictic</th>
<th>Num.</th>
<th>Epithet</th>
<th>Classifier</th>
<th>Thing</th>
<th>Qualifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>the</td>
<td></td>
<td></td>
<td>visual</td>
<td>appeal</td>
<td>of the models themselves</td>
</tr>
<tr>
<td>A</td>
<td>large</td>
<td></td>
<td>part</td>
<td></td>
<td>of the pleasure of collecting toy soldiers</td>
</tr>
</tbody>
</table>

In his examples, Butt also comments that the Thing can have pronounced Qualifier information – specification that comes after the Thing. A third point that he raises is the fact that within the Qualifier, one can find structures of the same rank, that
is, Nominal Groups functioning within the Qualifier within a Nominal Group. He illustrates:

**Figure 2.2** Examples of Nominal Groups functioning within Qualifier within a Nominal Group (Butt 1990: 20).

<table>
<thead>
<tr>
<th>Deictic</th>
<th>Epithet</th>
<th>Thing</th>
<th>Qualifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>large</td>
<td>part</td>
<td>of the pleasure of collecting toy soldiers</td>
</tr>
</tbody>
</table>

He adds that this kind of internal nesting of structures is a design pattern quite common throughout nature. It may be a particularly economical principle for the success of complex systems, whether natural/biological systems or social/symbolic ones.

Butt (1990) remarks that this kind of fractal pattern is displayed right across the functional elements of language, not just in the internal structure of Nominal Groups. By fractal, Butt means that the tendency for patterns of order to repeat themselves on different ranks and levels in nature.

This paper seeks to discover whether if such fractal patterns are common in the Nominal Groups in inspirational writings with Christian themes, if really it is so common as an economical principle for the success of complex systems.
Eggins (1994) states that nominalisation of this kind allows us to pack in more lexical content per sentence. She illustrates that a Nominal Group in English can be counted, specified, described, classified and qualified as seen in the example Figure 2.3 below.

**Figure 2.3** Examples of lexical content expansion of Nominal Groups (Eggins 1994: 60).

- spiders
- the three spiders
- the three redback spiders
- the three shiny redback spiders
- the smallest of the three shiny redback spiders
- the smallest of the three shiny redback spiders in the corner
- the smallest of the three shiny redback spiders spinning their webs in the corner
- etc.

She further states that this kind of lexical expansion is not seen in other groups, not even the Verbal Group, though the Verbal Group possesses the potential to be expanded. She explains that the Verbal Group is expanded differently and the effect of the expansion has to do with specifying non-content aspects: tense, number, aspect, voice, etc. Thus, unlike the Nominal Group, expansion in the Verbal Group does not add more content to the clause.

Halliday (1985b: 72) concurs with Eggins in his remark: "the overwhelming proportion of 'content', in the sense of lexicalised meaning, is carried in the Nominal Group – by nouns and their premodifying nouns and adjectives.... All the meat of the message is in the Nominals."
Thus, one of the reasons for studying Nominal Groups in this paper is the potential of the Nominal Group to carry a higher lexical content than any other group in the clause. With higher lexical content, there is a higher probability of finding correlation between function and meaning, in this case, how the lexical content in Nominal Groups functions in response to the concepts found in inspirational writings with Christian themes.

In Nominal Groups, the elements of structure share a close syntagmatic relationship with Thing and this allows them to modify and extend the meaning. But this kind of ‘functional’ syntagmatic relationship is different from that of formal grammar.

Eggins (1994) differentiates the two by differentiating the way functional and formal grammar labels its respective constituents. She points out that formal grammar divides its texts into stages or parts according to the form of the different constituents, whereas functional grammar divides its texts into stages or parts according to the function of the different constituents.

Thus, formal grammar emphasises sameness, dividing the stages or parts into constituents of the same type. And functional grammar emphasises on the different functions of each stage. Figure 2.4 gives a summary of the different emphasis. Figure 2.5 gives an example of how the Nominal Group is labelled in formal grammar, while Figure 2.6 shows how the Nominal Group is labelled in functional grammar, both using the Nominal Group (E4.S33.11) from the text.
learning computational techniques with instructional manuals that are filled with jargons and scientific terms.

These practical problems of teaching and learning of science have spurred a number of researches into this area of scientific and technical writing.

In their research, Halliday and Martin (1993) look into two tasks: (1) identification of certain characteristics of scientific prose, and (2) the issues that concern educating children to use and understand language appropriate to specific contexts. Halliday and Martin used SFG to analyse and describe the language, and to explain how it developed in the way it did.

One of the specific features of scientific writing, discovered by Halliday and Martin, is the nominalisation of processes. Nominalisation happens when the process, which is often realised by a verb, is realised instead by the noun. For example, the verb pollinate is nominalised as pollination, accelerate as acceleration, etc.

Thus, there is a tendency to use Nominal Groups in scientific and technical writing, with a number of effects on scientific texts. Firstly, this leads to an omission to most or all references to people, resulting in a “distancing” effect whereby scientific knowledge is portrayed as an external objective reality, devoid from the people who have researched it. This gives a feeling of “objectivity” to the truth or claims researched by the scientists.

Secondly, nominalisation allows the textual development to change its usual order with the nominalised process being at the starting point of the sentence, rather than being elsewhere in the sentence. For example, The way Sally acted was comically described by him could be written with nominalisation as His description of Sally’s way
of acting was comic. The verb 'describe' is nominalised and changes its order of appearance in the sentence.

Thirdly, it allows the nominalised process to become the Thing of a Nominal Group and as such, available for modification, as a Classifier in a Nominal Group. For example, *sheet metal fabrication* (Thing) and *fabrication engineering* (Classifier); *technical information* (Thing) and *information technology* (Classifier).

Halliday and Martin (1993) show that nominalisation and other grammatical characteristics of scientific texts are important for the expression of scientific knowledge, and also how schoolchildren need to be oriented into the use of appropriate scientific language at an early age.

Functional grammarians sometimes call nominalisation a grammatical metaphor (Halliday 1967, 1985a: 319-345). Like the more familiar lexical metaphors, grammatical metaphors represent a shift or transference of meaning.

We can tell that the clause is metaphorical because the truth would be impossible or incongruent. For example, *The boy is tiny* (possible or congruent meaning) and *The boy is a twig* (incongruent or metaphoric meaning). In fact, any mismatch of processes and participants is a shift in experiential meanings and this is what happens in nominalisation (Butt et al 2000).

In sharp contrast to the discourse of science, the discourse of history is not a technical one, with relatively few technical terms, but it also uses nominalisation or grammatical metaphor substantially to state its case (Martin 1991). The reason for this is that history can be very abstract, especially when explaining why things happened as
it did. In linguistic terms, this means that reasoning is realised inside rather than between clauses.

According to Martin (1991), both technicality and abstraction depend on nominalisation. In science, nominalisation is strongly associated with definitions; its function is to accumulate meaning so that a technical term can be defined. In history, nominalisation is strongly associated with realising events as participants so that the logical connections can be realised inside the clause; and at the same time nominalisation is deployed to construct layers of thematic and information structure in a text.

Thus, inspirational writings with its bend on abstract concepts may have the same nominalisation characteristics that writings in history possess. But even if there are similarities, this paper may not look at the nominalisation aspect. The reason being that nominalisation, though used, may not relate to the concepts found within such inspirational writings.

Butt (1990) states that much of our world is filled out by abstract things created by our potential in English for nominalisation, for example in *The impact of the balance of payments*. He goes on to emphasise that the concept of *a balance of payments* is sufficiently abstracted from the natural experience of human beings, and so too is the idea of its *impact* being Thing-like.

Thus, the Nominal Group reveals just how much our linguistic expressions do not simply correspond to natural classes of phenomena. But it is also a case of us choosing either to *make* our world more Thing-like or more by the way of events and processes. He also surmises that nominalisation plays an important role in the
development of technological discourse, which relies on abstract entities and the convenient packaging of events into nominal structures.

Guillen Galve (1998) points out that one of the pitfalls in the study of the construction of Nominal Groups in written English for Science and Technology (EST) is treating those phrases as exclusively static; in other words, as given, or created outside the text. But his reading of entire scientific pieces of discourse published in medical journals reveals that not all Nominal Groups are static, or given. In contrast, nominalisation in medical journal texts written in English allows shared semantic components to be represented in different ways by the use of grammatical metaphor.

Thus, we see that certain kinds of texts — in particular, scientific and humanities writings — contain a higher degree of nominalisation as compared to others.

Apart from the aforesaid works, which refer to the external functions of the Nominal Group in relation to the clause, there is very little research done explicitly on the internal functions of the Nominal Group, the inter-relation of elements within the Nominal Group, as in the focus of this paper.

Works that highlight the internal functions of Nominal Groups (Downing and Locke 1992, Bloor and Bloor 1995, Thompson 1996, and Lock 1996) are usually descriptive and pedagogical, and presents the Nominal Group as one part of larger descriptions of SFG.

As stated, very little research as been explicitly done on the internal functions of Nominal Groups. However, some research do cover a small portion of it, even though its main thrust is not focused on it.
Guillen Galve’s (1998) study on the nominalisation occurring in written medical English reveals that relatively large numbers of modifiers are piled up to the left of Thing, and this kind of extensive prenominal modifications very often occurs within lengthy Nominal Groups built on comparatively long Pre-Modifiers and Post-Modifiers.

He finds that long strings of Classifiers modify Thing, for example, continuous intra-arterial pressure monitoring, accidental nerve fascicle penetration, hind limb flexion reflex withdrawal time, etc. Also Classifiers tend to predominate over Epithets in those long Pre-Modifiers.

Thus, we can see the amount of information packed into them despite their simple lexicogrammar. This tendency, in Halliday’s (1985a: 376) words, “to package as much as possible into the Nominal Group” should not be just confined exclusively to written EST. But rather to English in general, since that is a property of the recursive aspect of the modifying relation in English, which according to Halliday (1985a: 172), “[shows] the Nominal Group as a regressive bracketing”.

Needless to say, Dubois (1982) notes that written medical English favours the use of univariate and almost univariate structures. And it is clear that these structures are also characterised by high lexical density, and the combination of those factors with metaphorical processes.

Jenkins’ (1993) analysis of a chapter of Stephen Hawking’s A Brief History Of Time reveals that the Nominal Group structure is relatively simple. 53% of the Nominal Groups consist of noun or pronoun, with or without determiner. That is, the Nominal Groups are maximally short and simple. She notes that even the more complex
of Nominal Groups can be readily analysed by a reader, for their structure is transparent, and this is strongly contrasted with specialist science texts.

She discovers Hawking limits his use of modifiers before Thing and almost entirely avoids compound (hyphenated) modifiers. When there is a modifier before Thing, they are mostly Epithets, rather than Classifiers, for example, in a fundamental, inescapable property of the world. Even so, where Classifiers are needed, it is used singly, for example, quantum mechanics, wave crest, X-rays, etc.

Thus, as Jenkins concludes, in the interest of clarity for the general reader, simplified Nominal Group structure is preferred. This conclusion may be helpful in deducing the Nominal Groups in this paper as the inspirational writings are also targetted to the general reader.

In studying Functional Variations In The NG Pre-Modifiers In Written English, Lopez-Folgado (1998) centres his attention unto the Epithet and Classifier elements and its functional variations. He notes that for the hearer to interpret the message correctly in terms of the modifiers used, the hearer more often than not has to rely on pragmatic factors such as situational factors and background knowledge in order to access the relevant message.

As Halliday propounds (1994), there are two types of Epithets: experiential and attitudinal. Lopez-Folgado concurs with him, but adds that classificatory distinction can hardly work as a general criterion. That is because that distinction leaves too much leeway to the speaker's selection of systemic options that should ensure a correct uptake on the part of the hearer. The hearer in discourse is supposedly guided by the signals of linear order, as in the case that “attitudinal Epithets tend to precede experiential ones”
(Halliday 1994: 184). Furthermore, the matter gains a degree of complexity when we introduce an additional Epithet.

Lopez-Folgado concludes by saying that there are considerable functional variations in the Nominal Group Pre-Modifier across written genres. And that "the communicative goal we as speakers have to face when making avail of ... discourse genres somehow determines, and to a certain extent anticipates, the type of modifying adjectives one is bound to use" (Lopez-Folgado 1998: 96-97).

In this respect of accessing the right message, the writer and the reader of inspirational writings must possess the same background knowledge for the communicative goal to be successful. Without which, both writer and reader might derive different meanings from the texts.

2.3 Conclusion

The review of literature has revealed that that SFG has many open-ended applications, and particularly in text analysis, it has gained prominence in its efficient and effective way of dissecting certain patterns from the texts.

The Nominal Group is also seen as having univariate and multivariate functional capabilities, adding to its versatility as a tool of analysis. The analysis of Nominal Groups is helpful in analysing abstract and technical texts, for example, in the field of science and technology.