Chapter 4:
Research Design and Analytical Approaches to Identifying Choice of Theme

The aim of the present research was to investigate Theme choices in memos, letters and reports and to uncover the linguistic resources a writer employs in their particular choice of Theme. With this in mind, two research tools were adopted in the present study: a text analysis following an SFL approach and informant interviews. The methodological concerns related to informant interviews will be outlined in Chapter Seven. This chapter introduces text analysis as an analytical tool and presents the rationale, procedures and concerns which emerged in the course of the investigation.

The research questions addressed in Chapter Three are repeated below:

1) What function does Theme perform in written workplace texts?
2) Where should the boundary between Theme and Rheme be drawn?
3) What, if any, are the major issues related to establishing this boundary?
4) How can different Theme choices be labelled?
5) What are the constituent elements of Theme and what function does each perform?
6) How does extended Theme function in the texts?
7) What evidence is there that the choice of Theme is genre-related?
8) What linguistic resources are used to construe interpersonal realisations through choice of Theme?

Before discussing the research tools which were employed to address these questions, in Section 4.1 the background to the study and its relationship to two larger research projects, the Effective Writing for Management Project (EWM) and the Communication in the Professional Workplace Project (CPW) is presented. The corpus used as the basis for the present study is comprised of data gathered in the EWM and CPW projects. Understanding the source and context of the data is crucial to understanding the present study. The theoretical paradigms and the appropriateness of the research paradigms underlying these projects in relation to the present study are discussed in Section 4.2. The field of corpus linguistics and the criteria for selecting the present corpus are outlined in Section 4.3. The procedures, processes and considerations guiding the lexico-grammatical analysis of the texts are outlined in Section 4.4. A discussion related to the value of conducting a study based on more than one research tool and the way how studying data from multiple perspectives improves the validity and credibility of research findings is presented in

Section 4.5. In the final section, Section 4.6, the key concerns and procedures adopted in the present research will be drawn together and concluding remarks will be presented.

4.1   Background to the present study

As noted previously, the data for the present study were taken from two research projects: The Effective Writing for Management Project (EWM), situated at the School of Education, University of Bristol, UK and the Communication in the Workplace Project (CPW) situated at the English Language Centre, University of Hong Kong, Hong Kong. Both projects aimed to investigate the principal writing requirements of sample populations of members of the business world (Davies and Forey, 1996; Nunan et al., 1996). Both the UK and Hong Kong data involved informants who were employed in the workplace, specifically managers from a range of different backgrounds in the EWM project and managers who were all accountants in the CPW project. The specific aims of both studies were to investigate the writing processes and the documents produced in the business environment, and to assess the extent and nature of training needs within the workplace. Questionnaires and interviews were used in both studies with the principal aim of eliciting from managers their views about the process of writing, the importance of writing and the effectiveness or otherwise of the texts they produced or received in the course of their day-to-day work. In addition, the respondents' opinions and views related to the type of written communication training and support which they believed was needed in the workplace were also elicited.

However, there was a distinct difference in the sample populations of the UK and Hong Kong studies. The UK population included representatives of managers from a range of different industry backgrounds, including media, local council, government, information technology, construction, engineering, aeronautics, nursing, and banking and finance among others, throughout the UK. These respondents were in the workforce while also undertaking part-time studies towards a Master of Business Administration degree at the time of the survey (Davies et al., 1999). Questionnaire data were collected from 202 managers, representing a response rate of 18.9%. In addition, interviews were conducted with 30 managers who, as part of their participation, brought to the interview texts from their workplace which they thought were either effective or ineffective. These texts were discussed as part of the interview.

The Hong Kong data were restricted to business people in the field of accounting. In the accounting profession there are two distinct sets of professional accountants: those

working within a public auditing company, who are involved in auditing the accounts of organisations, and accountants working in commercial organisations. Public auditing accountants included accountants from what used to been known world-wide as 'The Big Five' public auditing firms, as well as other smaller auditing organisations. Accountants from the commercial sector worked in a wide range of industries, including transport, hospital, government, hospitality, wholesale, retail, other merchandising companies, and banking and finance sectors. The CPW project data comprised 1,007 questionnaire responses, 30 interviews (Forey and Nunan, 2002:206-207) and approximately 20,000 words (Nunan and Forey, 1996).

   The data collected through interviews also involved the development of a corpus of texts, i.e. the respondents brought examples of texts they believed were either effective or ineffective and these texts were discussed as part of the interview. During the interviews the respondents discussed the importance of writing and the positive influence from both an organisational and individual perspective of being able to write well. At an organisational level "the image of a firm is conditioned in important ways by the quality of written products" (Forey and Nunan, 2002:209). At an individual level "writing skill was one of the main criteria used to appraise an individual's performance, and the ability to write well was highly correlated with both promotion and popularity" (Forey and Nunan, 2002:227). Such issues related to writing and the importance of writing in the workplace dominated the discussion in the interviews (Davies and Forey, 1996; Nunan et al., 1996; Davies et al., 1999; Forey and Nunan, 2002). The texts that the informants brought to the interview tended to be discussed in the final part of the interview. (The term 'respondents' is being used to refer to participants involved in the EWM and CPW project, which is differentiated from 'informants', which refers to the participants involved in the focus group interviews discussed in Chapters Seven and Eight). The comments related to these texts were sparse and sporadic. Some informants supplied the interviewer with the texts and offered no commentary about the chosen texts. Others offered a commentary which was limited to observations about grammar and sentence structure. Two differences between the projects should be noted: the EWM managers were all native speakers of English and those who volunteered to be interviewed were highly articulate about most issues, with the exception of the discussion related to the language and meaning of the sample texts they brought to the interview. The CPW sample included a limited number of native English speakers, with the majority being native Cantonese speakers and these were not as forthcoming in their discussion about language in the workplace as the EWM

respondents. For these reasons, the EWM and CPW interviewee comments have not been included as part of the present study. Instead, a new set of informant views about texts was collected, and this is discussed in Chapters Seven and Eight. Two groups, business and teacher informants, were involved in the study at this particular stage. These informant group interviews focused on specific linguistic features and provided insight into the way in which the language of the texts was interpreted. By focusing on the analysis of texts and informant interpretations, this study extends certain aspects of the work carried out in both earlier projects. The data in the informant interviews were focused on the language of the texts and a detailed discussion which could be related explicitly to specific realisations in the texts ensued. This provided a rich source of information, which could be used to support, or question, the linguistic analysis carried out. It revealed the way in which linguistic resources were seen to influence multiple interpretations, with different readers interpreting the same text in different ways. It also shed light on some issues related to organisational culture, as a number of opposing views surfaced where the teachers and business people, who operate in very different environments, interpreted the texts differently in a number of salient ways. The findings also call into question the role that cultural factors play in the interpretation of meaning construed through linguistic choices.

The distinct differences between the UK and Hong Kong data may raise a number of questions about the compatibility of the data sets. However, in the present study it is assumed, as argued by Scollon and Scollon (1995), that there are greater gender and generational differences in the discourse used by people in the workplace than there are cultural differences between countries:

> Ultimately we will argue that the cultural differences between people in professional communication are likely to be rather less significant than other differences which arise from being members of different gender or generational discourse systems, or from the conflicts which arise between corporate discourse and professional discourse systems.

(Scollon and Scollon, 1995:4)

As argued by Scollon and Scollon (1995), the differences in the discourse between the UK and Hong Kong data are likely to be limited, and workplace English is virtually an 'international language'. In both studies, English was the recognised medium of written communication, regardless of the mother tongue of the writers and their geographic location (Forey and Nunan, 2002).

The data collected in the EWM project tended to be from large and, in many cases, multi-national organisations, whereas virtually all the texts collected in the CPW data were from multi-national organisations. As pointed out by Scollon and Scollon:

> Hong Kongers' culture is quite flexible in that they can relate their behaviour either to the old fashioned conservative Chinese aspect of culture, or on the other hand the business man has the option to present Hong Kong as a modern centre from the international business culture, "the most progressive leading edge of Asian internationalisation".

(Scollon and Scollon, 1995:128)

International business is the economic cornerstone, which drives the viability of Hong Kong as a competitor in the fierce South East Asian and worldwide market. The present study does not totally deny the fact that intercultural differences exist, rather it focuses on the notion of culture as incorporated within the lexico-grammatical choices in the language (Painter, 2001). A study of intercultural issues related to communication in the workplace would possibly result in interesting findings, but this is not the focus of the present study. Thus, it was predicted that the generic variation of the memo, letter and report texts was more salient than the organisational context of the respondents.

4.2   Selecting a research paradigm

4.2.1   Differing research paradigms

Before discussing the particular methodology followed in this study, it is essential that the theoretical perspectives motivating the research be discussed. Many educational researchers believe that the theory adopted for a study acts as the foundation and helps gather the data into "a coherent conceptual framework of wider applicability" (Cohen and Manion, 1994:7). Lynch (1996:13) states that the epistemology which is used as the basis of the research explains "how we know what we claim to know". Thus, in all studies the epistemological foundations affect what is viewed and counted as knowledge (Hammersley, 1992; Cohen and Manion, 1994; Lynch, 1996; Scott and Usher, 1996; Guba and Lincoln, 1998). The researchers' interpretations are therefore reported through "their own conceptual and perceptual lens" (Scott, 1996:67). Scott (1996) asserts that researchers need to discuss and clarify the epistemological basis of their research. Moreover, the theoretical paradigms on which the research is based will also have direct implications for the methodological concerns of the research (Cohen and Manion, 1994:7). Thus, this section attempts to briefly discuss the research paradigm in which the study is situated.

Positivist/empiricist research emphasises 'determinacy' and is also 'unreflexive' as it focuses on the methods and outcomes and asks no questions about the research process (Usher, 1996:13). The positivist/empiricist research paradigm is based on the 'hard sciences' model where ontological features can be explained by means of observation and experimentation. However, for the purpose of this research, a study of authentic language use, such a model is inappropriate.

The theoretical model adopted for this study is more aligned with social research where, as Usher points out, "knowledge is concerned not with generalisations, prediction and control but with interpretation, meaning and illumination" (1996:18). In the present study interpretation occurred at a number of different levels: The texts forming the corpus were selected by informants on the EWM and CPW projects. During the EWM and CPW projects, managers were interviewed and supplied the researcher with sample texts. From the full EWM and CPW corpus, a random selection of memos, letters and reports was taken to form the corpus analysed in the current study. The texts were analysed at a lexico-grammatical level based on the SFL theory of language. Text analysis is unavoidably inter-pretative, as a text may be analysed in many different ways depending on the linguistic theory, the researcher's purpose and the socio-cultural background of the researcher. The two texts used as a basis for collecting teacher and business informant interpretations, discussed in Chapter Eight, were carefully chosen from the corpus of texts with regard to their suitability to elicit views about textual and interpersonal meaning. The data collected from the teachers and business informants involved the informants giving their inter-pretations and personal opinions of the two texts and the way in which they viewed written meaning within the context of the two texts. In addition, the informant interview data were analysed by the researcher following an inductive method.

The data used for this study cannot be viewed as 'truth', 'hard' or 'objective', terms used in the positivist/empiricist model; the data in this research are seen as representing only a partial story of the social context in which the texts were constructed. Varying inter-pretations influence the data collected throughout this study. The data in this research cannot be taken as 'indisputable evidence'; rather, they aim to 'persuade' and 'illustrate' certain human behaviours which were caught and dissected through the lens of the researcher (Guba and Lincoln, 1998:202). The study thus attempts to understand examples of written text constructed within the context of the workplace in order to inform pedagogy at a later stage.

The collection and interpretation of the data reflect the researcher's own perspective (Usher, 1996:21). The researcher should be the 'essential starting point' for acquiring data, which predates knowledge. Thus, an attempt to describe the 'starting point' of the present research entails a brief description of the researcher's perspective. The researcher is an English female in her early forties, who has been involved in education for over 14 years. For the researcher, the purpose of applied linguistics in general, and of this study in particular, is "to discover the unconscious rules which govern our behaviour and to make them explicit – to make the invisible visible" (Martin, 1984:21). In the collection and interpretation of the data certain issues related to the researcher's background, such as her cultural reading of the way in which meaning is construed through linguistic choices, her experience of working with constructed workplace materials in the classroom and her involvement with the EWM and CPW projects, will affect the outcome of the study.

The study aims to make some of the implicit language choices found in workplace texts explicit. As noted in Chapter Two, an important motivating force behind the study is the possibility that the outcomes of this study may be used later to help inform language pedagogy.

As noted by Scott (1996:70-71), in research there is always a 'gap' between the accounts given and reality, as the accounts are snapshots that are interpreted and reported by the researcher. The researcher and informants report the data from their own perceptions and as such they approximate and retell what they believe has happened. If research is understood in this manner, then it is far more honest than if it is presented as 'truth' and 'factual'.

4.2.2   Ethical considerations

In the process of data collection, ethics were a major consideration. Gaining the trust of the respondents who provided the texts and informants who offered their interpretation of texts, as well as ensuring confidentiality was maintained in the texts in the corpus, was paramount. Ethical considerations related to data collection involved the decision whether to reveal to the participants the aim and purposes of the research. Throughout the research, the study aimed to incorporate an open and transparent research model, where the aims and purpose of the research were shared with the subjects. All subjects were informed in detail about the purpose of the research. The subjects were audiotaped and sent copies of their transcripts, allowing the participants the right to veto any data they did not wish to reveal.

Simons (1984) suggests five democratic ethical procedures which need to be addressed throughout data collection. These five procedures and the way in which they relate to the present study are outlined below:

1) The researcher should attempt to act "impartially", i.e. "withhold their judgements" and represent a range of views.

   In fact, wherever possible, the researcher tried to remain impartial. The text analysis was carried out on the basis of an established theory of language, an SFL model of analysis. During the interviews, the respondents/informants were encouraged to control the pattern of the discussion, with only minimal prompts from the researcher.

2) Participants should have control over release of their data at every stage of the research.

   The parameters of the research and the interview were carefully explained to all participants. The respondents who provided the texts in the EWM and CPW projects self-selected the texts they wished to give to the interviewer. They were also encouraged to delete sensitive information found in the texts. The teacher and business informants were given the option whether they wished to be audiotaped or not and a signed consent form was obtained. The transcripts were returned to respondents/informants to allow them the opportunity to veto and/or amend their transcript in any way.

3) There should be a control mechanism over the fairness and accuracy of what is being reported, which should be negotiated between the researcher and participant.

   The EWM and CPW interviews in which the texts were collected and the informant interviews in the present study were all set up in an informal, open and friendly environment where participants were encouraged to comment, question and interrupt at any time. Respondents and informants all had the opportunity to amend and edit the sample texts they donated and the transcripts from their interview.

4) Participation should not be compulsory.

   All respondents and informants were volunteers. Both the UK and Hong Kong respondents were contacted prior to the interview and the aim and purpose of the research were discussed.

5) The researcher should be accountable not only to the participants, but also to other parties who have an interest in the research.

   In both the EWM and CPW projects a steering committee, made up of academics in the field of business and applied linguistics and influential members of the business community, was established. The steering committee oversaw, questioned and guided the CPW and EWM research projects. Beyond the time frame of this project, the researcher's supervisor was also closely involved in overseeing the direction of the study.

The anonymity and confidentiality of all participants has been protected. All names, dates and sensitive information in both the interview and corpus data have been changed. At the time of data collection every effort was made to establish and maintain equity in status and equity in the interpretation of the data between researcher and respondents/informants.

4.3   Establishing a corpus of authentic workplace texts

The corpus of the present study consists of texts which were selected by the managers and junior managers who volunteered to be interviewed as part of either the EWM or the CPW project. The specific criteria for selection were that the sample texts should be used within the workplace, and that they should be considered, by the respondent, to exemplify either effective or ineffective texts. This was consistent with the basic aim of both surveys, namely to establish the criteria respondents use when evaluating or producing text. In the event, this aim was not achieved; no clear pattern of responses was discernible and responses were fragmented and could not be verified in any way. The respondents' responses tended to be centred around issues related to grammar, or what the respondents believed to be grammar, which commonly referred to points such as spelling and sentence structure (Davies and Forey, 1996; Nunan et al., 1996), which is similar to Berry's experience (Berry, 1996). However, one feature which did emerge during the interviews was the extent to which managers revealed a deeply personal commitment to writing, as shown by respondents' comments that "writing is an essential part of the organisation" and that writing is "an opportunity to impress" (Davies et al., 1999:298). Many of the issues related to different writing practices and processes were investigated in both the EWM and CPW projects, such as the amount of time spent writing, the process of writing (which included drafting and redrafting), who was involved in the writing process (i.e. other colleagues, secretaries, etc.), whether their written texts were reviewed by others, and so on. In addition, a number of questions were asked with respect to perceived strengths and weaknesses, preferences and views about writing. The findings of both the EWM and CPW projects also discussed issues related to how the managers learnt to write, as well as the provision and need for training related to written texts. These and many other issues related to both projects are discussed in the respective reports and published papers (Davies and Forey, 1996; Nunan et al., 1996a/b; Davies et al., 1999; Forey and Nunan, 2002).

The EWM data in particular identified the three key genres used in the workplace, viz. letters, memos and reports. Memos, letters and reports were selected as they not only represent the most frequently written workplace texts, they are also the texts most commonly included in business communication text books. In a random sample of nine business communication text books, all nine books dedicated a great deal of space and time to information related to memos, letters and reports (Guffey, 1991; Thill, 1991; Treece,

1994; Chandler, 1995; Baugh et al., 1996; Ewald and Burnett, 1996; Lahiff and Penrose, 1997; Lehman and DuFrene, 1998; Inkster and Kilborn, 1999; Krizan et al., 2002).

A preliminary reading of the corpus data suggested that although these texts serve a basic informing function, they also frequently have an interpersonal function. As the present research progressed, this interpersonal aspect of language, which was initially seen to be merely textual, became increasingly important. For example, in Letter 12 the writer reassures the reader by stating *I am sure you will be pleased to learn that these measures appear to be having an effect.* In this clause complex it is clear that the writer is stressing interpersonal choices in their choice of linguistic resource in order to reassure the reader.

It was thus that the more specific aims of the present study became established. The aims were to investigate the range and extent of common features existing in the choice of Theme in the memos, letters and reports. As the study progressed, the analysis became increasingly sensitive to the ways in which interpersonal meaning was established and the linguistic devices employed by the writers that influence the interpersonal meaning of a text in the choice of Theme.

4.3.1   A small corpus

In seeking to achieve these aims the present corpus would appear to meet three of the four criteria outlined by Biber et al. (1998). The four basic characteristics of a corpus are that it

i	is empirical, analysing the actual patterns of use in natural texts;
ii	utilizes a large and principled collection of natural texts, known as a "corpus", as the basis of analysis;
iii	makes extensive use of computers for analysis, using both automatic and interactive techniques;
iv	depends on both quantitative and qualitative analytical techniques.

(Biber et al., 1998:4)

The present corpus is 'empirical' as it analyses the natural patterns at a lexico-grammatical level; is based on natural texts; and incorporates both qualitative and quantitative analytical techniques. However, the present study differs from Biber et al. (1998), and from what is commonly known as 'corpus linguistics', in the use of computers for analysis. In the present study the lexico-grammatical analysis of Theme has been carried out manually, rather than by "subjecting the texts to quantitative analysis using readily available software and from which the human analyst can interpret the results" (Ooi, 2001). Frequently in corpus linguistics the data are tagged and studies, for example of collocation, are carried out on millions of words through software such as WordSmith (Scott, 2001), Vocabprofile

and RANGE (Nation, 2001). As Stubbs (2001:317) points out, "millions of running words can be searched for patterns which cannot be observed by the naked eye". Sinclair (1997) adds that corpus linguistics uses authentic texts to verify what was previously often left to the researcher's intuition, to inspect co-text collocations within different contexts and to identify the distinction between form and meaning. Because corpus linguistics frequently deals with large sets of data, the output of such studies, i.e. the results of searches within the corpora, is often reliable.

Within the field of SFL there are few resources for conducting a computerised lexico-grammatical analysis. Only recently have resources of this sort become available, for example, O'Donnell's 'Systemic Coder' (2002), or Judd and O'Halloran 'Software for Research and Teaching SFL' (http://courses.nus.edu.sg/course/ellkoh/Overview.html). However, these resources were not available in a tried and tested form when the analysis was undertaken.

Against this background the term corpus is used in the present study to refer to the small, specialised corpus of a modest 31,883 words. (See Section 2.2.2 for a brief summary of similar-sized small corpora). The analysis of Theme has been carried out manually in a comprehensive and exhaustive manner. The texts were scanned and converted to a digital form, then checked for accuracy. Finally all names, figures, and identifying traits were changed to make the texts anonymous. Therefore, when these texts are read as part of a research study, it should be noted that the original name or organisation would perhaps elicit slightly different interpretations by the reader. However, in the present context this cannot be avoided. The corpus texts were manually subdivided into 1,486 main clauses or, where a main clause was accompanied by dependent clauses, into clause complexes within the boundary of the orthographic sentence. (The unit referred to as the main or independent clause is also referred to as α (alpha) clause in a clause complex. A definition of this type of clause is presented in Section 3.5.3). A more detailed description of the unit of analysis is given in Section 3.3. The analysis was recorded in a tabular format which was used to display the type of Theme chosen. This analysis is shown in Appendix II.

4.3.2   Details of the corpus of the present study

As previously established, the corpus of the present study consists of texts from the EWM and CPW projects. The details of size, number of α clauses and number of words of the corpus are presented in Table 4.1. In developing the corpus it was hoped that half the data

would come from each of the UK and Hong Kong studies. However, due to availability of texts, the balance between the texts from the UK and Hong Kong is not exactly half each.

In total there are 62 texts, comprising 30 memos, 22 letters and 10 reports. Of the 62 texts, 33 (53.2%) originate from the UK project and 29 (46.8%) from the Hong Kong project. In total there are 1,486 α clauses analysed for Theme. The 30 memos comprise 504 main clauses and 9,788 words, the 22 letters 248 main clauses and 5,652 words, and the 10 reports 734 main clauses and 16,403 words.

A full list of each text, illustrating its origin, the reference used, the title of the text, the number of clauses, the number of words and comments, is found in Appendix I. In this appendix the column labelled *Ref* represents a coding system, which is used to recognise the source of the individual texts, as shown in Figure 4.1. The title listed in the second column is the title used in the document; if no title was provided a suitable title was added in the table in order to help recognise individual texts. In addition, in the column labelled *Comments* there are notes related to whether the text was effective or ineffective are recorded and in total seven (11.1%) texts were labelled ineffective. The reason for including a small number of ineffective texts is that the corpus then is perhaps more reflective of the type of texts written in the workplace. All texts termed ineffective included in the corpus were included after they had been written and circulated in the workplace.
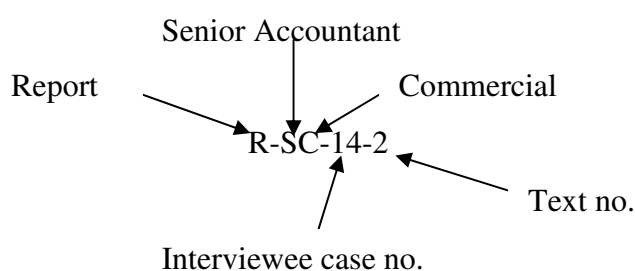
Senior Accountant

Report   Commercial

R-SC-14-2

Text no.

Interviewee case no.

Figure 4.1: Coding system for text identification

Figure 4.1 illustrates the coding adopted for recording the origins of the texts. For ease of discussion this identification label is restricted to texts in Appendix I and II only. A prefix of *R, L* or *M* identifies the text as a report, letter or memo. The second digit (*E, S* or *J*) identifies the source: *E* means that it is from the Effective Writing for Management project, UK; *S* and J refer to the status of the manager from the Hong Kong corpus; *S* and *J* refer to senior and junior. This is followed either by a *C* or a *P*, indicating a commercial

organisation or a Certified Public Accounting organisation. The first number identifies the case number of the interviewee, and the final number identifies the text number. As noted previously, this coding system is used in Appendix I and II; in addition all texts are labelled Memo 1, Memo 2, etc. This is the term used to discuss individual texts throughout the thesis.

The procedure of analysing the texts leading to an understanding of the common lexico-grammatical features will be discussed in the following section. Although the focus of the present study is on interpersonal features found in the choice of the textual metafunction, all three metafunctions, textual, interpersonal and ideational, will be presented in brief below in order to provide relevant background information. As noted previously, the meta-functions together simultaneously combine to create the meaning in the message.

4.4   Lexico-grammatical analysis and the metafunctions

4.4.1   The metafunctions

The present study focuses on an analysis of the textual metafunction and more specifically on the way in which interpersonal meaning is construed in the choice of the textual meta-function. However, the focus on the textual metafunction and related discussions through-out the study draws heavily on the role of the interpersonal and, to a limited extent, ideational choices within the Theme of the main clause. In order to provide background information, a discussion of all three metafunctions is presented.

Each metafunction, and the choices within that metafunction, is concerned with one particular area of meaning (as discussed in Section 2.7.2). The ideational metafunction relates to the linguistic coding of things, and events of experience. This system is known in SFL as transitivity, and includes the following features:

- process type (material, e.g. *go*, *do*; mental, e.g. *believe*, *hope*; verbal, e.g. *say*; relational, e.g. *be*);
- Circumstantial Adjunct (time, place, manner, cause, etc.);
- participation (transitive vs. intransitive).

The interpersonal metafunction relates to the way in which the relationship between the writer and reader is realised. This is known as the Mood system and includes features such as:

- mood (declarative, interrogative, imperative);

- modality (degrees of probability and obligation, e.g. *must*, *should*); polarity (positive / negative);

- vocation (terms of address, e.g. *sir*, *John*);

- person (e.g. *I*, *you*, *your*, *his*, *she*, *they*);

- speech function (statement, question, answer, offer, etc.);

- attitude (Modal Adjuncts, e.g. *unfortunately*) (Painter, 2001:177).

The textual metafunction is seen to organise the ideational and interpersonal choices into a coherent message. The components of the textual metafunction have been presented in Chapter Three. Many of these systems and terms will be referred to later in the study.

In addition to the lexico-grammatical analysis, certain standard symbols used within SFL have also been applied in the analysis of the data. The symbols used are (after Halliday, 1994:65):

[ ]	- ellipsis, e.g. *Please [you] contact Sylvie Robinson TT5, for meal tickets which are six pounds per person.* (Memo 7, clause complex 8)
[[ ]]	- downranked or embedded clause; it 'defines' the identity of a feature without entering into a relationship of hypotaxis or parataxis, e.g. *The equipment [[being used for off-air recording]] could be improved.* (Report 3, clause complex 64). Embedded clauses are not analysed; as Martin et al. (1997:177) point out, "they should be ignored".
<< >>	- clause boundary for an included clause, e.g. *the annual operating cost, <<including the waste collection service>>, would be about \$38 million.* (Report 8, clause complex 11). The included clause interrupts another clause, but is not embedded in it, and is not part of the clause. In the present analysis embedded clauses have been included as part of the clause complex.
α	- independent clause (a detailed description and examples can be found in Section 3.5.3)
β	- dependent clause (a detailed description and examples can be found in Section 3.5.3)

These symbols have only been applied to the Theme analysis of the data. This means that such features may be present in the Rheme of the clause, but the symbols have not been used to identify such realisations.

4.4.2   The analysis of Theme in the corpus

As the focus of the present study is thematic choices, more specifically the way in which the interpersonal is realised through a range of resources in the textual metafunction, a rigorous analysis of Theme was undertaken. The emerging direction of the study led to a focus on the choice of textual, explicitly interpersonal, topical and extended Themes.

Extended Themes include those realised by Complements, Circumstantial Adjuncts, enhancing hypotactic clauses or projecting clauses in initial position.

   The terms, concepts and systems used in the analysis of Theme are presented in detail in Chapters Three and Six. The unit of analysis used to analyse Theme is outlined in Section 3.3. Chapter Three focuses on general features related to Theme, and Chapter Six is specifically concerned with projecting clauses found in thematic position. In Chapter Three four key constituents of Theme were introduced and these key constituents were then applied in the analysis of Theme in the corpus. Firstly, Theme in the entire corpus was analysed following Halliday's distinction between textual, interpersonal and topical Themes. Topical Themes were subdivided into Subject/Theme and marked Theme. Halliday (1994) states that the Subject is typically the unmarked Theme of the clause where the two functions Subject and Theme are mapped onto each other. With the exception of textual and interpersonal Themes, anything other than Subject in initial position is referred to by Halliday as a marked Theme. In the present study, in an independent clause, the Subject has been labelled Subject/Theme. Ideational elements in thematic position that are not mapped onto the Subject have been termed marked Theme. Details and arguments related to the identification of Subject/Theme and the reasons for including the Subject of the main clause as part of Theme are presented in Section 3.2.3. Secondly, in the present study, extended Theme was sub-divided into three main groups, viz. Circumstantial Adjuncts, dependent clauses and projecting clauses. In the corpus there were only two examples of complement found, and although these have been recognised as marked Theme they have not been included in the analysis as they constitute only 0.1% of all thematic choices. The system of analysis adopted for Circumstantial Adjuncts, dependent and projecting clauses as well as various aspects of Theme is outlined below.

4.4.3   The representation of the analysis

As noted above, the texts were analysed according to the Theme of the independent clause and everything up to and including the Subject of the independent clause was categorised as Theme. Appendix II presents the analysis of Theme in all texts in the corpus. As shown in Appendix II, the Theme of the main clause was analysed through reference to the roles which the Theme performed, i.e. textual, interpersonal, marked and or Subject/Theme. Anything not considered Theme was considered Rheme. The tables in Appendix II are organised as follows:

Table 4.1   Example of tables used in Appendix II in the analysis of Theme

	THEME					RHEME
	textual Theme	marked Theme	interpersonal Theme	marked Theme	Subject/ Theme	
74	Accordingly		you may assume, [[subject to fine-tuning adjustments]], that		your investments costs on imported capital goods	would increase by about 50%.

As illustrated in Table 4.1, tables presenting the analysis of Theme in Appendix II are divided into seven columns. The headings given for each column indicate the aspect of Theme identified. Due to size constraints, the first column does not have a title but indicates the number assigned to each clause. Five different columns are used to identify the type of Theme, viz. textual Theme ^ marked Theme ^ interpersonal Theme ^ marked Theme ^ Subject/Theme. It was necessary to include two columns for marked Theme because on occasion, as shown in Appendix II, marked Themes may be realised before or after interpersonal Themes. For instance, in the data there are occasions when a textual Theme is realised after a marked or interpersonal Theme and this is indicated by the use of {}. As shown in Example 4.1, the conjunction *however* is realised after a Circumstantial Adjunct.

Example 4.1

	In ILLs, however, {however = textual}			it	is possible to cover all the hours within the team, by people already in the posts.
textual Theme	marked Theme	interpersonal Theme	marked Theme	Subject/ Theme	
THEME					RHEME

Memo 2, clause 12

In addition, as shown in Appendix II, headings and sub-headings have been included in the analysis and are recognisable by having no clause number and no sub-divisions within the row (for an example, see Appendix II, Report 2). In some instances these headings and sub-headings indicate that the following text is either a *note*, *other points of interest*, *appendix* or *P.S.* (for an example, see Appendix II, Memo 8, clause 17). If they were complete clauses, these additional linguistic features of a text were included and analysed as part of the text as they were seen to be an integral part of the text and its meaning.

However, in the case of Report 4 the notes were not complete clauses and were not included in the count of alpha clauses for that text.

4.4.4   The analysis of textual Themes

As established in Section 3.4.1, textual Themes are realised by conjunctions, relatives and Conjunctive Adjuncts, and while they are commonly found in initial position, they do not exhaust the potential of Theme (Halliday, 1994:53). In order to clarify the method of analysis adopted, a number of textual Themes are presented for further discussion, viz. *in fact*, *this way*, *and*, *so*, *so that*, *i.e.*, *e.g.* and the use of punctuation. For example, the textual Theme *in fact*, as shown in Example 4.2, could arguably be classified as an interpersonal Theme if the analyst believed that the wording *in fact* is an assertion of the writer's viewpoint.

Example 4.2

In fact	it	may even be possible to add hours to the existing posts on a longer term basis without recruitment
textual Theme	Subject/Theme	Rheme

Memo 2, clause complex 6

However, although this is a possible interpretation the present study follows Thompson and Zhou (2000) and Martin and Rose (forthcoming), who categorise all Conjunctive Adjuncts as textual Theme. However, these authors argue that Conjunctive Adjuncts perform two roles: a textual role semantically linking ideas and an interpersonal role as they express the writer's viewpoint. Although Conjunctive Adjuncts are analysed as textual Theme, their interpersonal function is also recognised. Halliday (1994) classifies *in fact* as a "verifactive" Conjunctive Adjunct, functioning in a manner similar to *actually* and *as a matter of fact* (Halliday, 1994:49). Conjunctive Adjuncts, such as *in fact*, in the present study have been classified as textual Themes, although they are recognised as carrying interpersonal meaning.

Similarly, *and* can function either as an additive Conjunctive Adjunct or as a co-ordinating conjunction. The difference between a Conjunctive Adjunct and a conjunction is that "while Conjunctive Adjuncts set up a semantic relationship with what precedes, conjunctions set up a relationship which is (not only semantic) but also grammatical" (Halliday, 1994:50). The conjunction *and* was analysed as a textual Theme and in many cases seen to indicate parataxis, as illustrated in Example 4.3:

Example 4.3

	I	refer to John Lui's visit to your office for the period 4-8-1-95
and	[I]	enclose herewith a copy of his report for your perusal.
textual Theme	Subject/ Theme	Rheme

Memo 22b clauses 1 and 2

In certain contexts *and* is used as a co-ordinator in a verbal group complex to link two processes, such as in *sign and return* (Letter 11, clause complex 8). Instances of this type are analysed as verbal group complexes – with *and* linking two processes but not two clauses – and the conjunction here does not function as a textual (clause) Theme.

The conjunction *so* may signal either a paratactic or hypotactic relationship between two clauses. The type of taxis is an important consideration in the present study. In some instances *so* acts to join two paratactic clauses, as shown in Example 4.4:

Example 4.4

		we	have also included dodgem cars as well as clay pigeon shooting
so,	as you can see	it'	[i]s a varied programme.
textual Theme	marked Theme	Subject/ Theme	Rheme

Memo 7, clauses 14 and 15

In Example 4.4, both clauses are of equal status and neither clause is dependent on the other for meaning. For example (*so as you can see) it's a varied programme* is a free clause and can be understood without depending on another clause for meaning. In addition, *we have also included dodgem cars as well as clay pigeon shooting* is also an independent clause. However, in Example 4.5, the conjunction *so that* is used to link a hypotactic clause to a main clause:

Example 4.5

and	when this happens	I	will type another note similar to this one so that we are all clear
textual Theme	marked Theme	Subject/ Theme	Rheme

Memo 4 clause complex 53

The clause *so that we are all clear* is not able to stand alone and is dependent on another clause for meaning. The conjunction *so that* generally signals a hypotactic relationship. In addition *so*, *so that* and *this way* are generally understood to be signalling a causal

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conjunction. The conjunction *this way* has been interpreted, in the context used in Memo 4, clause complexes 19, 22 and 31, to construe a similar meaning to *therefore* and *thereby*.

Punctuation marks such as the hyphen, and common Latin abbreviations such as *i.e.* and *e.g.* have been categorised as "appositive" Conjunctive Adjuncts (Halliday, 1994:49). Generally, they signal a paratactic relationship, unless contextual features indicate other-wise – as in the case of a colon, the interpretation of a hyphen and of *i.e.* and *e.g.* is based on the function of this form in the text.

The information following a colon has been treated in two different ways. Firstly, if the colon is used as part of the lead-in clause for a following set of independent clauses, each of these clauses will be analysed separately, with the usual potential for Theme and Rheme, as shown in Example 4.6:

Example 4.6

5.	The current project status	can be summarised as follows:
6.	Auto reconciliation systems function	needs to be rectified and tested before UAT sign-off on ISIS-CIS Interface [sic],
7.	and [Auto reconciliation systems function]	is critical for CIS pilot [sic] to commence.
8.	MIDAS/CIS conversion	includes implementation of GMIS for CIBL.
9.	Reports UAT	will start on 4 September 1995, lasting for 4 weeks.
10.	There	will be a parallel run of 1 week before implementation.
11.	CAD Functional Specification	will be delivered by 30 June 1995.
12.	CAD UAT	is scheduled to run from 1-31 October 1995 with the possibility of a modular approach.
13.	There	is no contingency available in the current plan for the CAD project
14	There	is no spare resource capacity in CIBL Operations for additional UATs during June-August period for general ISIS enhancements.
	Subject/Theme	Rheme

Memo 6, clauses 5-14

Secondly, if the colon is followed by a list of non-finite clauses, these non-finite clauses will considered part of the Rheme of the lead-in clause, as shown in Example 4.7:

Example 4.7

The involvement of PQM in the CIBL Programme	has focused on three key areas: - Facilitating communication across the projects to highlight immediate and potential inhibitors. - Offering general assistance to projects to help resolve current issues. - Keeping senior management (i.e. CIBL Board and PAS Committee) informed of progress and current issues.
Subject/Theme	Rheme

Memo 6, clause complex 16
(upper case in orig.)

As shown in Examples 4.6 and 4.7, the structural relationship between the lead-in and the items is fundamentally the same. However, the difference is the grammatical status of the list items and this is the reason for treating clauses differently.

4.4.5 The analysis of interpersonal Themes: Modal Adjuncts, modal finites, Vocatives and wh- interrogatives

Interpersonal Themes in the data were either realised by Modal Adjuncts (*fortunately*, *please*, etc.), modal finites (*would*, *could*, etc.), Vocatives (*Tom*, etc., as in *Tom, please [would you] pass a copy of this to your people*, Memo 8, clause 17), wh-interrogatives (*what*, as in *what is the role of the Production & Accounting Steering Committee in this process?*, Memo 6, clause 26, where *what* functions both as interpersonal Theme and as Subject/Theme). In order to represent the fact that an interrogative is functioning both as an interpersonal Theme and as Subject/Theme, the linguistic item, in the analysis in Appendix II, is shown in both boxes with ellipsed brackets [*what*] used in the Subject/Theme column. Another type of interpersonal Theme in the data was realised by projecting clauses in initial position. The method of analysis used to identify such clauses is discussed below in Section 4.4.6.

One major query which surfaced was how to analyse clauses such as *I would be grateful if*. The decision was made that such clauses, and others like it, were best treated as interpersonal metaphors functioning simply as *please do…X*, and thus as dependent clauses. If found in initial position, their analysis would be as follows:

Example 4.8

We should be grateful if	you	would refund the total amount of HKD665.00 to the office account accordingly
Interpersonal Theme	Subject/ Theme	Rheme

Memo 20, clause complex 2

In Example 4.8, *we should be grateful if* is a formulaic, polite way of introducing a request, or in this case a strong request, for the intended reader to refund outstanding money. Such phrases are common in workplace memos and letters and rarely found in reports. Based on this analysis, phrases such as *we should be grateful* have been analysed in the same manner as *please*, i.e. as a modal Adjunct of 'entreaty'.

4.4.6   The analysis of interpersonal Themes: projecting clauses acting as Theme

Projecting clauses found in Theme position play a crucial role in realising the interpersonal (see Section 6.5), and are therefore analysed and discussed separately from other types of extended Themes in Chapter Six. Concepts of Theme related to projection are presented in detail in Section 6.1; the literature related to projecting clauses, as relevant to the present study, is reviewed in Section 6.2; and the position adopted in the present study related to projecting clauses in thematic position is outlined in Section 6.3. However, in what follows the analytical system adopted for the analysis of projecting Themes is introduced.

When analysing the data, three categories of projecting Themes emerged, namely 'thematised subjective viewpoint', 'thematised comment' and 'thematised obligation / inclination'. These categories are based on previous work in the area by Halliday (1994) and Thompson (1994, 1996). It is suggested in the present analysis that a cline exists between the three categories of projection as follows:

1) Thematised subjective viewpoint
   This category is derived from Halliday (1994:358). Following Halliday, subjective viewpoint is viewed in terms of both explicit and implicit subjectivity. Subjective explicit is where *I*, *you* and *we* are used as Subject within the projecting clause e.g. *I hope that the foregoing information provides the appropriate clarity but please do not hesitate to contact me if further details are required.* (Memo 11c, clause complex 23) Implicit subjective is when a 'human participant' nominal group is used in the projecting clause. This categorisation is made regardless of whether the nominal group is referring to an individual such as *the Director of Housing* or as in the following example where the nominal group is referring to an institution comprised of humans, e.g. *The library is also concerned that all students on distance learning courses properly understand the implications of studying for a degree by distance learning.* (Report 3, clause complex 22)

2) Thematised comment

This category is derived from Thompson (1996:129), where a proposition is encoded in what appears to be an objective viewpoint. Thematised comment is found in the form of a factual projecting clause in initial position, e.g. *it would appear that there has been no progress or further feedback to your letter of 24 May 1995 regarding the above.* (Memo 11b, clause complex 1) This type of projecting clause, according to Thompson (1996:209), is frequently realised through the use of an anticipatory *it.*

3) Thematised obligation/inclination

This category is based on Halliday (1994:358). The distinction is not based on the choice of Subject but rather the choice of modularity compared to modality where the projecting clause is encoding as an imperative type of modality. In modularity there is some form of obligation or inclination embedded within the projecting clause in thematic position, e.g. *we must therefore take the view that the activation was caused by a genuine smoke incident.* (Memo 11c, clause complex 20) In this example the use of *must* indicates an imperative meaning attaching to the projecting clause. In other instances of thematised obligation/inclination the tense indicates that a decision or action has become an obligation, for example, *it has been decided therefore [that] all staff [[who are called upon to assist in these non-scheme activities]] maintain time sheets showing clearly the time devoted to non-scheme activities.* (Memo 19, clause complex 6). The projecting clause is no longer used to realise probability, as suggested by the other two groups of projection, but construes meanings of modularity; i.e. the decision has been made and is no longer up for negotiation.

A complete list of projecting and projected clauses found in the data is provided in Appendix VI. In this appendix the clause complexes found in the memos, letters and reports have been separated into the three categories outlined above.

4.4.7   The analysis of marked Themes

The theoretical position adopted in respect of marked Theme, and the approaches followed for the identification of marked Themes, are established in Section 3.5. As pointed out, a marked Theme may be realised by a Circumstantial Adjunct, Complement or dependent clause preceding the Subject of the main clause. In the data, marked Themes comprised Circumstantial Adjuncts and dependent clauses in initial position, and the method of analysis adopted for these two types of marked Theme is discussed below. Together marked Theme and Subject of the independent clause constitute an extended Theme.

An extended Theme may comprise Circumstantial Adjunct ^ dependent clause ^ Subject/Theme, or Circumstantial Adjunct ^ projecting clause ^ Subject/Theme. Therefore in conducting the analysis it was decided that Circumstantial Adjuncts would be analysed as part of Theme if they occurred first in a dependent clause which was itself in initial position, i.e. occurring before the independent clause in the clause complex. In such cases the dependent clause, including of course its Circumstantial Adjunct, is analysed as part of an extended Theme, as shown in Example 4.9:

Example 4.9

Accordingly,	at first sight,	it may appear that	the cancellation of duty	is only a matter for the domestic companies
textual Theme	Circumstantial Adjunct	inter-personal Theme	Subject/Theme	Rheme
extended Theme				

Report 6, clause complex 89

The analytical system followed to identify Circumstantial Adjuncts is presented in Table 3.4. However, as mentioned above, Thompson (1996:105) points out that Circumstantial Adjuncts can combine "two different types of meaning". This raises the problem of whether to code Circumstantial Adjuncts with reference to just one meaning or in some cases to two possible meanings. A limited number of Circumstantial Adjuncts were 'doubly' coded, as shown in Example 4.10:

Example 4.10

Following the recent decision [[to carry out a review of the QMS procedures set]],	please	[you]	find attached a list of all the registered procedures relevant to your respective departments.
Circumstantial Adjunct of matter / cause	inter-personal Theme	ellipsed Subject/ Theme	Rheme
extended Theme			

Memo 11a, clause complex 1

The Circumstantial Adjunct *following the recent decision [[to carry out a review of the QMS procedures set]]* could be analysed both as a Circumstance of matter in that it refers to *a recent decision*, as well as a Circumstance of cause in that it is because of *the recent decision* that the writer is writing the memo. It could be argued that each Circumstantial Adjunct should only be coded once in order to avoid confusion and that the coding should be an intuitively satisfying one. However, by only coding once the analyst would be ignoring one of the meanings of a given Circumstantial Adjunct, and therefore in the present study Circumstantial Adjuncts with more than one meaning have been 'doubly' coded in order to reflect their full meaning potential.

The analysis of dependent clauses in initial position involved the identification of the dependent clause as finite or non-finite, followed by its categorisation by clause type. A non-finite clause is a clause which has no Subject and whose main verb has no reference to time or person. Non-finite clauses are always dependent "simply by virtue of being non-finite" (Halliday, 1994:240). They have no Theme and if analysed as a clause, the whole

non-finite clause would be Rheme. In an analysis of Theme in the clause complex, however, a non-finite clause in initial position in the clause complex realises a marked Theme, as shown in Example 4.11:

Example 4.11

To ensure successful completion,	we	have adopted the 'programme' approach, - a flexible structure with project managers liasing [sic] closely with the Programme Manager to co-ordinate activities and manage project dependencies.
non-finite clause	Subject	
marked Theme	Subject/ Theme	Rheme
extended Theme		

Memo 6, Clause Complex 15

To ensure successful completion is a non-finite, dependent clause and *we* is the Subject of the following finite, independent clause. The Theme of this clause complex is thus *to ensure successful completion, we*, i.e. an extended Theme. In the analysis of dependent clauses in thematic position, the Themes of these clauses have been separately accounted for as finite and non-finite marked Themes respectively.

Nearly all of the dependent clauses found in initial position in the clause complex were hypotactic enhancing clauses. As noted above in Section 3.5.3, hypotactic enhancing clauses have a circumstantial quality and the categories developed by Halliday for these clauses are very similar to those of Circumstantial Adjuncts. The analysis of hypotactic enhancing clauses into semantic groups follows the criteria established by Halliday (1994), and exemplified in Halliday (1994:237) – and in Table 3.6 in Chapter Three – where Halliday presents a list of different types of hypotactic enhancing clauses and introduces the conjunctions and prepositions typically used to identify the hypotactic enhancing clause.

The analysis of Circumstantial Adjuncts and hypotactic enhancing clauses as part of extended Theme is shown in Appendix III. The source of the data and the analysis of the type of Circumstantial Adjunct(s) found in the marked Theme are indicated below the table with the analysis, as in Table 4.2:

Table 4.2   Example of labelling system used in Appendix III

	Marked Theme	Subject/ Theme	Rheme
23	but at that time, of course,	we	will follow Personnel's guidance as always, to make sure we are doing everything fairly.

<div align="right">Memo 2, location: time</div>

As shown in Table 4.2, the tables are divided into four columns. The first column indicates the clause number, the second the marked Theme, the third the Subject/Theme and the fourth the Rheme. In these tables the column labelled 'marked Theme' may include more than one type of Theme. In Table 4.2, the marked Theme includes a textual Theme *but* and a marked Theme, a Circumstantial Adjunct *at that time*. This extended Theme, and others like it, will be included in the column labelled 'marked Theme' and the Circumstantial Adjunct will be shown in bold to differentiate it from the other aspects of Theme. This method of representation has also been applied to the analysis in Appendix VI of projecting Themes and of the example texts in Chapter Five, Tables 5.11-13.

4.4.8   The analysis of Subject/Themes

Based on the data it appears that the Subject/Theme can be subdivided into six different lexico-grammatical categories. The criteria and categories developed are as follows:

a)   nominal groups; these refer specifically to lexical nominal groups, e.g. *the landlord*, *the specific assistance*, *the issue of off-air recording and housing managing video collections*. In order to simplify the discussion, all future references to lexical nominal groups will be to 'nominal groups' and although personal pronouns are also a nominal group, they will be referred to as 'personal pronouns' as in a separate category.

b)   personal pronouns, *I*, *you*, *we*, *he*, etc.;

c)   ellipsed Subjects, for example the Subject *you* is typically ellipsed in an imperative clause: *[you] See Appendix 2*;

d)   referential items, these refer to anaphoric or cataphoric references being made within the text, via demonstratives and pronouns such as *that, this,* and *it*, (cf. Halliday, 1994:314). In addition, referential items also include the anticipatory *it* which functions as Subject and as a placeholder; e.g. the *it* in Example 4.12 would be classified as a referential item.

Example 4.12

However	it	would not be prudent to charge on this basis for Period 1 & 2 because of the following reasons:
textual Theme	Subject/ Theme	Rheme

<div align="right">Memo 10, clause complex 3</div>

However, anticipatory *it* was treated differently when realised in a projecting clause found in thematic position (see Section 6.3.3):

e) *wh*-items, for example *how* and *what* in the following interrogative clauses: *How can we best co-ordinate…?*, *What are the expectations among project managers…?*;

f) existential *there*, where *there* is used as a 'pass' option and the writer chooses to not select an interpersonal or ideational topic as Theme (Berry, 1996), but to indicate that the Existent is introduced later in the clause (discussed in detail in Section 3.4.4).

Initial findings revealed that the most frequently occurring category was that of the nominal group and this also seemed the most interesting. Again following an inductive approach, categories for the nominal groups realising the Subject/Theme emerged from the data (Bogdan and Bilken, 1992; Creswell, 1998).

4.4.9   Validating the types of nominal group

In order to establish the credibility of the nominal group categories a validation process for the suggested categories was carried out and this process is described in brief below. Following Hyncer (1999) three judges from the applied linguistic community, lecturers in the English Department of the Hong Kong Polytechnic University, were asked to participate in a validation process to verify the semantic basis of the categories.

   Judges were presented with a draft of the following categories, definitions and exemplars of the nominal groups:

1) Human Participant

This group is subdivided into two categories:

i. *Human participant: personal reference*, where one person is identified personally by name, e.g. *Steve*, *Paul*, *Patrick*.
ii. *Human participant: institutional reference*, where the lexical item refers to an individual or a group through an institutional reference such as *the Building Facility Manager*, *Banco Santander*, *the Working Group*, *the Housing Department*, etc.

In all instances, human participants refer to an individual, a group of people or an organisation. A distinction between the two groups was made, as 'personal reference' identifies an individual in a personal manner and 'institutional reference' identifies an individual through their role in the institution. Human participants should not be confused with participants within the transitivity system as participants in the transitivity include a far wider group such as personal pronouns, objects and places, etc. (Halliday, 1994:107-9). Personal pronouns function in a similar manner to proper nouns but have not been included in this category as the focus here is solely on nominal groups.

2) Material Entities

This group is subdivided into five categories:

i. *Products* - The nominal group is used to refer to concrete phenomena which may vary in the level of generalisation by capturing a complete system such as *expenditure* and *the operating costs tendered*, or by narrowing the field to represent a finer point within the system, e.g. *this reference no*, *electricity costs for bulk supply contracts.* In each case a 'product' can be tied down to some kind of material entity or outcome. For example, the nominal group *the Sales proceeds* [sic] in Letter 18, clause 16, is referring to a concrete object – a sum of money generated from the sale of certain property. The material entity is wholly recoverable from within the text.

ii. *Documents* - This category refers to nominal references made to the present text or other texts, e.g. *this report*, *time sheets*. This category also includes internal references within the text such as *the following*. This category was included as a material entity because a document refers to a written product which represents planning, thoughts, ideas, etc.

iii. *Location: Place* - The nominal references are made to a particular place, e.g. *the back-up warehouse*, *both properties*, *new C&A homes.*

iv. *Location: Time* - The nominal reference is made to a particular time, e.g. *all the hours*, *the due date for submission*, *smoking breaks.*

v. *Action* - This refers to nominal groups which incorporate some form of nominalisation of a process within the nominal group and when some 'real world' activities are captured within the nominalisation, such as *the estimated amount of capital cost* and *the demand for video material in the library*. In both examples a verb has been turned into an element within a nominal group and presented in a non-congruent manner. In the example *the cancellation of duty privileges*, the congruent form would be *the amount of capital cost has been estimated*; however, the verb *to estimate* has been changed to an adjective and has become part of the nominal group. The realisation is presented in a manner where the action of estimating has been completed and settled and it is presumed that the reader will understand what is being talked about. Halliday refers to such instances as grammatical metaphor (Halliday, 1994:242-353).

Nominalisation allows for the complex packaging of information and "tends to become clearly a mark of prestige or power" (Halliday, 1994:353). Halliday adds that the writer knows exactly what is meant, but the interpretation by the reader is more complex due to the non-congruent packaging of information. The use of nominalisation allows the writer to present information in what may appear to be an authoritative manner.

 'Action' is not the only distinguishing feature of nominalisation; nominalisation is also found in 'concepts'. 'Action' is distinguished from 'concept' by being far more concrete and restricting the nominal group to a particular activity or product, e.g. *the cancellation of duty privileges* which clearly associates and incorporates the process of *cancelling* with the product of *duty privileges*. This is a far more concrete nominal group when compared to something like *the current thought*, which again uses nominalisation to convert the process of thinking into a noun, although this nominal group does not necessarily establish a

connection between a process and a clearly identified product. Thus, the Subject/Theme *the current thought* and other nominal groups, such as *these proposals*, *negotiations* and *the short term strategy*, would not be classified as a material entity but would be included as a 'concept'.

3) Concepts
   This type of Theme is used to construct concepts, ideas and information in the text in order to enable language and in particular the Theme choice to represent ideational features related to less concrete products, as well as action or people. Such Themes are, for example, used to make reference to institutional actions, products, or abstraction, e.g. *negotiations*, *these proposals*, *the current thought*, *the alternative*, etc. Frequently this category is used to encapsulate and synthesise institutional actions or products which are less concrete things compared to the 'material entities' identified above. This form of Subject/Theme is commonly associated with and/or typically found within workplace English texts.

Using the list above, judges raised questions and made comments about the definitions which were discussed with the researcher, who took notes and recorded key points from the discussions. Then the judges were asked to sort a random sample of 30 nominal groups extracted from the data into the three categories. When a judge could not place a given nominal group, the researcher probed to establish why she/he found it difficult. This process was repeated with the other two judges and the notes and comments from all three judges were consolidated. The process of the judges discussing and sharing ideas with the researcher about the definitions of the categories and the categorisation of the nominal groups led to rejection, modification and acceptance of the categories and their definitions as the basis for analysing nominal groups.

It should be noted, however, that the analysis was not always straightforward. For instance, certain nominal groups could potentially be categorised as either 'material entity' or 'concept', e.g. *these proposals* – if such a nominal group realised Subject/Theme, the text would be re-read to ascertain whether a clear referent to the *proposals* was included. If a description associated with the *proposal* was given, the nominal group would be classified as 'material entity'. If no referent was found, then the nominal group would be classified as 'concept'. Sometimes this distinction was difficult to make due to the complex nature of the text or the specialist nature of the subject matter.

When establishing the categories, it was questioned whether the category labelled 'concept' could, if a certain term was used again later in the text, then become more established as an ideational participant within the text and due to its established nature change its categorisation from 'concept' to 'material entity'. The answer to this question is

that the category of 'concept' has been assigned to a nominal group because the nominal group refers to institutional phrases where the intended meaning is not fully recoverable from within the text. Therefore even though a certain nominal group may be used on a number of occasions in the text, the label 'concept' would continue to be applied unless the exact meaning of this nominal group could be determined.

With this categorisation of nominal groups, the descriptive system for the analysis of the corpus is complete. In Chapter Five the results of the analysis are reported.

4.5   Validity and triangulation of the research tools

Unlike notions of validity in the positivist paradigm, where validity is assessed by applying four standard criteria, viz. internal validity, external validity, reliability, and objectivity, the social constructivist paradigm differs. The constructivist's notion of validity is established in terms of "trustworthiness and authenticity" (Denzin and Lincoln, 1998:277).

Validity is and should be built into a study by, as Lynch (1996) points out, the use of interpretative, theoretical and generalisable evidence. The approach taken in this study to ensure validity is to voice the possible interpretative bias which may surface in the study. This is achieved by honesty and explicit disclosure of the researcher's political and personal views. The personal orientation of the researcher is outlined in Section 4.2.1. Guba and Lincoln (1999), in a similar manner to Lynch, have interpreted the positivist terms of internal and external validity, reliability and objectivity to mean credibility, transferability, dependability and confirmability. With respect to these terms the present study is seen to be:

credible as it incorporates a range of texts. The range includes a variety of workplace texts, memos, letters and reports; these comprise the three main text types in work-place communication. Davies et al. (1999) and Forey and Nunan (2002) both establish through surveys that memos, letters and reports are the most frequently written texts from a UK and Hong Kong perspective, respectively. The study also incorporates triangulation, as discussed below. Data are checked and corroborated with informants, as outlined in the discussion of the findings in Chapter Eight. Data analysis and categories found within the data were also corroborated by checks with knowledgeable and informed informants.

transferable as the analytical system applied to the data is grounded in an established theory of language. Definitions and descriptions of the data follow an SFL theory of language and as such the analysis could be applied to other data sets.

dependable as overlapping methods which produce complementary results were applied. The data were analysed from a corpus perspective where generalisable results were reached. Secondly the data were approached from a more qualitative perspective where individual texts were analysed in detail. Thirdly, informants who are involved in working with such texts on a daily basis were interviewed in focus groups and asked to discuss their interpretation of the texts. The informant interpretations were then compared to other methods of analysis.

confirmable, which was achieved by using triangulation, discussed in detail below. In addition Guba and Lincoln (1999) also suggest that confirmability can be achieved by showing throughout the reporting of the study the reason why certain definitions and directions were taken throughout the course of the research.

Incorporating multiple methods and perspectives from which the topic can be investigated is an indication that the study is "confirmable" and "credible" (Creswell, 1994; Denzin and Lincoln, 1998; Guba and Lincoln, 1999; Sturman, 1999). As pointed out by Denzin and Lincoln:

> The combination of multiple methods, empirical materials, perspectives and observers in a single study is best understood, then as a strategy that adds rigor, breadth and depth to any investigation…

> (Denzin and Lincoln, 1998:4)

Rigour in the present study was achieved by approaching the analysis of the workplace texts from multiple perspectives. Triangulation, another term used for incorporating multiple methods, is "central to achieving credibility" (Sturman, 1999:110). Sturman (1999) adds that triangulation is the holistic way of dealing with validity and reliability as applied to survey research. Creswell (1994:174) points out that the concept of triangulation is based on the assumption that if data are collected from multiple perspectives and the results from differing methodologies are scrutinised, then this will delimit and neutralise inherent bias.

The evidence collected in the present study was amassed from three different perspectives. The three main perspectives discussed in this thesis are a quantitative analysis of the data, a qualitative analysis of selected texts and an analysis of the data from an informant's perspective. The data are investigated from a quantitative and qualitative position and the findings are reported in Chapters Five and Six. In these chapters the Theme choices in the memos, letters and reports are discussed from the perspective of what is happening in the corpus as well as what is happening in individual texts. In contrast, the informants' interpretations of texts are discussed in Chapter Eight. This provides a perspective on language and meaning that transcends lexico-grammatical

perspectives and offers the opinions related to language and meaning of more than just the researcher. The informants' views concerning the way in which Theme is functioning in the texts are discussed in detail. The procedures adopted to elicit informant interpretations are outlined in Chapter Seven.

4.6   Concluding remarks

The background to the present research and how it grew out of two funded projects, the EWM and CPW projects, have been outlined. This chapter has also outlined and described the procedures adopted in selecting the appropriate research paradigm and the appropriate methodological tools which were used to conduct an analysis of the memos, letters and reports. The procedures involved and the development of the corpus which forms the data for the lexico-grammatical analysis were described. The systems of analysis have been presented in detail. The analytical systems were applied to the analysis of Theme in the memos, letters and reports. Based on the findings a comparison of the linguistic resources found in the three different text types was possible. In what follows in Chapters Five and Six, the findings related to the different aspects of Theme are presented and comparisons are made between the similarities and differences of the text types.